

Description:

BOROFLOAT™ flat glass has excellent optical characteristics because of the high quality resulting from the float glass process. BOROFLOAT is an excellent equivalent to PYREX, 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 to 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.

Available Thicknesses:

Maximum Sheet Size: Approximately 33" x 45"

Thickness	Tolerance	Thickness	Tolerance	Thickness	Tolerance
0.70mm	± 0.10mm	2.25mm	± 0.20mm	5.00mm	± 0.20mm
1.10mm	± 0.10mm	2.75mm	± 0.20mm	5.50mm	± 0.20mm
1.75mm	± 0.20mm	3.30mm	± 0.20mm	6.50mm	± 0.20mm
2.00mm	± 0.20mm				

Other thicknesses available on request.

Properties:

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

Transmission: (estimated at 3.3 mm thick)

@300nm	46%	@340nm	89.5%
@320nm	80%	@350-2100nm	90%+

Mechanical and Thermal:

Density: 2.22 g/cm³

Thermal Coefficient of Expansion: (20-300°C) = $32.5 \times 10^{-7}/^\circ\text{C}$

Chemical:

Hydrolytic Resistance	(ISO 719-HGB):	Class 1
	(ISO 720-HGA):	Class 1
Alkali Resistance	(ISO 695-A):	Class 2
Acid Resistance	(ISO 1776):	Class 1

Electrical:

Dielectric Constant @25°C, 1Mhz	4.6
Dielectric Loss Factor @25°C, 1Mhz	37×10^{-4}
Dielectric Strength (Kv/mm thick)	16 @ 23°C
	7 @ 149°C
	1.8 @ 160°C

Applications:

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

Flatness, parallelism, cutting tolerances, roughness, cosmetic defects and visual inspection all conform to the specifications to be agreed upon by Precision Glass & Optics and the customer.

