Metal Technology Architectural Glazing Solutions

SP Curtain Walling

The Silicone Pointed Curtain Walling System has been developed as an extension to the Metal Technology standard System 17 High Rise Curtain Walling. SP Curtain Walling uses silicone pointed units which are secured with concealed fixings into the system to give clean, uninterrrupted external lines, creating a sleek appearance with high aesthetic values.



Introduction

The system is based on the tried and tested Metal Technology System 17 capped curtain walling. SP curtain walling makes use of all of the standard System 17 mullion and transom structural sections.

The system incorporates specially made double glazed units which are clamped directly into the curtain walling frame. The horizontal and vertical joints between the glass units are then silicone pointed to give a flush finish to the external façade.

The SP System accommodates 32mm, 34mm and 36mm unit thicknesses, with specific glass and cavity combinations. The System 17 Latitude vent may be incorporated within the SP System. As with all Metal Technology systems, the SP curtain walling system is manufactured to exacting standards enabling economy to be combined with strength to give many years of aesthetic, trouble-free operation.

Thermal Performance

Metal Technology SP curtain walling in conjunction with the correct glass specification is designed to aid compliance with the latest thermal requirements of the current building regulations.

Scope

This specification defines materials, construction, and finishes for SP curtain walling system.

Materials

Aluminium profiles are extruded from aluminium alloy 6060T6, T5, or T4 complying with the recommendations of BS EN 12020 -2 / BS EN 755-Parts 1 to 9. Polyamide thermal breaks are produced from glass reinforced nylon sections designed to withstand temperatures in excess of 200°C, allowing the sections to be powder coated after thermally breaking.

Finishes

The range of sections can be provided in either of the following range of finishes:

- 1. Anodised to BS EN 12373-1 or BS 3987
- 2. Powder organic coated to BS 6496 or BS EN 12206-1

Where required, a different colour/finish can be provided for the structural sections internally than to the external perimeter.

Construction

Curtain wall framing members are manufactured as detailed in the System 17 manual. Metal Technology do not recommend facetting curtain walling screens when using silicone pointed mullions. Metal Technology recommend that A2 or A4 Austenitic (300 series/class 70) stainless steel fixing screws are used in the assembly of their products.

Glazing

The inner panes of all fixed light double glazed units are to be toughened glass. Fixed light glazing is set against extruded gaskets internally which are fitted into gasket grooves in the mullions and transoms. The vertical and horizontal edges of the fixed light double glazed units are retained by local glazing lugs. Thermally broken aluminium sections are fitted to the mullions and transoms at the perimeter. The vertical and horizontal joints are then sealed with black neutral cure silicone.

Installation

Detailed installation instructions are provided in the System 17 fabrication manual which should be strictly followed.

Concealed Opening Vents

The System 17 SP curtain walling can incorporate concealed top hung, open out casement windows. Refer to the System 17 Latitude manual for further details.

Performance

This system has been designed as a front-sealed system. Where overall screen height exceeds 30 metres, refer to Metal Technology's Technical Department. The system has been impact tested to BS EN 14019 and tested for weather tightness to EN 13050 and in accordance with the CWCT dynamic test for curtain walling and achieved the following results:

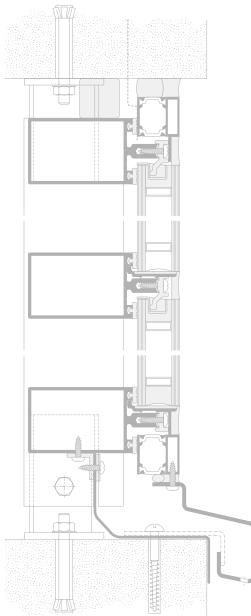
rene ming recenter	
Air permeability -	600 Pa
Water tightness -	600 Pa
Wind resistance -	2400 Pa
Dynamic water tightness -	600 Pa
Wind load (safety) -	3600 Pa

Full test report details are available on request.

These levels of performance should be sufficient for any location within the UK and Ireland. Where screen requirements differ from those stated in this literature refer to Metal Technology's Technical Department.

Development

Our policy is to continually research the market for new and improved products. We must therefore retain the right to amend specifications without prior notice. It is recognised at Metal Technology that in some instances special sections may be required for particular projects. When this occurs it may be possible to produce special sections subject to there being sufficient quantity and adequate time.





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WINDOW CLADDING