SPECIFICATION

AMS Architectural & Metal Systems

AMS MU800 Matrix Curtain Walling

The AMS MU800 Matrix mullion drained curtain walling system offers unique architectural design features combined with market leading weather performance. The system's main aesthetic feature is a picture frame finish externally which gives the appearance of a modular grid system with all the benefits of modern stick construction. The system is also propriety based and is suitable for both low & high rise applications. The system is visually complete internally with a visual face width of 55mm an overall external face width of 62mm, which comprises of two small picture frame section face caps which are 25mm each with a centre shadow gap seal of 12mm.

Introduction

The suite of profiles consist of 35mm X 55mm, 63mm X 55mm, 99mm X 55mm, 126mm X 55mm, 146mm X 55mm, with a thermal isolator, EPDM gaskets, foil backed weather tape and pressure plate allowing a thermally broken façade.

Thermal Performance

AMS MU800 Matrix curtain walling is designed to offer the specify excellent aluminium thermal u-frame values in conjunction with the correct glass specification to achieve overall target u-vales or equivalent energy ratings on specified projects.

Scope

This specification defines materials, fabrication, paint finishes, and size limitations for curtain walling.

Materials

Aluminium profiles are extruded from aluminium alloy 6063 T5 and T6 complying with BS1474 – BS EN 12020-2:2001 / BS EN 755-9:2001.

Paint Finishes

Polyester Powder Coatings

Aluminium profiles can be dual colour polyester powder coated to BS6496.

AMS offers in house painting with the following paint suppliers :

- Azko Nobel Interpon D
- Du Pont Alesta
- Beckers Powder

Decoral

Aluminium profiles can be polyester powder coated with a woodgrain effect paint finish to BS6496.

Anodised

Aluminium profiles can be anodised to BS1615 or BS3987.

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Fabrication

The AMS MU800 Matrix curtain walling system is designed as a stick system and frame members such as mullions and transoms shall be fabricated in accordance with AMS technical literature and transported to site as prepared components. The stick grid system shall be assembled on the proposed facade area as per fabrication shop drawings and architects instructions.

Mullions shall be square cut and profiles shall be joined specially with jointing spigots. Mullions shall run the full height of the façade with transoms spanning in between and these shall be notched and screw fixed to the mullion. Transoms shall have notched ends to ensure a weather proof joint.

Fixing points should be advised by a structural engineer and relevant fixing brackets approved so that all loads are transferred back to the main building structure. Low modulus silicone shall be used throughout for weathering joints as recommended by the silicone manufacturer.

Glazing

Glass shall be set against extruded gaskets internally which are fitted into gasket grooves in the mullions and transoms. Gaskets shall be to BS 4255: EPDM. The system can accommodate 22mm, 24mm, 28 mm and 32mm double glazed insulating units. Glazing shall be to BS 6262 and Building Regulations Document N.

Installation

AMS offer detailed installation instructions on all systems and these should be followed as per AMS's technical department's recommendations.

Structure

Section performance requirements must be calculated from site conditions and all loading requirements. All structural profiles shall be designed so as the maximum deflection of any member shall not exceed L/175 of its span and there shall be no evidence of any permanent deformation once the load has been removed.

Performance

Tested to BS 6375-Part 1.
Air Permeability - 600 Pa.
Water Tightness - 600 Pa.
Wind Resistance - 2000 Pa.

Tested to CWCT standards.
Sequence B Test.

Insert Opening Vents & Doors

Details and specification information for these insert products can be found in the window and door section of AMS's technical literature.