



INFORMATION BULLETIN

IFB

DESCRIPTION: Insulating Fire Brick.

USES INCLUDE: Insulation.
Reheat furnace linings.

USE LIMIT °C (°F): 2093 (2000)
1260 (2300)
1540 (2800)
1649 (3000)

CHEMICAL ANALYSIS: (TYPICAL CHEMICAL ANALYSIS)

(Approximate %)

| | | | | | |
|--------------------------------|------|------|------|------|-------|
| Al ₂ O ₃ | 38.0 | 38.0 | 42.0 | 55.0 | 74.0 |
| SiO ₂ | 48.0 | 49.0 | 45.0 | 32.0 | 32.0 |
| Fe ₂ O ₃ | 1.8 | 1.5 | 1.2 | 1.0 | 0.65 |
| Alkalis | 1.6 | 1.3 | 0.6 | 0.2 | Trace |

TYPICAL AS RECEIVED PROPERTIES:

| | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|
| Bulk Density pcf (g/cm ³) | 50 (0.8) | 50 (0.8) | 56 (0.9) | 62 (1.0) | 62 (1.0) |
| Cold Crush Strength psi (MPa) | 218 (1.5) | 290 (2.0) | 435 (2.5) | 580 (3.0) | 435 (2.5) |
| Linear Change % | - 2.0 | - 2.0 | - 2.0 | - 2.0 | - 0.8 |
| 8 hr at temp °C (°F) | 1200 (2192) | 1300 (2372) | 1400 (2552) | 1500 (3732) | 1600 (2912) |
| Thermal Conductivity BTU/SF/HR2 (W/mk) | | | | | |
| 400°C (752°F) | 1.59 (0.23) | 1.59 (0.23) | 1.87 (0.27) | 2.50 (0.36) | 2.63 (0.38) |
| 800°C (1472°F) | NA | 2.15 (0.31) | 2.22 (0.32) | 2.63 (0.38) | NA |
| 1000°C (1832°F) | NA | 2.29 (0.33) | 2.50 (0.36) | 2.84 (0.41) | NA |

The values reported above are average values derived from production data encompassing many different sizes and shapes. Actual data will vary to a small degree naturally and as a function of size and shape. This form is not intended to be used for purposes of specification; it is informational only.

Version 20.11