

GRADE "A" LAVA SPECIFICATIONS

	Property	ASTM Method	Units	Lava Grade A Fired
General	Color	--	--	Grey-Tan
	Gas Permeability	--	atms-cc/sec	Porous
	Water Absorption	C 20-97	%	3
Mechanical	Density	C 20-97	g/cc	2.30
	Hardness	Vickers 500 gm	GPa (kg/mm ²)	4.4 (450)
	Hardness	--	R45N	42
	Flexural Strength (MOR) (3 point) @ RT	F417-87	MPa (psi x 10 ³)	69 (10)
	Tensile Strength @ RT	--	MPa (psi x 10 ³)	21 (3)
	Compressive Strength @ RT	--	MPa (psi x 10 ³)	172 (25)
Thermal	C.T.E. 25 - 100° C	C 372-96	x 10 ⁻⁶ /C	2.9
	C.T.E. 25 - 300° C	C 372-96	x 10 ⁻⁶ /C	3.3
	C.T.E. 25 - 600° C	C 372-96	x 10 ⁻⁶ /C	3.6
	Thermal Conductivity @ RT	C 408	W/m K	2
	Max Use Temp	--	Fahrenheit (°F)	2000
--		Celsius (°C)	1100	
Electrical	Dielectric Strength (.125" Thick)	D 149-97A	V/mil	100
	Dielectric Constant @ 1 MHz	D 150-98	--	5.3