

# Firecrete® 3X G

**Product Data Sheet** 

### **Product Description**

Gunning version of the Firelite 3X, a high alumina, general purpose castable for service temperature up to 1650°C (3000°F). It has a good thermal shock resistance. Very good adhesion property makes it suitable for new application as well as patchwork repairs. It is recommended for burner blocks, door lining, car to repair, crucible furnace linings and special shapes. Its high purity makes it suitable for special furnace atmospheres.

Properties	Firecrete 3X G
Region of Manufacture	Europe
Bond Type	Hydraulic
Method of application	Gun
Maximum Service Temperature, °C (°F)	1650 (3000)
ASTM C401-91 Classification	E
Estimated weight of dry material/ m³ of construction, kg (lb)	2061 (129)
Water addition, % by weight	13.5
Maximum grain size, mm	5
Packaging in bags, kg (lb)	25 (55)

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Density, kg/m³ (pcf), ASTM C134		
oven dried, 110°C (230°F)	2150 (134.2)	
after 5 hours firing, 815°C (1500°F)	2050 (127.9)	
Cold crushing strength, MPa (psi), ASTM C133		
oven dried, 110°C (230°F)	53.2 (7714)	
after 5 hours firing, 815°C (1500°F)	34.9 (5090)	
after 5 hours firing, 1000°C (1832°F)	22.5 (3262)	
Permanent linear change, %, ASTM C113		
after 5 hours, 815°C (1500°F)	-0.2	
Thermal conductivity, W/m•k (BTU•in./hr•ft²•°F), ASTM C201/417		
400°C (752°F)	0.79 (5.48)	
600°C (1112°F)	0.85 (5.90)	
800°C (1472°F)	0.89 (6.17)	
1000°C (1832°F)	0.90 (6.24)	
Chemical composition, %		
Alumina, Al <sub>2</sub> O <sub>3</sub>	58.9	
Silica, SiO <sub>2</sub>	31.6	
Ferric oxide, Fe <sub>2</sub> O <sub>3</sub>	0.8	
Titanium oxide, TiO <sub>2</sub>	1.6	
Calcium oxide, CaO	6.1	
Alkalis as, MgO+K <sub>2</sub> O+Na <sub>2</sub> O	0.5	
Ignition Loss	0.8	

#### **Storage and Shelf Life**

- Should be stored in dry conditions, unopened packaging on pallets. Do not store on ground. Keep out of rain and damp conditions.
- Shelf life is of twelve months with original packaging, double shrink film and dehydrating agent provided if the monolithic is stored under these recommended conditions.

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