

## Borofloat™ (Schott)

**DESCRIPTION:** BOROFLOAT™ flat glass has excellent optical characteristics because of the high quality resulting from the float glass process. This opens up new applications for borosilicate flat glass which has proved itself over time in laboratories, chemical processing plants, and in the home appliance and lighting industries. BOROFLOAT™ flat glass is highly resistant to water, neutral, acidic and saline solutions, as well as chlorine, bromine, iodine and organic substances. Even over long periods of time and at temperatures above 100°C, BOROFLOAT™ exceeds the chemical resistance of most metals and other materials. Maximum long-term operating temperature is 450°C.

**APPLICATIONS:** Precision engineering, optical applications, home appliances, environmental technology, sewage treatment technology and lighting.

**MAXIMUM SHEET SIZE:** Typically 33" x 45" with these **AVAILABLE THICKNESSES:**

<b>Thickness (mm)</b>	0.7	1.1	1.75	2.0	2.25	2.75	3.30	5.0	5.5	6.5
<b>Tolerance (mm)</b>	± 0.1	± 0.1	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2	± 0.2

**PROPERTIES:**

**Refractive Index**  $n_d$  ( $\lambda = 588 \text{ nm}$ ) = 1.472

<b>Transmission (estimated at 3.3 mm thick)</b>	@ 300 nm	@ 320 nm	@ 340 nm	350-2100 nm
	46%	80%	89.5%	90%+

**Mechanical and Thermal**

Density: 2.20 g/cm<sup>3</sup>

Thermal Coefficient of Expansion (20-300°C) = 32.5 x 10<sup>-7</sup>

<b>Chemical</b>	<i>Hydrolytic Resistance</i>	<i>Alkali Resistance</i>	<i>Acid Resistance</i>
	(ISO 719-HGB)	(ISO 695-A)	(ISO 1776)
	Class 1	Class 2	Class 1

<b>Electrical</b>	Dielectric Constant: 4.6		Dielectric Loss Factor: 37 x 10 <sup>-4</sup>	
	Dielectric Strength (Kv/mm thick):	16.6 @ 75°F	7.1 @ 300°F	1.8 @ 500°F