



Toughened Glass

High performance safety glass

Dellner Glass Solutions toughened glass is a high-strength safety glass suitable for architectural applications including but not limited to windows, balustrades, facades, public shelters and canopies. The glass we produce is up to five times stronger than traditional float glass, and of the highest quality with minimum distortion and bow.

With over 80 years' experience and state of the art machinery, our toughened glass is available across our product range inclusive of coated glass technologies and optional heat strengthening up to 10mm thick.

Our toughened glass can be incorporated into laminated glass, double glazed units and a combination of these. The glass can be machined in all shapes and drill configurations, from simple to highly complex, with top quality edge finishes to specification. We also provide the option of heat soak testing to ensure a high quality glass product.

Standards

Our toughened glass is fully tested and certified to the following specifications:

- BS EN 12150
- BS EN 14179

Key Features

- Up to five times stronger than annealed glass
- Toughened from 4mm
- Heat strengthened from 3mm
- Available in all shapes and drill configurations
- High quality finish with minimum distortion and bow
- Can be incorporated into laminates and double/triple glazed units
- Tested and certified to British and European standards
- Optional heat soak testing to DIN 18516 and BS EN 14179

Toughened Glass - Key Criteria

Characteristics	Specification
Minimum glass size	250mm x 100mm
Toughened glass thickness range	4mm - 19mm
Heat strengthening thickness range	3mm - 10mm
Control of flatness or overall bow	4mm thick - 3mm per 1000mm
	5mm thick - 2mm per 1000mm
	6mm thick - 19mm thick: 1.5mm per 1000mm
Control of roller wave distortion	4mm thick maximum 0.08mm
	5mm - 19mm thick: less than 0.08mm
Position of holes	The distance between the glass edge and the hole should be at least twice the glass thickness
Hole diameters	When two or more holes are required in a piece of glass then the distance between the holes should be at least half the hole diameter or twice the glass thickness
Hole diameters	The minimum diameter of a hole must be 5mm for glass thickness up to and including 5mm, and for thicker glasses, at least the thickness of the glass being drilled