

# 3000°F CERAMIC FOAM

## Machinable & Insulating Ceramic Blocks

### 310M Machinable Ceramic Blocks

**Rescor 310 Foam** is composed of over 99% pure fused Silica Ceramic and withstands temperatures to 3000°F.

310 Ceramic Foam features low thermal expansion, high thermal shock resistance, low thermal conductivity and high thermal reflectance.

It is resistant to oxidizing and reducing atmospheres, molten metals, steam, corrosive gases, most acids, chemicals and solvents.

Does not contain organics and will not out-gas in vacuum atmospheres.

White Hot, 2000°F, Ceramic Foam parts can be immersed in water without cracking.

Rescor 310 is easily cut, sawed and drilled.

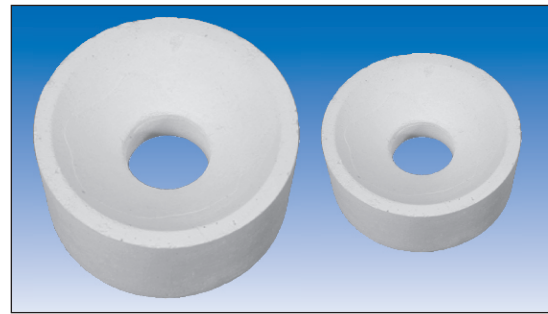
Can produce highly detailed parts with unique properties suitable for many applications.

**Applications include** Miniature heater forms, heat reflectors, instrumentation parts and assemblies, radiant heater panels, severe thermal shock applications, etc.

Typical Tolerances are -0.015" to +0.060".

**Cat. No.            Size**

- 310M - 1 . . . . . 4.5" x 6" x 9"
- 310M - 2 . . . . . 4.5" x 9" x 12"
- 310M - 3 . . . . . 4.5" x 12" x 18"
- 310 - 4 . . . . . Trial Kit (Misc. Pieces)
- 901A-1 . . . . . Hardener (Quart)



**Rescor 310 Heating Element Reflectors**

RESCOR TYPE GRADE	310M High Strength Machinable	311 Insulating Blocks
Max Service Temp. °F	3000	2600
Density (# / ft <sup>3</sup> )	50	50
Porosity %	63	52
Thermal Expansion (x10 <sup>-6</sup> /°F)	0.3	2.9
Thermal Cond. BTU in / Hr °F Ft <sup>2</sup>	1.3	2.4
Compressive Strength (psi)	1200	500
Flexural Strength (psi)	520	250
Dielectric Constant (@ 1 MHz)	3.17	2.17
Loss Factor (@ 1 MHz)	0.0002	0.02
Resistivity (ohm / cm)	10 <sup>9</sup>	10 <sup>8</sup>

### 311 Ceramic Blocks

**Economical Rescor 311** Foam is composed of Alumina Silica Ceramic and withstands temperatures to 3000°F.

Low Cost 311 Ceramic Foam is used for applications where the strength and fine grain structure of Rescor 310 foam is not required.

It is resistant to oxidizing and reducing atmospheres, molten metals, steam, corrosive gases, most acids, chemicals and solvents.

No organics. Will not out-gas in vacuum atmospheres.

Rescor 311 is easily cut, sawed and drilled.

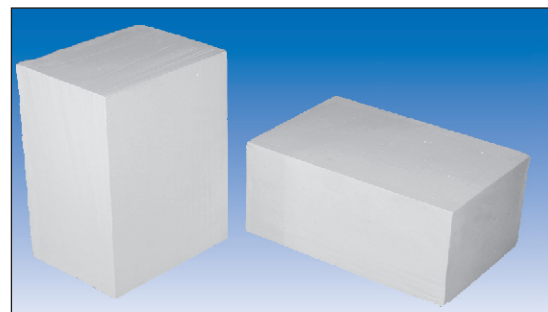
Larger shapes are easily produced.

Just prime the surfaces with the 901A liquid hardener (pg 50) and join surfaces with 901 adhesive (pg 51) or seal joints with 7020 Ceramic Putty (pg 51).

These assemblies can then be machined to the final sizes and shapes.

Surfaces are rough with some porosity. Sizes are nominal.

Also available, Rescor 740, a unique castable ceramic foam, great for fabricating very large or irregular shapes (page 59).



**Rescor 311 Ceramic Foam Blocks**

**Cat. No.            Size**

- 311-1 . . . . . 2.5" x 4.5" x 9"
- 311-2 . . . . . 2 pack
- 311-3 . . . . . 4 pack

**2300°F Ceramic Putty Ideal for Sealing Joints** (See page 51)

- 7020-5 . . . . . 3-4 oz Dispenser tubes
- 7020-3 . . . . . 11 oz. Caulking cartridges