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

Mechanical
- Density (25°C) $\rho$ 2.58 g/cm$^3$ 161.1 lb/ft$^3$
- Young’s Modulus $E$ 92 Gpa 13 Mpsi
- Poisson’s Ratio $\mu$ 0.25

Thermal Expansion
- 20 – 700 °C (68 – 1292 °F) $(0 +/- 0.5) \times 10^{-6}/K$

Maximum Operating Temperatures
- Usage Temp: 560°C 5000 hours
- Usage Time: 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”