



SPECIAL FEATURE

A defining moment for modern glazing: FIRE RESISTANT GLASS

Fire Resistant Glass is redefining fire safety in buildings through extended resistance classes, large-format capability, advanced interlayers and certified European compliance. Supporting integrity, insulation and radiation control whilst enabling daylight and transparency, it now plays a central role worldwide for processors, manufacturers and architects alike.

Moving beyond its former role as a specialist building material, Fire Resistant Glass is now also a core component of contemporary architectural and glazing strategies. That evolu-

tion reflects wider changes in how buildings are being designed, regulated and experienced - particularly where transparency, safety and performance must all coexist without compromise.

Across internal and external

building applications, Fire Resistant Glass is increasingly specified to deliver defined levels of fire protection whilst supporting daylight, visibility and spatial openness. This shift has been enabled by advances in glass construction, interlayer technology, production ca-

pability and system testing - positioning fire-rated glazing as a mainstream solution within the flat glass industry.

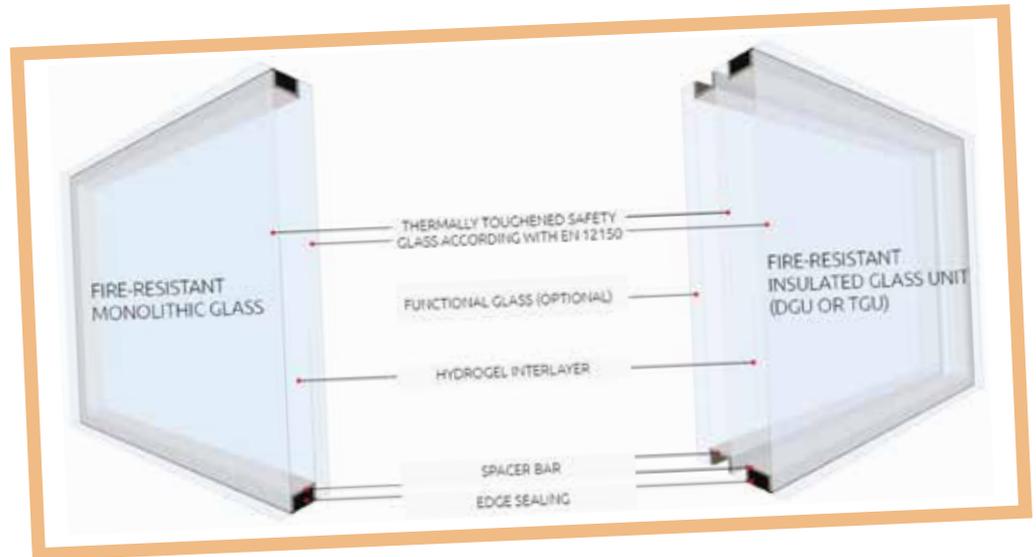
CLASSIFICATION

A defining characteristic of modern Fire Resistant Glass is the breadth of fire resistance classes now available.



Glazing solutions are produced to meet integrity-only requirements, integrity with reduced heat radiation and full integrity combined with thermal insulation. These performance levels are defined under EN 13501-2 and extend from shorter resistance times to durations of up to 180 minutes.

Integrity-rated fire glass provides a barrier against flames and hot gases, while variants offering radiation control limit the transfer of heat to the non-fire side. Fully insulating fire-resistant glass delivers both integrity and thermal insulation, effectively blocking the transmission of conductive and radiant heat. This range al-



lows fire performance to be aligned precisely with building fire strategies rather than restricting design outcomes.

CAPABILITY

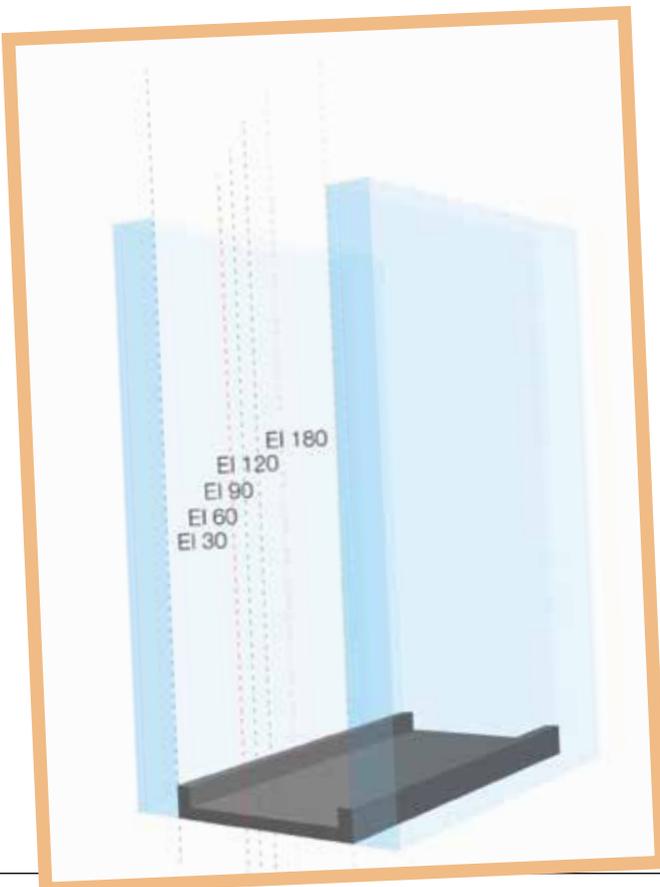
Fire Resistant Glass is no longer constrained by size or form. Large-format and curved fire-resistant glazing is now produced across multiple fire resistance classes, supporting expansive architectural applications. These capabilities are underpinned by pioneering production technologies and in-house testing facilities that ensure consistent performance at scale.

The on-site production of fire-reactive interlayers, in-

cluding hydrogel and intumescent materials, further strengthens quality control and supply reliability. For manufacturers and processors, this vertical integration supports repeatable performance while meeting the increasing demand for complex, high-performance glazing.

APPLICATION

Modern Fire Resistant Glass is designed for both interior and exterior use and can be incorporated into a





spread of flames, smoke and hot gases.

In addition to fire performance, these systems deliver high light transmission and unobstructed vision under normal conditions. Clear intumescent interlayers provide a visible barrier to flames during a fire event, which can help reduce panic and support safer evacuation. Impact safety and effective noise control further enhance the functional value of fire-rated glazing.

COMPLIANCE

Compliance and verification are central to the growing adoption of Fire Resistant Glass. Products are extensively tested in a variety of framing materials and glazing systems to ensure that declared performance is achieved in real-world applications. CE marking and adherence to harmonised European standards provide assurance of consistency, traceability and regulatory acceptance.

Available in different thicknesses and compositions for internal or external use and supplied as monolithic panes or insulating glass units, Fire Resistant Glass offers flexibility without compromising compliance. This combination of certified performance, design freedom and production capability explains why fire-rated glazing has now become an irreversible, defining trend within the global flat glass industry.

wide variety of framing systems. It is compatible with steel, aluminium and timber frames, as well as monolithic configurations and insulating glass units. Seamless integration within plasterboard walls and butt-joint glazing systems allows fire protection to be embedded discreetly within architectural layouts.

Applications now extend across transparent fire walls, doors, windows, screens, partitions, façades, atriums, stairwells, storefronts, lot-line glazing, floors and roof elements. Vertical, inclined and horizontal installations enable large glazed areas to meet fire safety requirements while maintaining daylight and visual continu-

ity - replacing opaque constructions that previously limited design flexibility.

PERFORMANCE

The performance of Fire Resistant Glass is achieved through multi-layer constructions using clear glass laminated with transpar-

ent fire-reactive interlayers. When exposed to fire, the pane facing the flames fractures but remains in place, while the interlayer reacts immediately, foaming to form a thick, rigid insulation shield. This barrier absorbs energy from the blaze and restricts the



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