

Fire-Rated Glass Units

Integrity and insulation glazing for compartmentation, fire doors and escape routes

Product Overview

Fire-rated glass provides fire resistance for a defined period during a fire. Classifications: E (integrity — prevents flames and hot gases), EW (integrity + radiation control — limits heat to below 15 kW/m²), EI (integrity + insulation — limits temperature rise to below 140°C on the unexposed face). EI-rated glass contains intumescent gel layers that expand in fire, forming a rigid opaque insulating shield.

Fire Ratings & Products

Rating	Class	Thickness	Max Panel	Weight/m ²	Products
E 30	Integrity	6-7mm	1500x2500	16-18 kg	Pyroguard, Georgian wired
E 60	Integrity	7-10mm	1400x2400	18-25 kg	Pyroguard, Borosilicate
EW 30	Radiation	10-15mm	1300x2400	25-37 kg	Pilkington Pyrodur
EI 30	Insulation	15-21mm	1200x2400	37-52 kg	Pyrostop, Contraflam 30
EI 60	Insulation	25-33mm	1100x2300	62-82 kg	Contraflam 60

How Intumescent Fire Glass Works

EI-rated glass contains multiple clear intumescent gel layers between glass plies. Under normal conditions the gel is completely transparent. In a fire, each gel layer reacts to rising temperature by expanding and turning opaque white, forming a rigid insulating foam shield. Layers activate in sequence as temperatures increase, providing sustained protection. The unexposed face stays cool (below 140°C).

Critical Installation Requirements

- Approved framing only — must use tested, approved fire-rated frame systems.
- Intumescent seals — glazing tape/strips must match tested specification exactly.
- No site modification — fire glass cannot be cut, drilled or modified on site.
- Rating match — glass rating must meet or exceed the wall/partition fire resistance period.
- Building control — every installation must be signed off by building control.

Handling, Storage & Lead Times

- **Storage:** Store vertically on A-frames under cover. Never store flat.
- **Handling:** Suction cups for units over 25kg. Mechanical handling over 60kg.
- **Edge protection:** Protect edges during transport. Avoid glass-to-glass contact.
- **Installation:** Install within 28 days of delivery for warranty validity.
- **Temperature:** Do not install below 5°C. Allow units to acclimatise first.

Product	Standard	Express	Notes
Standard DGU	3-5 days	1-2 days	Most configs
Triple Glazed	5-7 days	3-4 days	Warm edge std
Integral Blinds	10-15 days	—	Made to order
Jumbo Units	5-10 days	—	Size dependent
Shaped Units	5-7 days	—	Template req.
Fire-Rated	7-14 days	—	Availability
Walk-On Glass	7-10 days	—	SGP lamination
Smart Glass	10-15 days	—	PDLC film

How to Order

Contact our sales team: 020 8574 9342 | 07305 993794 | sales@csultd.co.uk | csultd.co.uk — quotes returned within 2 business hours (Mon-Fri, 8am-5pm).