

**Gemcolite® No-Smoke® FG23-103**

**Gemcolite® No-Smoke® FG23-103 Material Overview**

**No-Smoke® FG23-103 Gemcolite®** is Refractory Specialties Inc's non-off-gassing insulating fiber board. It uses man-made vitreous alumina-silicate fibers, and inorganic binders, to generate a relatively strong board with excellent insulating properties while maintaining a low density when compared to insulating brick or monolithic refractory blocks and shapes. It is best used in indoor applications, and areas that will not tolerate burn-off products from organic components. FG23-103 resists thermal shock allowing for faster cycle times. RSI's vast forming and machining capabilities allow **Gemcolite® No-Smoke® FG23-103** to be made in a variety of shapes, besides standard boards and blocks, and can be tailor made to customer required shapes and specifications. This material is also easily cut and formed using hand-tools. **Gemcolite® No-Smoke®** can also be made in a variety of other temperature ranges upon request. To answer any questions, or if you have special requirements that aren't covered by this product, call for our expert assistance at (330) 938-2101.

**Gemcolite® No-Smoke® FG23-103 Technical Information**

<u>Property</u>	<u>Typical Results</u>
Density	18 to 22 lb/ft <sup>3</sup>
Modulus of Rupture (MOR)	
Supplied	75 lb/in <sup>2</sup> , Minimum
After First Use	70 lb/in <sup>2</sup> , Minimum
Compressive Strength (10% Compression)	4000 lb/t <sup>2</sup>
Maximum Use Temperature	2300° F
Suggested Use Temperature	2150° F
Melting Point	3260° F
Linear Shrinkage	
1800° F	1.50%
2300° F	5.50%
Thermal Conductivity	
600° F	0.55 Btu-in/hr/ft <sup>2</sup> /°F
800° F	0.63 Btu-in/hr/ft <sup>2</sup> /°F
1200° F	0.92 Btu-in/hr/ft <sup>2</sup> /°F
1600° F	1.35 Btu-in/hr/ft <sup>2</sup> /°F
2000° F	1.97 Btu-in/hr/ft <sup>2</sup> /°F
Typical Chemical Analysis (After Use)	
SiO <sub>2</sub>	65 % (By Weight)
Al <sub>2</sub> O <sub>3</sub>	35 % (By Weight)

**Other Information**

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