

# PRODUCT DATA

## JET D.P. FIREBRICK

### ALSEY Jet D.P. High Duty Firebrick

**Description:**

High duty dry press firebrick

**Sizes:**

Various

### TYPICAL TEST DATA -- PHYSICAL PROPERTIES

**ASTM C-24**

P.C.E. .... 32-32½  
 Temperature Equivalent (melting), °F.....3123-3135  
 Service Temperature (max. recommended), °F ..... 2850

**ASTM C-133**

Modulus of Rupture (MOR), psi ..... 1062  
 Cold Crush ..... 3560

**ASTM C-20**

Apparent Porosity, % ..... 19.9  
 Apparent Specific Gravity, g/cc.....2.68  
 Bulk Density, lb/ft<sup>3</sup> ..... 133.7  
 Water Absorption, %..... 8.8

**ASTM C-16 Schedule 2, % deformation**

Load Test at 2460°F..... 1.3

**ASTM C-27**

Classification ..... High Duty

**ASTM C-113 Schedule B % linear**

Reheat Change at 2550°F.....-0.1

**ASTM C-38, 2910°F preheat**

Panel Spalling Loss, % wt. .... 3.3

### Thermal Conductivity (K-Factor)

At a mean temperature of		Btu/in ft <sup>2</sup> hr°F	W/m°C
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

### TYPICAL CHEMICAL ANALYSIS, Wt. % (calcined basis)

Silica (SiO <sub>2</sub> )	56.32
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	37.63
Titanium Dioxide (TiO <sub>2</sub> )	2.01
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1.69
Potassium Oxide (K <sub>2</sub> O)	1.25
Magnesium Oxide (MgO)	0.38
Calcium Oxide	0.26
Other Oxides	0.46
Total	100.00

Loss on Ignition, 1000°C ..... 0.12

MSDS available upon request.

Alsey Refractories Company ph: 314-963-7900 fax: 314-963-7973 info@alsey.com www.alsey.com

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.