

**Description: Wet, High-Strength, Air-Setting, High-Temperature Mortar**

- Features:**
- High-strength, air-setting mortar with ideal troweling characteristics.
  - Can be supplied in a consistency for troweled mortar joints in brick linings.
  - Can be field-adjusted to dipping consistency with the addition of water.
- Uses**
- Laying high-duty, super-duty, high-fired super-duty, and 50% alumina firebrick.
  - Ideal as a general-purpose refractory mortar.

**Chemical Analysis: Approximate (Calcined Basis)**

Silica (SiO <sub>2</sub> )	59.6%
Alumina (Al <sub>2</sub> O <sub>3</sub> )	34.6%
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1.1%
Titania (TiO <sub>2</sub> )	1.9%
Lime (CaO)	0.1%
Magnesia (MgO)	0.3%
Alkalies (Na <sub>2</sub> O+K <sub>2</sub> O)	2.4%

**Physical Data (Typical)**

Maximum Service Temperature	3000°F (1650°C)
Material Required Per 1,000 9-inch Equivalent	lb (kg)
Dipping Consistency	350 to 400 (159 to 181)
Modulus of Rupture at Joints	lb/in. <sup>2</sup> (MPa)
After 220°F (105°C)	650 (4.5)
After 1500°F (815°C)	500 (3.4)
Refractoriness Test	
2910°F (1600°C) Test Temperature	No softening or flowing
Particle Size	
Maximum Grain Size 20 Mesh (Tyler) (0.83 mm opening)	0.5%
Maximum Grain Size 35 Mesh (Tyler) (0.42 mm opening)	5.0%

Note: 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.

**Mixing and Using Information**

Per 55 lb pail

Material is supplied ready to use and can be field-adjusted as required.

**Water Required—Thin Trowel**

Gallons	0.1
Liters	0.5

**Water Required—Dipping**

Gallons	0.7
Liters	2.5

Note: As supplied, this is a thick trowel mortar; amounts of water (above) can be added if a thinner mortar is required. Always mix well when making such adjustments.

**Water Retention** 14 Minutes

For detailed mixing and using instructions, contact your HWI representative or visit [www.thinkHWI.com](http://www.thinkHWI.com).

Product Data

Heatup/Dryout Schedule	
Not applicable	
Installation Guidelines	
See HWI Installation Guidelines M-1—Wet Mortars—Ready to Use.	
Shelf Life (Under Proper Storage Conditions)	180 days