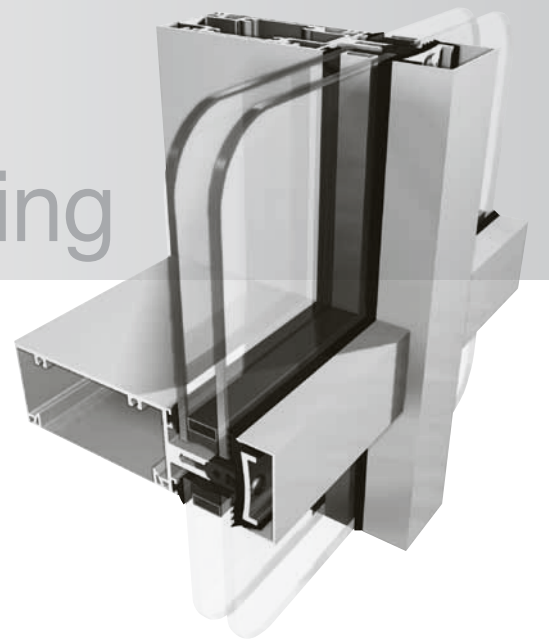


System 8

Low Rise Curtain Walling

Metal Technology, an acknowledged leader in window and door systems has designed System 8 curtain walling for commercial applications. Its attractive and clean lines will enhance all types of office and commercial front façades, with the added benefit of simple fabrication.



Introduction

This system is designed for use in applications where the screen height does not exceed one bar length. As with all curtain walling systems, intermediate tie backs to the structure may be required subject to site conditions. The basic suite is comprised of structural profiles, spigots, pressure plates and thermal isolators. A wide range of caps allows the designer to select from a variety of aesthetic options. Various other bespoke profiles can be produced allowing architects to achieve flexible designs. Glazing options are available for a variety of unit thicknesses. As with all other Metal Technology products, manufacturing is to exacting standards giving economy with required strength, and many years of aesthetic, trouble-free operation. Where curtain walling is required for medium and high rise developments Metal Technology should be consulted for advice on the most suitable system to use.

Thermal Performance

Metal Technology System 8 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 curtain walling.

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.

Finishes

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

1. Anodised to BS 1615 or BS 3987
2. Powder organic coated to BS 6496 or BS EN 12206-1

Where required, a different colour/finish can be provided internally and externally.

Construction

Frame members are square cut shaped and fixed securely to frame by means of austenitic stainless steel screws driven into screw grooves in the section. Frame joints are sealed during construction against entry of water. Intermediate mullion and transom bars are similarly square cut and fitted. Extruded glazing gaskets are provided to resist the ingress of water. The system offers the facility to produce screens façetted on plan. Gaskets provide the facility of façetting up to $\pm 7.5^\circ$. To facilitate more efficient fabrication of the system Metal Technology have invested in purpose designed machinery to punch fixing holes and drainage slots within the sections.

Metal Technology recommend that A2 or A4 Austenitic (300 series/class 70) stainless steel fixing screws are used in the assembly of their products.

Installation

System 8 is designed as a ladder-built system which can then be clipped together on site. Alternative stick-built assembly methods are also detailed in this manual. Extruded profiles for manufacturing adjustable structural brackets capable of accommodating site tolerance, thermal and structural movement are available. These allow the curtain walling to be fixed to the structure easily and securely, so that all loads are transferred back to the building's main structural form.

Glazing

Glass is set against extruded gaskets internally which are fitted into gasket grooves in the mullions and transoms. Horizontal and vertical unit edges are then retained using pressure plates and gaskets screw fixed into the structural members. Cover caps are applied to conceal the pressure plate fixings.

Curved Sections

In accordance with Metal Technology's policy of offering the maximum flexibility to the designer, Metal Technology have special facilities available to enable profile to be supplied curved.

Requirements for curved sections should be discussed with Metal Technology at an early stage in the project.

Opening Vents

Details and specifications for the opening vents can be found in the Metal Technology Thermally Enhanced and Windows manuals.

Performance

The curtain walling has been tested for weather tightness in accordance with BS6375 pt.1.

- Air permeability - 600 Pa
- Water tightness - 600 Pa
- Wind resistance - 2400 Pa
- Wind load (safety) - 3600 Pa

These levels of performance should be sufficient for any location within the UK and Ireland. For further information on testing and performance contact Metal Technology's Technical Department.

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. These requirements should be discussed with Metal Technology.

