

## Product Information: **BOROFLOAT®** Borosilicate Float Glass

6/01

### General Description

BOROFLOAT® flat glass is highly resistant to water; neutral, acidic and saline solutions; as well as to chlorine, bromine, iodine and organic substances. Even over long periods of time and at temperatures exceeding 100°C, BOROFLOAT® exceeds the chemical resistance of most metals and other minerals.

- Thermal conductivity at 90°C: 194°F 1.12W/(m • K)
- Mean specific thermal capacity Cp (20/100°C; 68/212°F) 0.83 kJ/(kg • K)
- Maximum operating temperature (in consideration of RTD<sup>1</sup>)
  - Short term 500°C;932°F
  - Long Term 450°C;842°F

### Mechanical Properties

- Density (at 25°C/77°F) 2.2 g/cm<sup>3</sup>
- Modulus of Elasticity 63 kN/mm<sup>2</sup>
- Knoop hardness HK 0.1/20 480  
(According to E DIN/ISO 9385)
- Poisson's Ratio 0.2

### Sizes and Tolerances

Stock sizes (standard) ± 0.2 mm  
 2300 x 1700 mm (90.5 x 66.9 inches)  
 1150 x 850 mm (45.3 x 33.5 inches)

Normal Thickness(mm)	Tolerance(mm)
0.7	± 0.1
1.1	± 0.1
1.75	± 0.2
2.0	± 0.2
2.25	± 0.2
2.75	± 0.2
3.3	± 0.2
3.8	± 0.2
5.0	± 0.2
5.5	± 0.2
6.5	± 0.2
9.0	± 0.3
11.0	± 0.3
13.0	± 0.3
15.0	± 0.3
16.0	± 0.3
19.0	± 0.5
21.0	± 0.5

### Optical Properties

- Refractive index n<sub>D</sub> 1.472
- Dispersion (n<sub>F</sub> - n<sub>C</sub>) 71.9 x 10<sup>-4</sup>

### Thermal Properties

- Linear thermal coefficient of expansion (20/300°C; 68/572°F) 3.25 x 10<sup>-6</sup>/K
- Transformation temperature Tg 530°C;986°F
- Upper cooling point (10<sup>13</sup> dPa xs) 560°C;1040°F

### Optical Data

Glass thickness: 2, 6, and 15 mm

