

## DAMASCUS 70 AIR BOND

Recommended Service Temperature Limit, °C, (°F) .....	1705 (3100)
Bond Type .....	Air Set
Weight to Place, Kg/m <sup>3</sup> (lb/ft <sup>3</sup> ) .....	2720 (170)
Minimum time before firing, hours .....	0 hr
Maximum particle size, mm (mesh) .....	4.75 (4)
Storage Life/conditions, months .....	6 months
Packaging, weight per container, Kg (lb) .....	25.0 (55)

### Typical Chemical Analysis, % (Calcined Basis)

Al <sub>2</sub> O <sub>3</sub>	68.7	Fe <sub>2</sub> O <sub>3</sub>	1.4	Na <sub>2</sub> O	0.1
SiO <sub>2</sub>	27.1	CaO	0.1	K <sub>2</sub> O	0.1
TiO <sub>2</sub>	2.4	MgO	0.1		

After Heating at: °C (°F)	Bulk Density Kg/m <sup>3</sup> (lb/ft <sup>3</sup> )	Linear Change %, ASTM C-179	Apparent Porosity %, ASTM C-830
110 (230)	2627 (164)	- 1.5	--
538 (1000)	---- (---)	---	--
815 (1500)	2574 (159)	- 1.5	21
1093 (2000)	---- (---)	---	--
1400 (2550)	2307 (144)	+ 1.4	27
1500 (2732)	2259 (141)	+ 1.3	28
1600 (2910)	2323 (145)	+ 1.5	25
1700 (3092)	2339 (146)	+ 1.5	22

After Heating at: °C (°F)	Cold Modulus of Rupture MPa (lb/in <sup>2</sup> ), ASTM C-491	Cold Crushing Strength MPa (lb/in <sup>2</sup> ), ASTM C-133
110 (230)	3.9 (555)	4.2 (----)
538 (1000)	--- (---)	--- (----)
815 (1500)	4.3 (620)	8.3 (----)
1093 (2000)	--- (---)	--- (----)
1400 (2550)	7.5 (1075)	17.2 (2480)
1500 (2732)	7.1 (1025)	---- (----)
1600 (2910)	7.8 (1120)	---- (----)
1700 (3092)	9.7 (1390)	---- (----)

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Note: Data are averaged results of laboratory tests conducted under applicable and current ASTM standards, except where noted. Data should not be used for exact specification purposes.