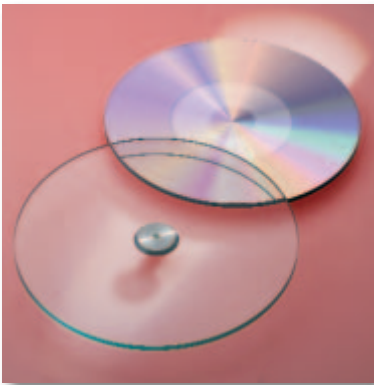




## Process

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 seeking 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 merely 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.



## Applications

Float Glass is ideal where high visibility and clarity are required:

- Manufacture of insulated glass for windows
- Doors
- Solariums
- Mirrors
- Display screens
- Shelves
- Picture frame glass
- Handrails
- Table tops
- Laser discs

## Characteristics

- Flat surfaces
- High light transmission
- Optical clarity
- Can be toughened or laminated for safety glazing
- Can be silvered to produce mirrors
- Suitable for screen-printing, acid etching and decorating with ceramic materials.

## Standards and approvals

Guardian Europe has obtained ISO 9002 accreditation for the manufacturing of Clear Float Glass at all its European based float glass plants. Guardian Clear Float Glass complies with the requirements of the European standard EN 572-2: 1994 "Glass in Building – Part 2: Floatglass".

## Availability

Standard thicknesses: 2, 3, 4, 5, 6, 8, 10, 12 and 15 mm. Other glass thicknesses may be available on request.

## Clear Float Glass - Performance data

Thickness (mm)	Weight (kg/m <sup>2</sup> )	Visible Light %		Solar Energy %			Shading coefficient			U-value
		Transmittance	Reflectance	Transmittance	Reflectance	Absorptance	Total	Short Wave	Long Wave	
2.00	5.00	91	8	87	8	5	1.03	1.02	0.01	5.90
3.00	7.50	91	8	84	7	9	1.00	0.98	0.02	5.80
4.00	10.00	90	8	82	7	11	0.99	0.95	0.04	5.80
5.00	12.50	90	8	80	7	13	0.97	0.93	0.04	5.80
6.00	15.00	89	8	78	7	15	0.95	0.91	0.04	5.70
8.00	20.00	89	8	74	7	19	0.92	0.87	0.05	5.70
10.00	25.00	88	8	71	7	22	0.90	0.83	0.07	5.60
12.00	30.00	86	8	66	6	28	0.86	0.77	0.09	5.50
15.00	37.50	83	8	62	6	32	0.83	0.71	0.12	5.30