



# Insulating Fire Brick

**BNZ Materials, Inc**

Effective: Mar-16		<b>BNZ 23HS</b>
<b>Classification Group</b>	ISO 2245 ASTM C 155	125-0.65-L 23
<b>Classification Temperature</b>	°C	1260
<b>Density</b>	ASTM C 134 g/cm <sup>3</sup>	0.67
<b>Cold Crushing Strength</b>	Flat ASTM C 133 MPa Edge	1.3
<b>Cold Modulus of Rupture</b>	ASTM C 133 MPa	1.0
<b>Permanent Linear Change</b>	ASTM C 210 %	0.0
24h soak at Temperature, °C		1232
<b>Linear Thermal Expansion</b>	%	0.60
Reversible, Max.		
<b>Deformation under Hot Load</b>	ASTM C 16 %	0.0
69 kPa load, 1½h at Temperature, °C		1093
<b>Thermal Conductivity</b>	ASTM C 182 W/(mK)	
Mean Temperature, °C		
200		0.17
400		0.19
600		0.22
800		0.25
1000		0.28
1200		
<b>Chemical Analysis</b>	%	
Al <sub>2</sub> O <sub>3</sub>		40.0
SiO <sub>2</sub>		48.8
Fe <sub>2</sub> O <sub>3</sub>		0.7
TiO <sub>2</sub>		1.5
CaO + MgO		8.3
Na <sub>2</sub> O + K <sub>2</sub> O		0.5
<b>Dimensional Tolerances</b>	Standard Square	
Dimensions mm		± 0.8
Out of Squareness %		≤ 0.5

The above physical and chemical properties of Insulating Fire Brick represent values obtained on standard squares in accordance with accepted test methods and are subject to normal manufacturing variations. This information is supplied as a technical service and may change without notice. Results should not be used for specification purposes, unless agreed with seller.

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