H11 CURTAIN WALLING

110CURTAIN WALLING

Smart Systems are a major supplier to the window and door fabrication industry and are active members of The Council for Aluminium in Building (CAB) and members of CWCT.

Smart Systems aluminium and composite profile product range includes, doors, windows, glazed screens, curtain walling, roof glazing and conservatories, for both the commercial and domestic markets. An extensive range of ancillary items such as door panels, louvres, balustrades and glazed in trickle vents are available to complement each product range.

Aluminium profiles are manufactured from grade 6060/6063 T5/T6. Size tolerances are in accordance with DIN and BS standards.

Co-extruded profiles and EPDM seals are tested in accordance with DIN 7863, TV 110, NFP 85301, ISO 3994. Thermal breaks are formed with polyamide strips PA 6.6 25 reinforced with glass fibre, fitted between aluminium extrusions.

Profiles can be Electrostatic powder coat finished in a range of RAL colours to APA Qualicoat guidelines with the option of BI-colour, different internal and external colours. Other finishes include anodised in satin with EWAA/EURAS-Qualanod quality label. Powder-coated woodstructure finishes are available on request.

**MC-Wall – MC Glass**

A curtain wall stick built system with transoms joined to mullions with stainless steel pins to form a straight wall profile.

Slight faceted shapes can be achieved with the use of screw joints on the transoms.

A clamping strip is coupled to the mullions with an extruded connecting bar, which also forms a thermal break in the curtain wall. The clamping strip is manufactured with a co-extrusion of hard plastic as a basis and a softer plastic material for sealing, the completed construction can be finished externally with a choice of decorative beads.

Thermal breaks to transoms are formed with polyamide strips PA 6.6 25 reinforced with glass fibre, fitted between aluminium extrusions. All profiles are extruded from aluminium alloy 6060/6063 T5/T6 and comply with the recommendations of BS EN 12020-2; 2001/BS 755-9: 2001. Profiles can be Electrostatic powder coat finished in a range of RAL colours to APA Qualicoat guidelines with the option of BI- colour, different internal and external colours. Other finishes include anodised in satin with EWAA/EURAS-Qualanod quality label. Powder-coated woodstructure finishes are available on request.

The units are designed to accept 24mm to 33mm double-glazing. (Contact Smart’s Technical for sizes outside of this range).

Consult Smart Systems Ltd technical literature for details. Smart Systems Ltd can also provide design and specification guidance and it is recommended that they are consulted early in the design process.

**Curtain walling system: Manufacturer**: Smart Systems Ltd. Arnolds Way, Yatton, North Somerset BS49 4QN  
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**Product reference:** MC-Wall Curtain Wall system.

**Type:** Stick System

**Performance**: Design Wind Pressure tested to CWCT Standard 2400Pa with a safety wind resistance test to 3600Pa.

**Exposure**: Design Wind Pressure **TBA**

**Thermal**: All Curtain Wall, in conjunction with a suitable glazing specification, to achieve an average project U-value to meet the current requirements of the approved Building Regulation Document L1/L2 for England and Wales. Target façade U-value **TBA**

**Structure:** All structural profiles to be designed so as the maximum deflection of any glass edge into a framing member under wind load shall not exceed L/175 of its span with no evidence of any permanent deformation once the load has been removed. Any vertical member with multiple glass edges shall not exceed L/200 up to 3000mm span, or over 3000mm span shall not exceed L/300+5mm. All horizontal framing members to restrict dead load deflection to L/400, up to a maximum of 3mm.

**Construction:** All screens shall be manufactured, installed and glazed in strict accordance with Smart Systems instructions and guidelines as set down in the appropriate technical literature, details and specifications. The system to be thermally broken throughout by means of a continuous thermal isolator located between the pressure plates when used and all structural members. Consult with Smart Systems for recommendations and details of options available.

**Fixings:** All fixings shall be in strict accordance with Smart Systems instructions and guidelines, as detailed in their technical literature and in accordance with the relevant British Standards. All such accessories shall be manufactured from Smart Systems range of bracket and plate extrusions as detailed in their technical manual so as to allow for site tolerance and structural movement. All fixing of the screens to the building structure shall be achieved using a suitable anchor and bracket fixing method capable of supporting all applicable loads and accommodating the relevant fabrication, installation and site and expansion tolerances. Details of the proposed fixing method shall be submitted to the project engineer for approval prior to installation.

**Material:** All profiles are extruded from aluminium alloy 6060/6063 T5/T6 and comply with the recommendations of BS EN 12020 -2; 2001/BS 755-9: 2001.

Thermal breaks are formed with polyamide strips PA 6.6 25 reinforced with glass fibre sections capable of withstanding temperatures up to 200°C for over painting. Co-extruded profiles and EPDM seals are tested in accordance with DIN 7863, TV 110, NFP 85301 and ISO 3994.

**Finish as Delivered:** Internal Colour: **TBA** External Colour: **TBA**

**Cover cap colour:** Consult with Smart Systems technical department for options.

**Glazing:** Unit thickness. Overall thickness of up to 32mm.(Contact Smart’s Technical for sizes outside of this range).

**Glazing system:** Dry glazed using proprietary, high performance captive gaskets. All glazing units to be supported continuously along all four edges by a structural member and held firmly in position by means of a screw fixed pressure plate with a snap on face cap. All gaskets are to be bonded and sealed during construction, using a suitable waterproof adhesive, to ensure a watertight joint at all connections.

Alternatively, glazing can be held in place mechanically via aluminium toggles and finished as a silicone bonded system. All glass silicon joints to be installed via approved applicators. Consult with Smart Systems Technical for details.

**Panel/ facing type:** Consult with Smart Systems technical department for recommendations and details.

**Accessories:** All aluminium flashings, sills and other perimeter trims necessary to ensure the performance of the glazing system shall be the responsibility of the glazing sub-contractor and shall be designed, fabricated, finished, install, secured and sealed in accordance with Smart Systems instructions and guidelines as detailed in their technical literature. No additional Ironmongery or Accessories required.

**Incorporated components:** The full range of Smart Systems Ltd windows and doors can be incorporated into the system. Consult with Smart Systems for recommendations and details.