

DESCRIPTION: High Duty, dry press firebrick
SIZES: Various

TYPICAL TEST DATA

CHEMICAL ANALYSIS [Wt. % Calcined Basis]

Silica [SiO ₂]	56.3
Aluminum Oxide [Al ₂ O ₃]	37.6
Titanium Dioxide [TiO ₂]	2.0
Iron Oxide [Fe ₂ O ₃]	1.7
Potassium Oxide [K ₂ O]	1.3
Other Oxides	0.4
Magnesium Oxide [MgO]	0.4
Calcium Oxide [CaO]	0.3
Total	100.0
Loss on Ignition, 1000°C	0.1

THERMAL CONDUCTIVITY [K-Factor]

At a mean temperature of		Btu/in	W/m°C
		ft ² hr°F	
400°F	[205°C]	8.2	1.18
800°F	[425°C]	8.5	1.23
1200°F	[650°C]	9.0	1.30
1600°F	[870°C]	9.2	1.33
2000°F	[1095°C]	9.5	1.37
2400°F	[1315°C]	9.8	1.41

PHYSICAL PROPERTIES

ASTM C-24

P.C.E.	32-32½
Service Temperature [max. recommended], °F	2850
Temperature Equivalent [melting], °F	3123

ASTM C-133

Modulus of Rupture [MOR], psi	1100
Cold Crush	3500

ASTM C-20

Apparent Porosity, %	19.0
Apparent Specific Gravity, g/cc	2.7
Bulk Density [fired] lb./ft ³	133.7
Water Absorption, %	8.8

ASTM C-16 Schedule 3 [% deformation]

Load Test at 2640°F	1.3
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ASTM C-113 Schedule B [% linear]

Reheat Change at 2550°F	-0.1
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ASTM C-38 2910°F preheat

Panel Spalling Loss, % wt.	2.0
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SDS AVAILABLE UPON REQUEST



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The above properties represent average results of typical data produced from standard ASTM test methods on a 9" straight. Specifications should not be considered guaranteed. Alsey Refractories Company makes every effort to ensure consistency in our products; however, properties may vary due to standard statistical manufacturing deviations. Alsey Refractories Company reserves the right to modify this data at any time without prior notice.