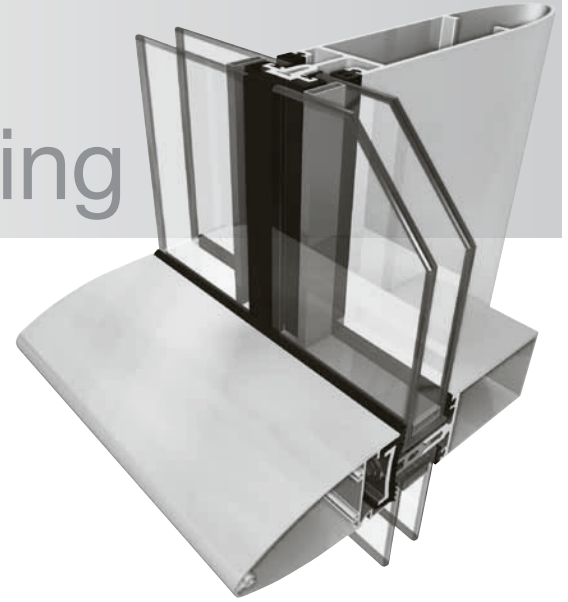


System 17

Latitude Curtain Walling

The “Latitude Curtain Walling” system has been developed as an extension to the Metal Technology standard System 17 High Rise Curtain Walling. This system offers flush vertical joints while emphasising the horizontal transoms with aerofoil aluminium caps. A frameless vent is also available in keeping with the clean external lines of this system.



Specification Overview

Introduction

The system is based on the tried and tested Metal Technology System 17 capped curtain walling. Latitude curtain walling makes use of all the standard System 17 mullion and transom structural sections. The System is designed to have pressure plate and cover cap to horizontal members and flush vertical joints between glass units, using either a silicone or gasket sealed detail. The system accommodates 32mm or 34mm units only.

Where large transom centres are required the units can be recessed to facilitate a concealed mechanical restraint. The system also includes a structurally glazed concealed top hung casement window.

As with all Metal Technology systems, the Latitude 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 Latitude 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, finishes and size limits for the Latitude 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-Part 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 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

Curtain wall framing members are manufactured as detailed in the System 17 manual. Horizontal pressure plates and cover caps are then cut to run continuously past consecutive mullions. Specialist profiles are also available to provide a flush perimeter detail adjacent to the glass. Metal Technology do not recommend façetting curtain walling screens when using silicone

pointed mullions. To ensure the accurate and efficient prepping of the drainage and fixing holes in the transom pressure plates Metal Technology can supply these in a pre-punched condition. 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

Glass is set against extruded gaskets internally which are fitted into gasket grooves in the mullions and transoms. The vertical edges of double glazed units over 900mm high are retained by local glazing lugs or pressure discs. The vertical joints are then sealed. Pressure plates and caps are then fitted to the transoms.

Installation

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

Concealed Opening Vents

The concealed vent is designed as a top hung, outward opening casement window incorporating heavy duty friction hinges and a shoot bolt locking system. Sashes must be restricted to prevent opening beyond 100mm.

Sash and outer frame members are mitre cut at 45°, corners are reinforced with extruded aluminium crimping cleats and corner braces and a secure joint is formed by pneumatically crimping the corner assembly. All joints are sealed during construction to resist the ingress of water.

Metal Technology should be contacted for any special operating or ironmongery requirements.

Maximum Size Limits

Vent Width	Vent Height	Vent Weight
Friction Hinges		
Concealed Opening Vents		
1500mm	1500mm	100 Kg

For complete details of maximum/minimum sizes and weight restrictions, see the size limitation chart in the fabrication manual.

Performance

The curtain walling 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:

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 overall screen height exceeds 20 storeys or 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.

