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STELLAR MATERIALS INCORPORATED

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ENGLISH

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FORMULA 6-J

Formerly Formula Six-Flow

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 - Fast Setting - Fast Curing -

PACKAGING		
Unit Equivalent	Bags: 1	Jugs: 1
Bag Weight*	43 lbs	19.5 kg
Jug Weight*	8 lbs	3.6 kg
Drum Weight*	400 lbs	181.4 kg
Unit Weight*	51 lbs	23.0 kg
Yield / Unit*	0.35 ft ³	0.010 m ³
Units / Ton*	39.53 short	43.57 metric
Board Feet / Unit*	4.2 bd ft	
Wet to Dry Ratio*	17.7% - 19.4%	
Liquid Activator	FORMULA	
Bags Per Pallet	48	
Drums Per Dry Pallet	1	

COMPRESSIVE STRENGTH**			
1500F (816C)	2000 psi	141 kg/cm ²	14 N/mm ²
2000F (1093C)	2300 psi	162 kg/cm ²	16 N/mm ²
2500F (1371C)	8000 psi	562 kg/cm ²	55 N/mm ²

PERMANENT LINEAR CHANGE**	
1500F (816C)	-0.36%
2000F (1093C)	-0.51%
2500F (1371C)	-2.20%

TYPICAL CHEMICAL ANALYSIS (After 1500F (816C))**	
Al ₂ O ₃	61.02%
SiO ₂	24.88%
Fe ₂ O ₃	1.00%
P ₂ O ₅	6.78%
Other	6.31%
Total	100.00%

APPLICATION	
Data based on	Casting

THERMAL CONDUCTIVITY**		
600F (316C)	8.9 Btu-in/hr-ft ² -F	1.28 W/m K
1200F (649C)	9.3 Btu-in/hr-ft ² -F	1.34 W/m K
1800F (982C)	9.8 Btu-in/hr-ft ² -F	1.41 W/m K
2400F (1316C)	10.0 Btu-in/hr-ft ² -F	1.44 W/m K

BULK DENSITY**		
As Placed	145 lbs/ft ³	2323 kg/m ³
After 1500F (816C)	140 lbs/ft ³	2243 kg/m ³

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

COLD MODULUS OF RUPTURE**			
1500F (816C)	500 psi	35 kg/cm ²	3 N/mm ²
2000F (1093C)	550 psi	39 kg/cm ²	4 N/mm ²
2500F (1371C)	1900 psi	134 kg/cm ²	13 N/mm ²

HOT MODULUS OF RUPTURE**			
1500F (816C)	1100 psi	77 kg/cm ²	8 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.