



### **PTI Brick - 2300° Insulating Firebrick**

PTI 2300° Insulating Firebrick are manufactured with a unique slurry casting process which creates a network of micro porosities producing low thermal conductivity and good thermal shock characteristics.

- Low Density
- Low heat storage
- Excellent strength at room and high temperatures
- Excellent resistance to alkali attack
- Excellent service in applications involving special atmospheres

### **Specifications**

<b>Composition</b>	Alumina (Al <sub>2</sub> O <sub>3</sub> ) Silica (SiO <sub>2</sub> ) Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> ) Trace Elements	≥50% ≥44% ≤0.9% ≤2.5%
<b>Density</b>		36 lb/ft <sup>3</sup> 580 kg/m <sup>3</sup>
<b>Maximum Operating Temperature</b>		2300 °F 1230 °C
<b>Cold Crush Strength</b>		260 psi 1.8 MPa
<b>Modulus of Rupture</b>		145 psi 1.0 MPa
<b>Thermal Conductivity</b> Btu-in/ft <sup>2</sup> , hr, °F (W/m-k)		1.25 (0.18) at 390°F 1.39 (0.20) at 750°F 1.60 (0.23) at 1110°F
<b>Permanent Linear Change</b>		-0.5% (at 2300°F for 24hrs)

### **Application Examples**

Backup insulation for carbon baking furnaces, blast furnace stove linings and in aluminum electrolytic cells. Linings for heat-transfer, forge furnaces and carbonizing furnaces. Also for industrial and hobby use electrical kilns.