Float Glass

Standard annealed glass — the base substrate for every other glass type

Overview

Float glass is manufactured by floating molten glass (at approximately 1,100°C) on a bath of molten tin, producing perfectly flat, distortion-free sheets with uniform thickness and optically clear surfaces. Every other glass type — toughened, laminated, Low-E coated, solar control, self-cleaning, fire-rated — starts as float glass before further processing.

Standard clear float has a slight green tint visible at edges due to iron oxide content (~0.10% Fe■O■). For applications where colour-neutral edges are important, use low-iron glass (Pilkington Optiwhite, SGG Diamant) which reduces iron to ≤0.01%.

Performance in Sealed Units

Configuration	U-value	Light	g-value	Weight/m²
4mm single pane	5.8	90%	0.87	10 kg
4-16-4 Air DGU	2.8	82%	0.76	20 kg
4-16-4 Low-E Argon	1.1	80%	0.63	20 kg
4-20-4 Low-E WE Argon ★	0.9	80%	0.63	20 kg

Technical Specifications

Property	Specification
Manufacturing	Float process — molten glass on tin bath ~1,100°C
Composition	~72% SiO2, 14% Na2O, 10% CaO
Density	2,500 kg/m³
Thicknesses	2, 3, 4, 5, 6, 8, 10, 12, 15, 19, 25mm
Max sheet	6000 x 3210mm (jumbo)
Emissivity	0.84 (uncoated)
Strength	40 N/mm² (annealed)
Thermal shock	40°C max differential

Limitations

- **Not safety glass:** breaks into sharp shards. Use toughened/laminated for safety locations.
- **Poor thermal single:** U-value 5.8. Must be in a sealed unit with Low-E.

- **Thermal stress risk:** prone to fracture if partially shaded — toughen large panes.
- **Green edge tint:** use low-iron (Optiwhite) where colour-neutral edges are needed.

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).