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ENGLISH

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FORMULA 2112-R

Thermbond Refractories use the patented Stellar Binder System™ for easy and accurate mixing, controlled setting, fast dry-out and heat up, thermal shock resistance and other unique properties. Thermbond chemically bonds to existing fired refractories. CHARACTERISTICS: - High Alumina - Very Dense - Abrasion Resistant - Non-Wetting - Fast Setting - Fast Curing

PRELIMINARY DATA

PACKAGING		
Unit Equivalent	Bags: 2	Jugs: 1
Bag Weight*	52 lbs	23.6 kg
Jug Weight*	8 lbs	3.6 kg
Drum Weight*	400 lbs	181.4 kg
Unit Weight*	112 lbs	50.7 kg
Yield / Unit*	0.57 ft3	0.016 m3
Units / Ton*	17.90 short	19.74 metric
Board Feet / Unit*	6.9 bd ft	
Wet to Dry Ratio*	7.3% - 8%	
Liquid Activator	FORMULA	
Bags Per Pallet	48	
Drums Per Dry Pallet	1	

APPLICATION	
Data based on	Ramming

BULK DENSITY**		
As Placed	195 lbs/ft3	3124 kg/m3
After 1500F (816C)	184 lbs/ft3	2947 kg/m3

MAXIMUM RECOMMENDED SERVICE TEMP**		
Hot Face	2500 F	1371 C

ABRASION RESISTANCE** (ASTM C-704)	
After 1500F (816C)	<3 cc loss

COMPRESSIVE STRENGTH**			
1500F (816C)	24000 psi	1687 kg/cm2	165 N/mm2

PERMANENT LINEAR CHANGE**	
1500F (816C)	-0.30%

TYPICAL CHEMICAL ANALYSIS (After 1500F (816C))**	
Al2O3	81.96%
SiO2	5.78%
Fe2O3	0.78%
P2O5	3.74%
Other	7.74%
Total	100.00%

THERMAL CONDUCTIVITY**		
600F (316C)	14.0 Btu-in/hr-ft2-F	2.02 W/m K
1200F (649C)	15.0 Btu-in/hr-ft2-F	2.16 W/m K
1800F (982C)	15.5 Btu-in/hr-ft2-F	2.24 W/m K
2400F (1316C)	16.0 Btu-in/hr-ft2-F	2.31 W/m K

COLD MODULUS OF RUPTURE**			
1500F (816C)	3500 psi	246 kg/cm2	24 N/mm2

HOT MODULUS OF RUPTURE**			
1500F (816C)	2800 psi	197 kg/cm2	19 N/mm2

*Measures are approximate and may vary. For mixing partial units, contact Stellar Materials for specific wet-to-dry ratios. See Installation Guide for more detailed information.

**Test data shown are based on averages subject to normal variation on individual tests, and therefore should not be assumed to be maximum or minimum specifications.

Due to the unique nature of the Stellar binder system, test procedures vary slightly from ASTM. Documentation of these variations is available upon request.