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ENGLISH

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FORMULA 6-AB

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: - Alumina - Silica - Mullite - Dense - Abrasion Resistant - Fast Setting - Fast Curing -

PACKAGING		
Unit Equivalent	Bags: 1	Jugs: 1
Bag Weight*	63 lbs	28.7 kg
Jug Weight*	8 lbs	3.6 kg
Drum Weight*	400 lbs	181.4 kg
Unit Weight*	71 lbs	32.2 kg
Yield / Unit*	0.46 ft ³	0.013 m ³
Units / Ton*	28.20 short	31.08 metric
Board Feet / Unit*	5.5 bd ft	
Wet to Dry Ratio*	12% - 13.2%	
Liquid Activator	FORMULA	
Bags Per Pallet	48	
Drums Per Dry Pallet	1	

COMPRESSIVE STRENGTH**			
1500F (816C)	4500 psi	316 kg/cm ²	31 N/mm ²
2000F (1093C)	6000 psi	422 kg/cm ²	41 N/mm ²
2500F (1371C)	9500 psi	668 kg/cm ²	65 N/mm ²

PERMANENT LINEAR CHANGE**	
1500F (816C)	-0.20%
2000F (1093C)	-0.60%
2500F (1371C)	-1.45%

TYPICAL CHEMICAL ANALYSIS (After 1500F (816C))**	
Al ₂ O ₃	64.62%
SiO ₂	24.91%
Fe ₂ O ₃	0.89%
P ₂ O ₅	5.03%
Other	4.55%
Total	100.00%

APPLICATION***	
Data based on	Casting
Alternative Method***	Hand Packing

THERMAL CONDUCTIVITY**		
600F (316C)	10.3 Btu-in/hr-ft ² -F	1.48 W/m K
1200F (649C)	9.9 Btu-in/hr-ft ² -F	1.43 W/m K
1800F (982C)	10.0 Btu-in/hr-ft ² -F	1.44 W/m K
2400F (1316C)	10.6 Btu-in/hr-ft ² -F	1.52 W/m K

BULK DENSITY**		
As Placed	155 lbs/ft ³	2483 kg/m ³
After 1500F (816C)	145 lbs/ft ³	2323 kg/m ³

MAXIMUM RECOMMENDED SERVICE TEMP**		
Hot Face	3000 F	1649 C

COLD MODULUS OF RUPTURE**			
1500F (816C)	1250 psi	88 kg/cm ²	9 N/mm ²
2000F (1093C)	1400 psi	98 kg/cm ²	10 N/mm ²
2500F (1371C)	2100 psi	148 kg/cm ²	14 N/mm ²

ABRASION RESISTANCE** (ASTM C-704)	
After 1500F (816C)	<15 cc loss

HOT MODULUS OF RUPTURE**			
1500F (816C)	2300 psi	162 kg/cm ²	16 N/mm ²

*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.

***Application by alternative method may produce somewhat different results.

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