

**Gemcolite® ASM FG30-115050 and FG30-165050**

**Gemcolite® ASM FG30-115050 and FG30-165050 Material Overview**

FG30-115050 and FG30-165050 ASM **Gemcolite®** is Refractory Specialties Inc's high temperature insulation board. It uses man-made vitreous alumina-silicate enhanced with high-purity alumina to provide very high temperature insulation with minimal shrinkage and high density and strength. It is best used in applications with extreme high temperature, up to 3000° F, where there is a need for good board strength and resiliency. FG30-115050 ASM is specially formulated for board and flat applications, while FG30-165050 is designed for sleeves and other shapes that will see higher physical stresses while in service. RSI's vast forming and machining capabilities allow **Gemcolite®** ASM 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. 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® ASM FG30-115050 and FG30-165050 Technical Information**

<u>Property</u>	<u>FG30-115050</u>	<u>FG30-165050</u>
Application	Board, planar shapes	Sleeves, 3D Shapes
Density	22 to 28 lb/ft <sup>3</sup>	22 to 28 lb/ft <sup>3</sup>
Modulus of Rupture (MOR)		
Supplied	125 lb/in <sup>2</sup>	125 lb/in <sup>2</sup>
After First Use	75 lb/in <sup>2</sup>	75 lb/in <sup>2</sup>
Compressive Strength (10% Compression)	5000 lb/ft <sup>2</sup>	5000 lb/ft <sup>2</sup>
Maximum Use Temperature	3000° F	3000° F
Melting Point	3260° F	3260° F
Linear Shrinkage		
2200° F	1.00 % (0% pre-fired)	1.00 % (0% pre-fired)
2600° F	2.50 % (1.5% pre-fired)	2.50 % (1.5% pre-fired)
Thermal Conductivity		
500° F	0.65 Btu-in/hr/ft <sup>2</sup> /°F	0.65 Btu-in/hr/ft <sup>2</sup> /°F
1000° F	0.88 Btu-in/hr/ft <sup>2</sup> /°F	0.88 Btu-in/hr/ft <sup>2</sup> /°F
1500° F	1.10 Btu-in/hr/ft <sup>2</sup> /°F	1.10 Btu-in/hr/ft <sup>2</sup> /°F
2000° F	1.22 Btu-in/hr/ft <sup>2</sup> /°F	1.22 Btu-in/hr/ft <sup>2</sup> /°F
2500° F	1.92 Btu-in/hr/ft <sup>2</sup> /°F	1.92 Btu-in/hr/ft <sup>2</sup> /°F
Typical Chemical Analysis (After Use)		
SiO <sub>2</sub>	26 % (By Weight)	20% (By Weight)
Al <sub>2</sub> O <sub>3</sub>	74 % (By Weight)	80 % (By Weight)

**Other Information**

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**Refractory Specialties, Inc.** 230 West California Avenue, Sebring, Ohio 44672

Tel: (330) 938-2101/Fax: (330) 938-2574/Web: [rsifibre.com](http://rsifibre.com) /E-mail: [@rsifibre.com](mailto:@rsifibre.com)