

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/ft³ 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 ² 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 ₂)	56.32
Aluminum Oxide (Al ₂ O ₃)	37.63
Titanium Dioxide (TiO ₂)	2.01
Iron Oxide (Fe ₂ O ₃)	1.69
Potassium Oxide (K ₂ 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.