

BNZ Insulating Fire Bricks

Typical data Properties	STANDARD ASTM C155 GRADES								
	BNZ 20	BNZ 23	BNZ 23 HS	BNZ 23A	BNZ 26	BNZ 26-60	BNZ 28	BNZ 3000	BNZ 32
ASTM Classification	20/23	23	23	23	26	26	28	30	32
Temperature Use Limit (Normal oxidizing atmosphere)°C	1260	1260	1260	1260	1427	1427	1538	1649	1760
Density, Avg. kg/m ³ ASTM C134	577	593	673	529	769	801	881	1041	1201
Modulus of Rupture Mpa ASTM C133	0.7	0.7	1.0	0.79	1.4	1.3	1.5	1.7	2.1
Cold Crushing Strength MPa ASTM C133	0.7	0.9	1.3	1.0	1.9	2.0	2.3	3.0	3.1
Permanent Linear Change % ASTM C 210 24 hrs. At soaking temp.°C									
1232	0.0	0.0	0.0	0.0	-	-	-	-	-
1290	-	-	-	-	-	-	-	-	-
1343	-	-	-	-	-	-	-	-	-
1399	-	-	-	-	-0.1	-0.2	-	-	-
1510	-	-	-	-	-	-	-0.7	-	-
1538	-	-	-	-	-	-	-	-	-
1621	-	-	-	-	-	-	-	-0.7	-
1732	-	-	-	-	-	-	-	-	-0.4
Linear Thermal Expansion % Reversible 20-1000	0.60	0.60	0.6	0.60	0.60	0.60	0.65	0.65	0.65
Thermal Conductivity ASTM C 182 (W/mK) Mean temperature, °C									
260	0.13	0.14	0.17	0.13	0.23	0.26	0.33	0.40	0.56
538	0.17	0.19	0.22	0.16	0.27	0.29	0.35	0.42	0.59
816	0.22	0.23	0.25	0.20	0.32	0.30	0.37	0.45	0.61
1093	0.24	0.26	0.29	0.24	0.37	0.33	0.39	0.48	0.62
Chemical Analysis (%)									
A ₂ O ₃	35.0	35.0	35.0	38.0	47.0	60.4	67.0	69.9	78.3
SiO ₂	60.3	60.3	60.3	45.0	48.6	36.1	30.5	28.1	20.7
Fe ₂ O ₃	0.9	0.9	0.9	0.3	0.7	0.4	0.3	0.3	0.2
TiO ₂	1.3	1.3	1.3	1.6	1.3	1.0	0.9	1.2	0.5
CaO	2.1	2.1	2.1	15.0	0.3	0.1	0.3	0.2	0.1
MgO	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.1	0.1
Na ₂ O & K ₂ O	0.4	0.4	0.4	0.5	2.0	1.8	1.0	0.2	0.1
Dimensional Tolerances mm	±1	±1	±1	±1	±1	±1	±1	±1	±1

The above physical and chemical properties of Insulating Firebricks 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 specific purposes.

For further information about one of the above-mentioned Insulating Firebricks please do not hesitate to contact one of our specialists at:

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