

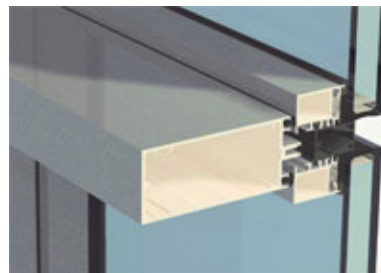
Products - TECHNAL - MX Curtain Walling

MX has all the aesthetic, durability and low maintenance qualities of aluminium, and combines innovative technology and construction features with advanced manufacturing techniques for quality installation and long-term performance.

MX is a complete curtain walling suite, offering specifiers enhanced thermal performance to meet the most stringent building regulations, and a choice of highly flexible aesthetic options from a single system. MX is fully compatible with Technal's portfolio of casement windows and doors, and can be used to create a wide variety of architectural compositions.

Features

1. Slim, constant 52mm sight lines for the mullion and transoms for visual consistency across a project
2. Excellent thermal performance to achieve low U values
3. A technically advanced framing system which uses high quality components for long-term durability
4. Intelligent design to ensure the quality of fabrication and installation
5. A choice of depths up to 240mm for structural members, to meet individual project requirements and ensure cost efficiency
6. Fully compatible with Technal's FXi, PXi and GXi window and door suites
7. The option of concealed vents in a variety of configurations
8. A range of shaped caps for further design flexibility
9. The system can carry glazing units or insulated infill panels.



Technical Details

Materials Aluminium profiles are extruded from alloys 6005 T6, 6063 T6 or 6060 T5 to BS EN 12020, BS EN 573-3, BS EN 515 and BS EN 775-1 to 9. Accessories are cast from Zamak 5 or A-S9G03 to BS EN 12844. All frame gaskets are structural silicone certifiably compatible EPDM. Polyamide thermal breaks are extruded from PA6-6 (0.25 FV). Screws are torx head austenitic stainless steel.

Finishes Standard mill finished. Natural self-colour or Anolok anodised in accordance with BS EN 1273 and BS3987. Stoved polyester powder coated finishes in a wide range of colours and in accordance with BS 6496. The MX suite is also available in Technal's exclusive flecked gloss Cendré polyester powder coated colours.

Profile Width 75mm

Construction The mullions and transoms are square cut and assembled using a combination of factory-fitted cast face-fixed junction spigots and concealed anti-rotation spigots, or by transom blocks. This robust construction offers ease of fabrication, greater accuracy and enhanced stability.

The mullion jointing uses a specially designed sleeve spigot for each mullion for a high quality joint.

All machine operations can be performed on drill jigs with punch tooling for drainage, to reduce fabrication time and cost, and achieve consistent quality.

Performance Each individual drainage zone has a series of bespoke EPDM plugs between the isolators and pressure plates at each junction, preventing water ingress and removing the need for sealant for higher performance.

The MX system has the additional advantage of secondary mullion drainage to further improve weather performance and quality.

A PVC perimeter sealing profile ensures damp proofing at the building interface.

The system is zone drained and pressure equalised to ensure performance and drainage efficiency.

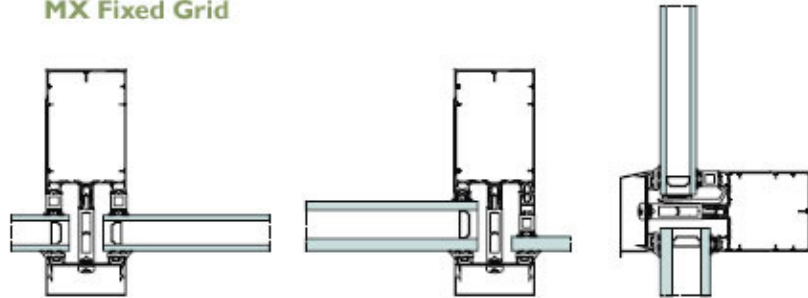
Design Options High to low rise curtain walling

MX I frame for horizontal or vertical emphasis
 MX SSG structural sealant glazing
 MX BG beaded glazing
 Sloped and faceted façades
 Atrium roofs
 Ribbon glazing
 Concealed vents.

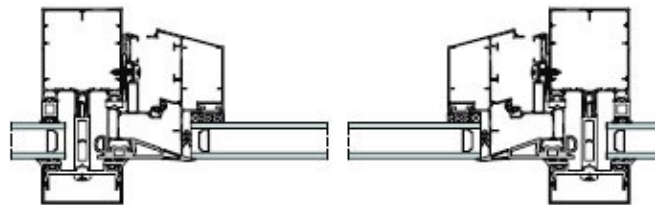
Performance Tested in accordance with NF standards, meeting the requirements of BS EN 13830 Specification for Curtain Walling.

MX Visible Grid

MX Fixed Grid



MX Fixed Grid



Features 6mm to 32mm glazing available as a flat façade or faceted up to 20°.

Superior load distribution with less deflection across the transoms, allowing the system to hold large, heavy glazing units.

Projecting top hung open-out, and tilt/turn concealed vents for natural ventilation whilst maintaining an uninterrupted flat façade.

Choice of glazing gaskets as over-sized vulcanised corners, linear supply, or made-to-order frames to suit project requirements.

Construction The faceted glazing option uses a standard cast face-fixed spigot for a facet of $\pm 10^\circ$, and a transom block with specially designed pressure plates, caps and adaptors for 10° to 20° facets.

The mullions and transoms are square cut and assembled using a combination of cast face-fixed junction spigots and concealed anti-rotation spigots for ease of fabrication.

There is also the option of transom blocks as an alternative to anti-rotation spigots to meet design and project requirements.

Weather Performance The MX visible grid system is thermally isolated using a 34mm TPE thermal break between the pressure plate and mullion or transom. This ensures superior thermal performance in line with the required building regulations.

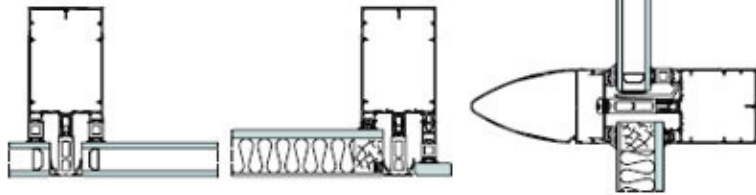
A pressure plate holds the infill in place with a combination of EPDM gaskets and allows for zone drainage with pressure equalisation using punched slots into the pressure plates and caps.

MX Trame

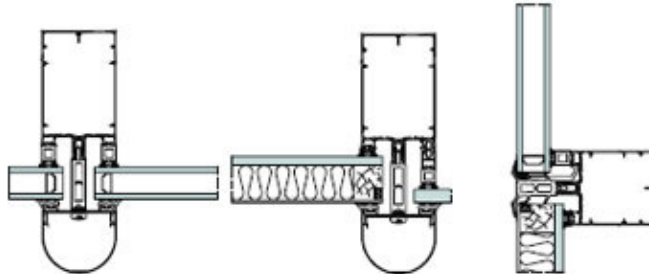
MX Trame

MX Trame

MX Trame Horizontal



MX Trame Verticale



Features MX Trame is a further design option, allowing specifiers to highlight the vertical or horizontal profiles across the building envelope.

MX Trame Horizontale can accommodate 6mm to 32mm glazing as a flat façade or faceted up to 10°. The concealed vent configurations are top hung open-out or tilt/turn

MX Trame Verticale can carry 6mm to 32mm glazed units as a flat façade. Concealed vent options are top hung or tilt/turn

On larger mullion or transom spans, the glass deflection is reduced using a centrally fitted pressure block.

Construction Projecting aerofoil transom caps add depth to the façade whilst slender face trim gaskets, which are flush with the front face of the infill, soften the corresponding vertical or horizontal sections

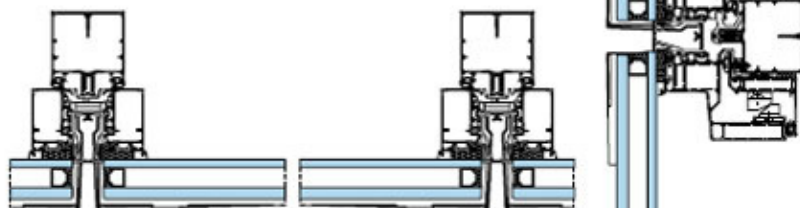
The MX Trame system is dry glazed, removing the need for site-applied sealant.

Weather Performance A pressure plate on the mullion or transom holds the infill in place with a combination of EPDM gaskets and allows for zone drainage with pressure equalisation through punched slots into the pressure plates and caps

MX Trame is thermally isolated using a 34mm TPE thermal break between the pressure plate and mullion or transom. This ensures superior thermal performance in line with the required building regulations.

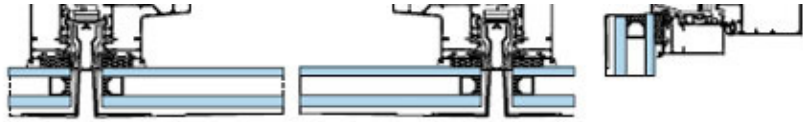
MX SSG

MX SSG Fixed Frame



MX SSG Open-out Vent





Features MX SSG responds to the increasing demand for structural glazing to create striking flush glass façades with visibly less aluminium

MX SSG uses the same grid system as MX beaded glazing, MX Trame and MX visible grid, allowing specifiers to vary the aesthetics of the building envelope without the need for additional interface detailing and construction

The system is manufactured in controlled factory conditions by an approved bonding specialist to certified standards

A patented 'hook and toggle' system facilitates installation

The double glazed units are bonded onto the carrier frame with one or two-part silicone. The external edges are arised and a 2mm step to the outer pane allows standing water to drain away for improved weather performance

A bespoke EPDM perimeter frame gasket is fitted to every frame

MX SSG can accommodate 6mm, 28mm or 34mm structural sealant glazing or 50mm composite insulated panels

Available as a flat façade or faceted up to 3°

The glass is supported by a patented glass security support at each corner of the carrier frame which allows a maximum glass weight of 200kg per frame

A choice of fixed lights, top hung open-out and tilt/turn concealed vents are available

A single carrier frame can be easily removed from the inside using a special tool for replacement glazing.

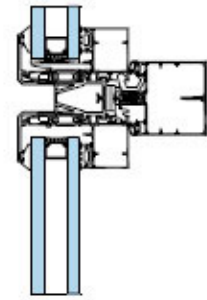
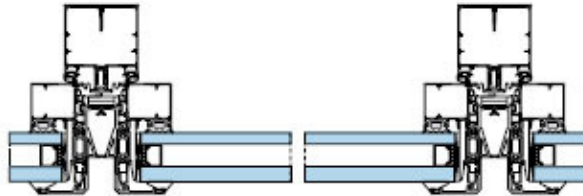
Construction An EPDM internal compression gasket makes the system fully air tight. There is a choice of a frame gasket or over-sized vulcanised corners fitted on site

Carrier frames are fitted onto the curtain wall grid using the 'hook and toggle' system

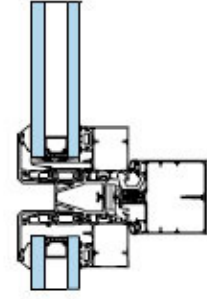
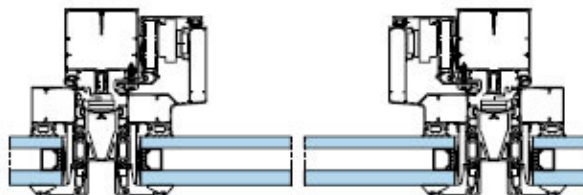
The carrier frames are mitre jointed using an epoxy-bonded and mechanically crimped corner cleat for a robust construction.

MX BG

MX BG Fixed Frame



MX BG Open Out Vent



Features MY BG has an externally headed frame option to create a

features MX BG has an externally beaded frame option to create a 'picture frame' appearance

MX BG uses the same grid system as MX structural glazing, MX Trame and MX visible grid, allowing specifiers to vary the aesthetics of the building without the need for additional interface detailing and construction

A patented 'hook and toggle' system facilitates installation

The system is dry glazed onto carrier frames in the factory

MX BG can carry 30mm to 36mm glazing

Available as a flat façade or faceted up to 3°

Externally glazed, the top and bottom beads are pop-rieveted to the fixed frame for additional security

A choice of fixed lights, top hung open-out and tilt/turn concealed vents are available

A single carrier frame can be easily removed from the inside for replacement glazing using a special tool.

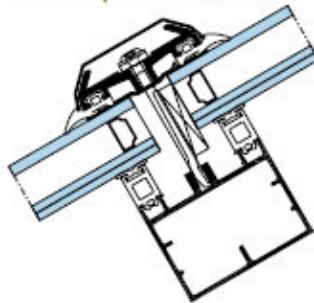
Construction An EPDM internal compression gasket makes the system fully air tight. There is a choice of a frame gasket or over-sized vulcanised corners fitted on site.

Carrier frames are fitted onto the curtain wall grid using the 'hook and toggle' system

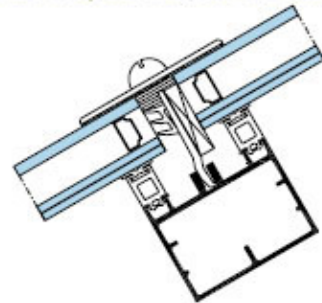
The carrier frames are mitre jointed using an epoxy-bonded and mechanically crimped corner cleat for a robust construction.

MX Sloped Glazing

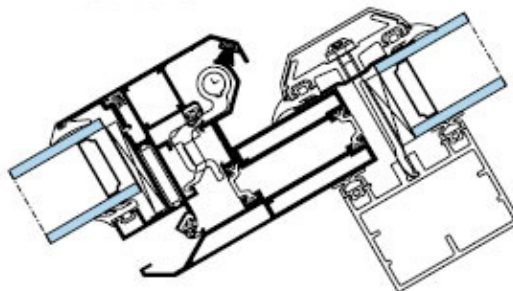
MX Sloped Visible Grid



MX Sloped Trame Verticale



MX Roof Vent



Features The MX system allows sloped glazing to be created in MX visible grid or MX Trame Verticale

These options give specifiers the flexibility to construct sloped roofs, atria, canopies, valleys and pyramids, which are fully compatible and visually consistent with the vertical façade.

MX Visible Grid:

A special transom cap for the horizontal and vertical profiles reduces the collection of water on the slope

The rafters and transoms are square cut and assembled using a penetrating transom principle.

MX Trame Verticale:

There are vertical caps and silicone sealant on the transom with pressure blocks to prevent deflection under negative wind load pressure

The double glazed units should be manufactured using structural silicone sealant

A minimum slope is available of 10° for single glazed units and 15° for double glazing.

Construction The 8mm to 32mm infill is held by horizontal and vertical pressure plates for the visible grid system and by vertical pressure plates and horizontal pressure blocks for MX Trame Verticale.

Weather Performance Drainage is achieved from the transom ends through the rafters

The grid system is glazed with an EPDM gasket to the inside and butyl tape to the outside. MX Trame Verticale has an infill gasket and silicone on the transoms.
