

Mondrian FR EI60/90

Product Data Sheet



Frame

Thermally broken fire rated, steel frame
Frame Depth 70mm
Typical Ven t + Frame Profile 132.5mm
Typical Meeting Stile 155mm
Typical Head Frame 132.5mm
Typical Base Frame 122.5mm
Uf Value from 2.9 W/m²K in accordance with EN ISO 10077-2
Frame finishes Raw steel & Galvanised Steel

Opening Configurations

Available as both internal or external glazing as doors or fixed fire rated screens.

Single Doors (inward/outward opening),
Double Doors (inward/outward opening),
Fixed Screens

Glass

Transparent Fire Rated Glass with intumescent layers
Typical Glass Spec Single glazed*
Typical Ug Value 1.0 W/m²K
Maximum glass thickness up to 49mm
Glazing Bars adhered glazing bars possible (19/25mm wide), true dividers (70mm wide)
PPC same as frame.

- EI60 can be double glazed, EI90 cannot.

Performance

Fire Rating EI60 / EI90 in accordance with EN 1634-1 and EN13501-2
Smoke Doors S_a/S₂₀₀ in accordance with EN13501-2, also tested as smoke doors in accordance with DIN 18095 and EN 1634-3
Suitable for Emergency Exit Doors in accordance with EN 179 and EN 1125 when suitable ironmongery used
Air Permeability Class 4 (600Pa) in accordance with EN 12207
Water Resistance Class 4A (150Pa) in accordance with EN 12208
Wind Load up to Class 4 (1600Pa) in accordance with EN 12210
Acoustic Reduction R_w 43 (-1;-4) dB in accordance with EN ISO 410-3, ISO/DIS 717-1 and DIN 52210, depending on glass specification
Classification of Strength Class 4 in accordance with EN 1192
Mechanical Durability Class 6 (200,000) in accordance with EN 1191 and EN 1603

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Maximum Sizes

Opening Configuration	Fire Rating	Material	Max Size	Notes
Fixed Screen	60/60 or 90/90	Steel	4755mm tall x unlimited	Framed doors can be integrated within fixed
Single Doorset	60/60	Steel	1598mm wide x 2906mm tall	Max area 4.21m ² , with single mortise lock and top shoot bolt.
Single Doorset	90/90	Steel	1656mm wide x 2889mm tall or 1426mm wide x 3044mm tall	Max area 4.34m ² or 5.21m ² , with single mortise lock and top shoot bolt.
Double Doorset	60/60	Steel	2930mm wide x 2889mm tall	Max area 4.19m ² , with single mortise lock and
Double Doorset	90/90	Steel	2930mm wide x 2889mm tall	Max area 4.01m ² , single mortise lock and top shoot bolt.
Structural Glazing	EI90 EI120 possible		Individual panes 1560mm wide x 3500mm tall	With flush vertical silicone joints between panes

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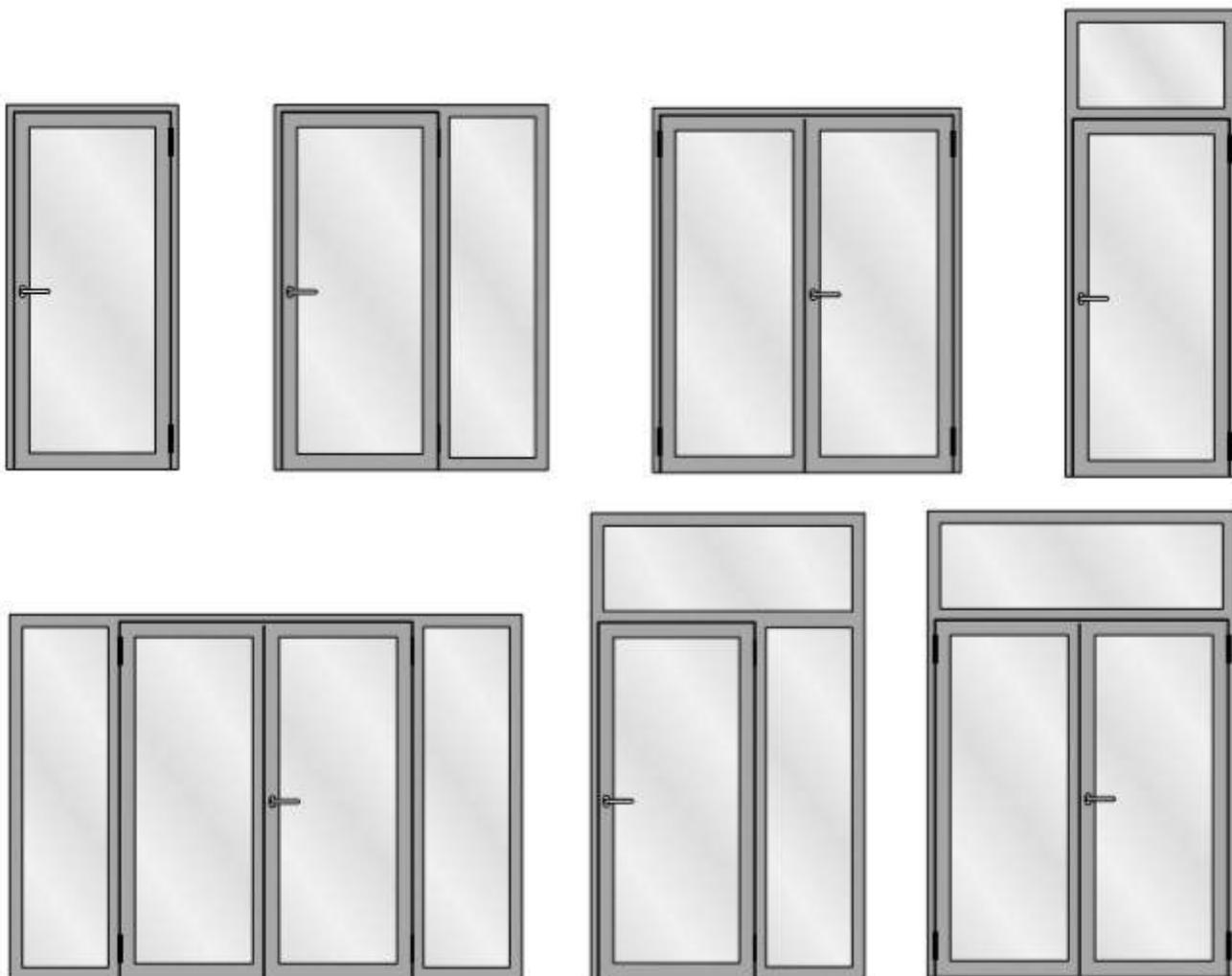
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Configurations

Available as:

Fixed screens, fixed structural glazing, single hinged (inward and outward opening), double hinged (inward and outward opening), opening doors within fixed glazing

Fixed Structural glazing: Individual glass panes 3.5m tall x 1.56m wide with flush vertical silicone joins



Glazing Bars

True and adhered glazing bars are possible to create a traditional steel look.

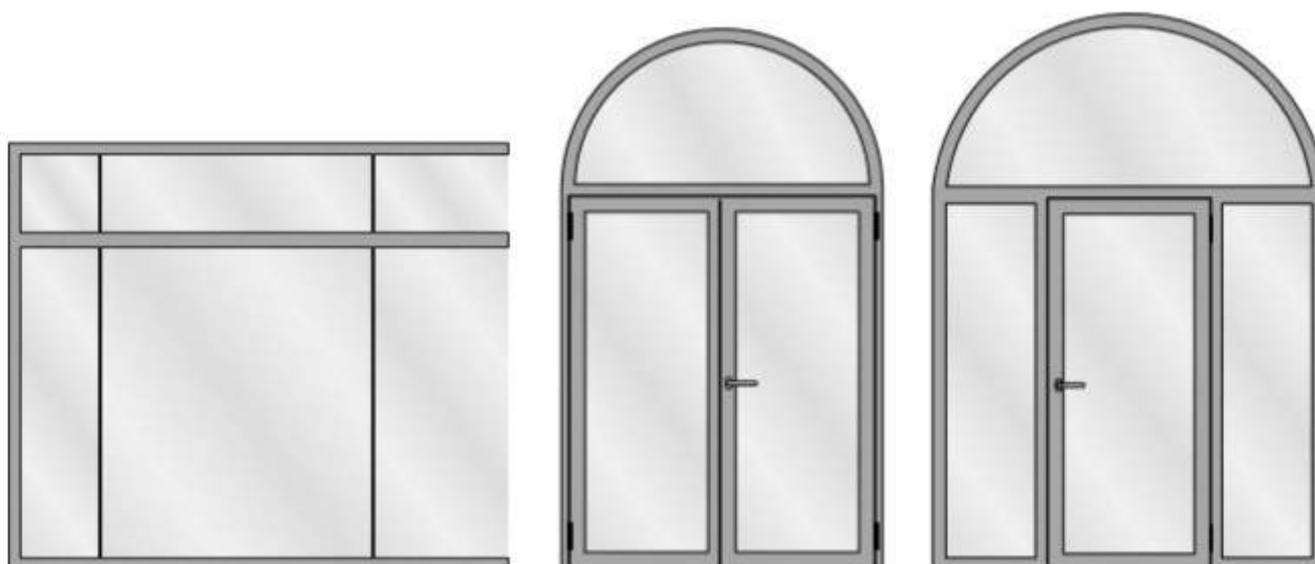
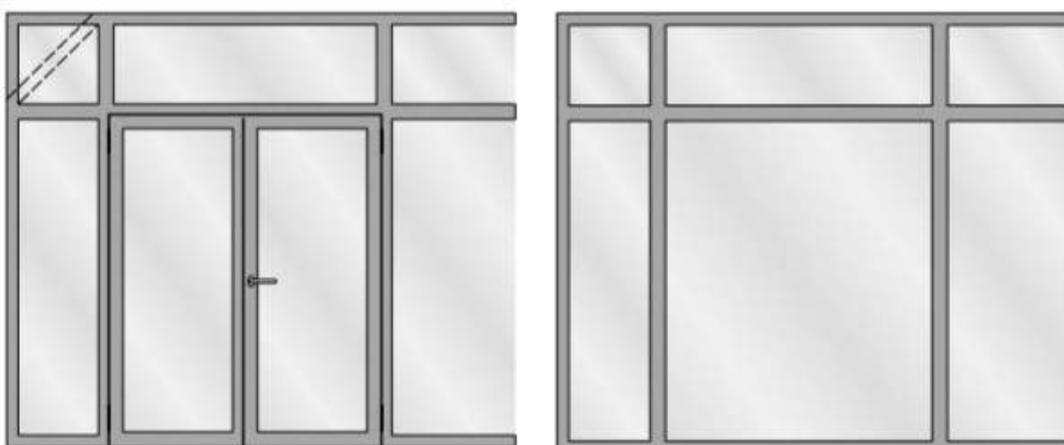
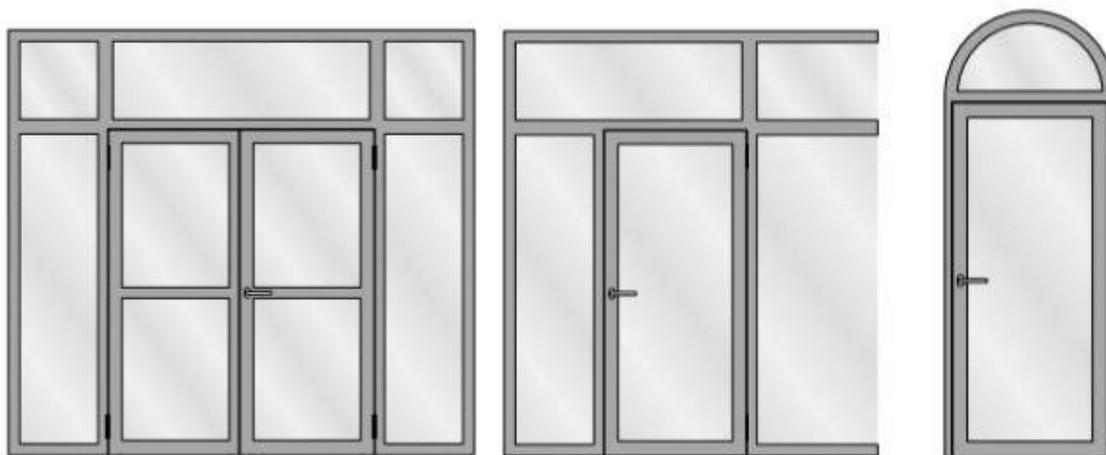
Adhered glazing bar size: 19mm or 25mm

True glazing bars: 70mm

PPC: same colour as the frame

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Configurations

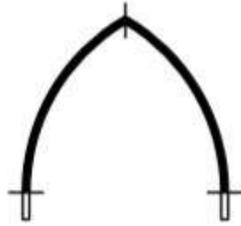


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Configurations - Arched Doors



Semi-circular Arch



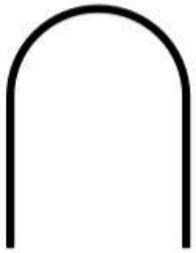
Gothic Arch



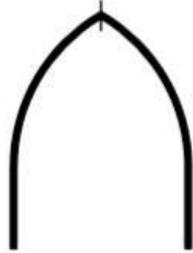
Segmented Arch



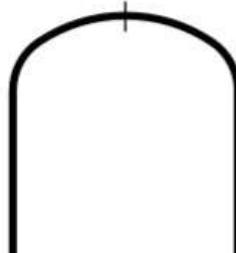
Oval Arch



Semi-circular arch
with side extension



Gothic arch with
side extension



Oval arch with
side extension

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Locking

Latched Single Leaf Doorsets

Up to 2500mm tall a minimum of ;

A two-point lock or a single point lock and bi-metallic latch at the head of the door if there is a side light on lock side.

Minimum single lock if additional sidelight on lock side.

Taller than 2500mm;

A two-point lock or a single point lock and bi-metallic latch at the head of the door if there is no side light on lock side.

Minimum of three-point lock if no additional sidelight on lock side

Latched Double Leaf Doorsets

Up to 2500mm tall a minimum of ;

Active leaf – single lock;

Passive leaf – spring loaded shoot bolt(s) that engage with the head or head and base frame.

Taller than 2500mm;

Active leaf – minimum two-point lock and bi-metallic latch at the head of the door;

Passive leaf – spring loaded shoot bolt(s) that engage with the head or head and base frame.

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Handle Options



Lever Handle

Available with Standard function, Emergency function B and Emergency function E

Standard function

- fitting hinge side / side opposite hinge
- with lock 555.800 \varnothing 22 / 555.801 \varnothing 17

Emergency function B

- fitting hinge side / side opposite hinge
- with lock 555.802 \varnothing 22 EN 179
- with lock 555.802 \varnothing 22 EN 1125* / 555.804 \varnothing 17 EN1125*

Emergency function E

- fitting side opposite hinge
- with lock 555.806 \varnothing 22 EN 179 / 555.807 \varnothing 17 EN 179

* fitting hinge side **ONLY**



Push Bar / Touch Bar

Available with Emergency function B and Emergency function E

Emergency function B

- fitting side opposite hinge
- with lock 555.802 \varnothing 22 EN 1125 / 555.804 \varnothing 17 EN1125

Emergency function E

- fitting side opposite hinge
- with lock 555.806 \varnothing 22 EN 1125 / 555.807 \varnothing 17 EN 1125

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How to Specify a Mondrian Glazing System

Mondrian Windows and Doors are first choice for architects and designers all over the UK looking for a high end steel solution for their design. If you would like to specify a Mondrian product for your project just speak to the team at IQ who would be happy to assist.

Speak to the team at IQ

The team at IQ are the experts in our Mondrian product range. If you are considering using a Mondrian product on your project speak to the team at IQ who will be able to advise you on the best solution for your intended design, ensure that all specification criteria are met and advise you on any feasibility areas of the installation you may not have considered.

Get a Quotation

We advise our customers to get a quotation for intended Mondrian installations from IQ. This allows us all to ensure that the preferred product and design is within budget. If it is not we can help you adjust the specification to reach all performance, design and budgetary requirements.

Add us to your NBS Specification

To assist you in specification we have created individual NBS Specification sheets for each Mondrian product. These easy to navigate documents contain all the vital information needed for specification. They are available for you to complete on your own alternatively ask your sales representative at IQ to complete this on your behalf.

Place the Order

When ready you (or your client or the builder) can then place the order for your Mondrian Door or Window with us. A full in house handover will take place and your project will be passed to the contracts and design team. Once your project deposit is placed we will then undertake full design drawings for the Mondrian installation. Please allow at least 20 working days for the design process. The project will be appointed a dedicated contracts manager who will oversee the installation process.

Any Questions? Would you like to visit the showroom?

Contact the team at IQ who will be happy to help.

hello@iqglassuk.com

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Buckinghamshire, HP6 6FT

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Finishes + Material Specification

One of the architectural advantages of the Mondrian Range is the broad selection of materials and finishes it is available in. When choosing the material and finish for your Mondrian installation it is important to keep in mind the maintenance, usage and location of the glazing to ensure you select one most suited to your environment.

Galvanised Steel

The act of galvanising steel is designed to create a protective zinc layer to the external face of the steel material. This protective layer then protects the internal steel structure from rust or corrosion. The galvanisation process is applied to the entire steel section/sheet which is then cut down to order.

When galvanised steel is cut, welded and cleaned this protective zinc layer on the outside of the steel is slightly compromised at those areas.

Although powder coating gives an element of protection to these joints and edges there is a small chance that oxidisation could occur on the corner joints or cut edges of a galvanised steel profile.

Powder Coated Finishes for Steel

Galvanised, Mild and Stainless Steel can all be powder coated to finish the metal in the RAL colour of your choice.

Dry Powder Coating is the most common method. This involves the even application of charged polyester particles to the frame which are then baked to create a coloured seal to the metal frame. Dry Powder Coating may not be suitable for architectural metal works with intricate detailing as the polyester particles will slightly fill in any delicate notches, lines or detailing.

For these more decorative elements of metalwork Wet Powder Coating is better suited. This coloured finish is applied by hand using a wet spray. The process of hand applying the spray may result in slightly different colour thicknesses across the surface of the metal.

Care of Powder Coated Surfaces

If you chip or scratch a powder coated surface you will expose the base material of the metal and create a weak spot in the metal's defences against corrosion. This point is then an area

where moisture can penetrate the metal substrate and cause corrosion or oxidisation.

Care must be taken in the handling of metal elements to ensure that no damage is inflicted to the powder coated surface. This applies to the installation process, post installation construction (where other works will be carried out on site) and once the project is completed.

Information regarding the protection and handling of metal profiles and products should be shared with all that may have interaction with the specialist architectural metal installation. This includes other trades, contractors, cleaners and the end user.

Cleaning of Architectural Metal

Architectural metals are artisan building materials and careful consideration and attention should be taken for their aftercare.

Do not use harsh abrasives or chemicals

Do not use scrubbing brushes or sponges with bristles or rough surfaces

Do not use acidic cleaning products

Clear water with a neutral pH is recommended

Soft wiping with a non-abrasive cloth is recommended

Frames and glass must be fully dried after cleaning

When the glass is cleaned it is important to ensure that all water is dried from the glass surface, in particular in any crevices or corners of the glass where it meets the frame. If this is not done the water may cause corrosion to the profiles.

All parties involved with the maintenance and cleaning of the installations must be given a copy of the O+M manual to ensure proper handling. This includes all external cleaning services, property maintenance and building users.