

FLOAT GLASS

Clear Float

Guardian Clear Float Glass is manufactured using the latest advances in glass making technology. An extending number of float glass manufacturing facilities are strategically located to meet the needs of the European architectural glass market with efficient and reliable service.

During the Float Glass manufacturing process, molten glass, at approximately 1100°C, is poured continuously from a furnace onto a large bath of molten tin. It then floats on the tin, spreading and forming a controlled level surface. In the controlled production process, the molten glass is allowed to spread to a width of 300 to 360 cm, depending on the glass thickness being produced. The thickness is controlled by the speed at which the slowly solidifying glass ribbon is drawn through the tin bath. After about 120 m of travel through the cooling Lehr, it emerges as a continuous ribbon of glass at room temperature. The product is perfectly flat and has virtually parallel surfaces. Automatic cutters are used to trim the edges and to cut across the width of the moving glass ribbon. This creates sizes which can be shipped or handled for further processing. Guardian clear float glass can be toughened or laminated.

It is the preferred choice for many applications such as:

- Architectural façades
- Partitions, shop fronts, show cases
- Table tops, shelves, consoles, folding screens
- Residential insulating glass units
- Laminated safety glass
- Silk-screen printed glass
- Mirrors

PROJECT: Opera House – LOCATION: Copenhagen, Denmark – ARCHITECT: Henning Larsen Architects





PROJECT: Lufthansa Aviation Centre – LOCATION: Frankfurt, Germany – ARCHITECT: Ingenhoven Architekten

STANDARDS AND APPROVALS

GUARDIAN Europe has ISO 9001 accreditation for the manufacturing of float glass at all its European based float glass plants. GUARDIAN float glass complies with the requirements of the standards EN 572-2: 1994 “Glass in Building – Basic soda lime silicate glass products – Part 2: Float glass”.

Thickness [mm]	Light Transmission [%]	Light Reflection [%]	Colour Rendering Index [Ra]	Direct Energy Transmission [%]	Energy Reflection [%]	Energy Absorption [%]	Solar Factor [%]	Shading Coefficient [g / 0.87]	UV Transmission [%]
3	90	8	99	86	8	6	88	1.01	73
4	90	8	99	84	8	8	86	0.99	69
5	89	8	99	83	8	10	85	0.98	66
6	89	8	99	82	7	11	85	0.98	64
8	88	8	98	79	7	14	82	0.94	61
10	87	8	97	76	7	17	80	0.92	58
12	87	8	97	74	7	20	79	0.91	55

All performance data are nominal values and are subject to production tolerances. The data were determined according to EN 410.

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