

Corning® Pyrocera™
Code 9606



Corning® Pyroceram® glass-ceramic material is opaque, light gray in color, and has high strength, high elastic modulus, and uniform dielectric properties. It can be manufactured in ogival* shapes, hemispheres, pressware sheets, and various machined shapes.

* pointed arch

Applications

Tactical Missile Nosecones
Antenna Windows
Radomes
Solid Wave Guides
Hydrospace Systems

Dimensions

| | |
|------------------|---|
| Ogival Shapes | Up to 48 inches long x 20 inches diameter |
| Hemispheres | Up to 16 inches in diameter |
| Pressware Sheets | Up to 27 inches x 27 inches x 1.0 inch or 17 inches x 17 inches x 2.0 inches |

Physical Properties

| | |
|------------------|---|
| Water Absorption | < 0.01% |
| Softening Point | 1350 °C; 2462 °F |
| Gas Permeability | Impermeable |
| Density | 2.6 g/cm ³ ; 160 lb/ft ³ |
| Elastic Modulus | 120 x 10 ⁶ kPa; 17.4 x 10 ⁶ psi |

Thermal Properties

| | |
|---------------------------------|--|
| Coefficient of Linear Expansion | 57 x 10 ⁻⁷ /°C — 32 x 10 ⁻⁷ /°F (20 °C - 320 °C; 68 °F - 608 °F) |
| Thermal Conductivity | 0.0081 cal/(s·cm·°C) — 2 BTU·ft/(h·ft ² ·°F) (mean 20 °C - 800 °C — 68 °F - 1472 °F) |
| Thermal Diffusivity | 0.0127 cm ² /s — 0.049 ft ² /h (mean 20 °C - 800 °C — 68 °F - 1472 °F) |
| Specific Heat | 0.233 cal/(g·K) — 0.233 BTU/(lb·°F) (mean 20 °C - 800 °C — 68 °F - 1472 °F) |

For more information about Corning's Pyroceram® materials please contact:

CORNING

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