

## Product Data

1/12: 5908

Description: General-Purpose Castable for Temperatures up to 2600°F

- Features:
- Low iron content.
  - Minimal shrinkage, even when used in large patches.

### Chemical Analysis: Approximate (Calcined Basis)

Silica (SiO <sub>2</sub> )	37.0% to 42.0%
Alumina (Al <sub>2</sub> O <sub>3</sub> )	45.0% to 49.0%
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1.2% to 2.2%
Titania (TiO <sub>2</sub> )	2.2% to 4.2%
Lime (CaO)	6.0% to 8.0%
Magnesia (MgO)	0.1% to 0.5%
Alkalies (Na <sub>2</sub> O+K <sub>2</sub> O)	0.5% to 1.5%

Physical Data (Typical)	Poured
Maximum Service Temperature	2600°F (1425°C)
Material Required	125 lb/ft <sup>3</sup> (2.00 g/cm <sup>3</sup> )
Bulk Density	lb/ft <sup>3</sup> (g/cm <sup>3</sup> )
After 220°F (105°C)	128 to 135 (2.05 to 2.16)
After 1500°F (815°C)	121 to 128 (1.94 to 2.05)
Modulus of Rupture	lb/in. <sup>2</sup> (MPa)
After 220°F (105°C)	700 to 1,200 (4.8 to 8.3)
After 1500°F (815°C)	300 to 650 (2.1 to 4.5)
After 2000°F (1095°C)	250 to 500 (1.7 to 3.4)
Cold Crushing Strength	lb/in. <sup>2</sup> (MPa)
After 220°F (105°C)	2,900 to 4,900 (20.0 to 33.8)
After 1500°F (815°C)	1,600 to 3,000 (11.0 to 20.7)
After 2000°F (1095°C)	1,400 to 2,800 (9.7 to 19.3)
Permanent Linear Change	
After 220°F (105°C)	None
After 1500°F (815°C)	0% to -0.3%
After 2000°F (1095°C)	0% to -0.5%
After 2500°F (1370°C)	-0.3% to +1.5%
Thermal Conductivity	Btu · in/hr · ft <sup>2</sup> · °F (W/m · °C)
At 400°F (205°C)	6.4 (0.92)
At 800°F (425°C)	6.4 (0.92)
At 1200°F (650°C)	6.4 (0.92)
At 1600°F (870°C)	6.5 (0.94)
At 2000°F (1095°C)	6.6 (0.95)
At 2400°F (1315°C)	6.8 (0.98)

Particle Size	
Maximum Grain Size 6 Mesh (Tyler)	Less than 3%

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.

## Product Data

Mixing and Using Information (Water calculated at 8.337 lb/gallon)	55 lb bag	1000 lb bag	1500 lb bag
Water Required—Vibration Casting (Weight 12.0%)			
Pounds	6.6	120.0	180.0
Gallons	0.8	14.4	21.6
Liters	3.0	54.4	81.6
Water Required—Hand Casting/Pouring (Weight 12.8%)			
Pounds	7.0	128.0	192.0
Gallons	0.8	15.4	23.0
Liters	3.2	58.0	87.0
For detailed mixing and using instructions, contact your HWI representative or visit <a href="http://www.thinkHWI.com">www.thinkHWI.com</a> .			
Working Time	20 minutes		
Heatup/Dryout Schedule			
See HWI Dryout Schedule 2—PLUS Rated Castables and Gunning Castables.			
Installation Guidelines			
See HWI Installation Guidelines CC-1—Conventional Castables—Standard.			
Shelf Life (Under Proper Storage Conditions)	365 days		