

GREENPATCH-421

Technical Data:

Physical Properties: (Typical)

	<u>English Units</u>	<u>SI Units</u>
Maximum Recommended Temperature	3200°F	1760°C
Refractoriness Test 3100°F (1704°C) Test Temperature	No Softening or Flowing	
Quantity Required per Square Foot (305x305mm) For a ½" (13mm) Thickness	6 ¼ lb	2.8 kg
Approximate Amount Required per 1000 9" Equivalent: Dipping Consistency	425 lb	193 kg
Water Required for Tempering (Approximate) Volume per 100 pounds (45.4 kg) For Laying Brick Troweling Consistency Dipping Consistency	<u>Gallons</u> ¼ 1¼	<u>Liters</u> 0.9 4.7
Modulus of Rupture at Joints On KX-99 Brick with Ends Bonded Together Using Mortar in Trowelling Consistency At 220°F (105°C) After 1500°F (815°C)	<u>lb/in²</u> 850 600	<u>MPa</u> 5.9 4.1
Water Retention A.R.I. Technical Bulletin No. 60	Minimum of 2 Minutes	
Particle Size Retained on 20 Mesh Screen (0.83mm opening) Retained on 35 Mesh Screen (0.42mm opening)	Less Than 1.0% Less Than 5.0%	

Chemical Analysis: (Approximate)
(Calcined Basis)

Silica	(SiO ₂)	39.4%
Alumina	(Al ₂ O ₃)	55.2
Titania	(TiO ₂)	2.0
Iron Oxide	(Fe ₂ O ₃)	1.1
Lime	(CaO)	0.2
Magnesia	(MgO)	0.2
Alkalies	(Na ₂ O+K ₂ O)	1.9

(Continued)

GREENPATCH-421 (Continued)

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.

Description: GREENPATCH-421 is a 3200°F, wet, air-setting, thick patching mortar. It can be used as a patching material, a coating, and for bonding brick such as EMPIRE S, CLIPPER DP, KX-99, KX-99-BF, and KRUZITE-70. It can be fired-in faster than regular high alumina mortars.

Applications: Typical applications include boilers, brick plants, steel mills, asphalt plants, iron foundries, and as a protective coating over ceramic fiber modules.

7/09/94 Dev.