



Glass and Polymer
Technologies

Borofloat

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.

Mechanical Properties

- Density (at 25°C/77°F) 2.2 g/cm³
- Modulus of Elasticity 63 kN/mm²
- Knoop hardness HK 0.1/20 480, (According to E DIN/ISO 9385)
- Poisson's Ratio 0.2

Optical Properties

- Refractive index n_d 1.472
- Dispersion ($n_F - n_C$) 71.9×10^{-4}

Thermal Properties

- Linear thermal coefficient of expansion (20/300°C; 68/572°F) $3.25 \times 10^{-6}/K$
- Transformation temperature T_g 530°C;986°F
- Upper cooling point 560°C;1040°F (1013 dPa xs)
- Thermal conductivity 1.12W/(m • K) at 90°C: 194°F
- Mean specific thermal capacity C_p (20/100°C; 68/212°F) 0.83 kJ/(kg • K)
- Maximum operating temperature (in consideration of RTD1)

Short term 500°C;932°F

Long Term 450°C;842°F

Sizes and Tolerances

Stock sizes (standard) ± 0.2 mm

2300 x 1700 mm (90.5 x 66.9 inches)

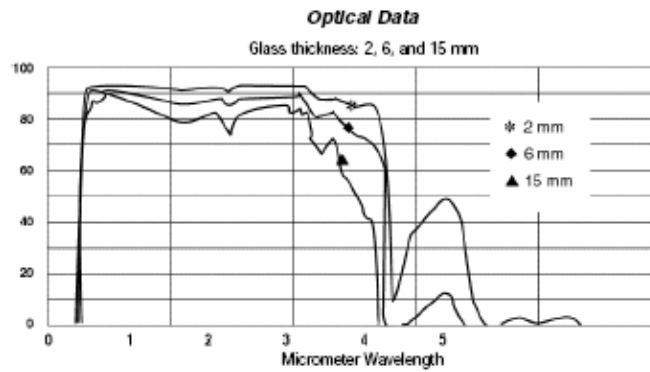
1150 x 850 mm (45.3 x 33.5 inches)



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Nominal 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



POLYMER GLASS