

Description: High Alumina Brick

## Chemical Analysis: Approximate (Calcined Basis)

Silica (SiO <sub>2</sub> )	25.0%
Alumina (Al <sub>2</sub> O <sub>3</sub> )	69.8%
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1.4%
Titania (TiO <sub>2</sub> )	3.0%
Lime (CaO)	0.2%
Magnesia (MgO)	0.2%
Alkalies (Na <sub>2</sub> O + K <sub>2</sub> O)	0.4%

## Physical Data (Typical)

Bulk Density	165 lb/ft <sup>3</sup> (2.64 g/cm <sup>3</sup> )
Modulus of Rupture	lb/in. <sup>2</sup> (MPa)
At 70°F (21°C)	1,800 (12.4)
At 2300°F (1260°C)	1,200 (8.3)
Cold Crushing Strength	8,000 lb/in. <sup>2</sup> (55.2 MPa)
Permanent Linear Change	
After 2910°F (1600°C)	+3.4%
Apparent Porosity	16.8%
Load Test, 25 psi (1.8 kg/cm <sup>2</sup> )	
Linear Subsidence After 2640°F (1450°C)	1.0%
Quantitative Thermal Cycling Test	
Modulus of Rupture Loss	30.0%

Note: The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.