

Specialty Glass Products Technical Reference Document

10/12

Ceramic/Glass

SCHOTT Robax[®] Transparent Ceramic Glass

Description

SCHOTT Robax[®] is a transparent ceramic glass that is extremely heat resistant. The combination of good optical transmission (including infrared, which we perceive as heat) and low thermal expansion make Robax[®] an excellent choice for windows in heating devices. Robax[®] also has good UV blocking characteristics. The most common uses are fireplaces, stoves, and other types of heating systems.

Features

- High resistance to heat (up to 700°C)
- Good transmission
- Excellent resistance to thermal shock
- Blocks UV

Applications

- Windows in room heaters and stoves
- Cover panels for heating radiators
- UV blocking shields
- Cover panels for high powered flood lights
- Cover panels for IR drying appliances

Physical Properties

Mechanical

- | | | |
|---------------------|------------------------|--------------------------|
| • Density (25°C) ρ | 2.58 g/cm ³ | 161.1 lb/ft ³ |
| • Young's Modulus E | 92 Gpa | 13 Mpsi |
| • Poisson's Ratio μ | 0.25 | 0.25 |

Thermal Expansion

- 20 – 700 °C (68 – 1292 °F) (0 +/- 0.5) x 10⁻⁶/K

Maximum Operating Temperatures

Usage Temp:	Usage Time:
560°C	5000 hours
610°C	1000 hours
660°C	100 hours
710°C	10 hours
760°C	5 hours

Dimensions

- Thicknesses: 3mm – 5mm
- Sizes: Up to 62" x 33"

