

'SAIRBOND

Dry, High Strength, High Temperature Mortar

'SAIRBOND is a dry, air-setting, high strength mortar for temperatures up to 3000°F (1650°C).

Typical applications are for laying firebrick, super duty and 50% alumina firebrick - including high fired - for low temperature incinerators, air heaters, cyclones, cement preheaters, fluid bed reactors, roasters and vertical shaft furnaces. Mortar consistency can be easily changed by varying water contents. 'SAIRBOND offers much greater storage life than its companion, wet, air-setting mortar, 'SAIRSET.

CHEMICAL ANALYSIS - Calcined Basis

Silica - SiO ₂	52.8%
Alumina - Al ₂ O ₃	40.0%
Iron Oxide - Fe ₂ O ₃	1.2%
Lime - CaO.....	0.2%
Magnesia - MgO	0.3%
Titania - TiO ₂	2.4%
Alkalies - Na ₂ O + K ₂ O.....	3.1%

A. P. Green is a supplier of high duty and super duty brick, insulating firebrick, high alumina brick, basic brick, silica brick, mortars, plastics, castables, and precast shapes as well as mineral wool block insulation and a complete ceramic fiber line. Stocks of these products are maintained in more than 90 locations throughout North America. And, having been in the refractories business for more than 80 years, A. P. Green can also provide the expertise and thorough technical assistance that you might require.

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Technical Data

MAXIMUM TEMPERATURE 3000°F 1650°C

REFRACTORINESS TEST - ASTM C199

2910°F (1600°C) Test Temperature (No Softening or Flowing)

QUANTITY REQUIRED TO LAY 1,000 9x4 1/2x2 1/2" (229x114x63 mm) BRICK

Dipping Consistency 275 lb 125 kg

WATER REQUIRED

Approximately

	<u>Gal (U.S.)</u>	<u>Liters</u>
Volume per 100 pounds (45.4 kg)..... For Laying Brick		
Troweling Consistency	2 1/2	9.5
Dipping Consistency	3 1/2	13.2

MODULUS OF RUPTURE - ASTM C198

On KX-99 Brick with Ends Bonded Together

	<u>lb/in²</u>	<u>MPa</u>
Using Mortar in Troweling Consistency		
After 220°F (105°C).....	650	4.5
After 1500°F (815°C).....	900	6.2

WATER RETENTION

A.R.I. Technical Bulletin No. 60 (Minimum of 5 Minutes)

PARTICLE SIZE - ASTM C92

Retained on 20 Mesh Screen	Less Than 0.5%
Retained on 35 Mesh Screen	Less Than 2.0%

Manufacturing Locations: Mexico, MO; Sproul, PA

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. Accordingly, test data cannot be taken as establishing maximum or minimum specifications

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