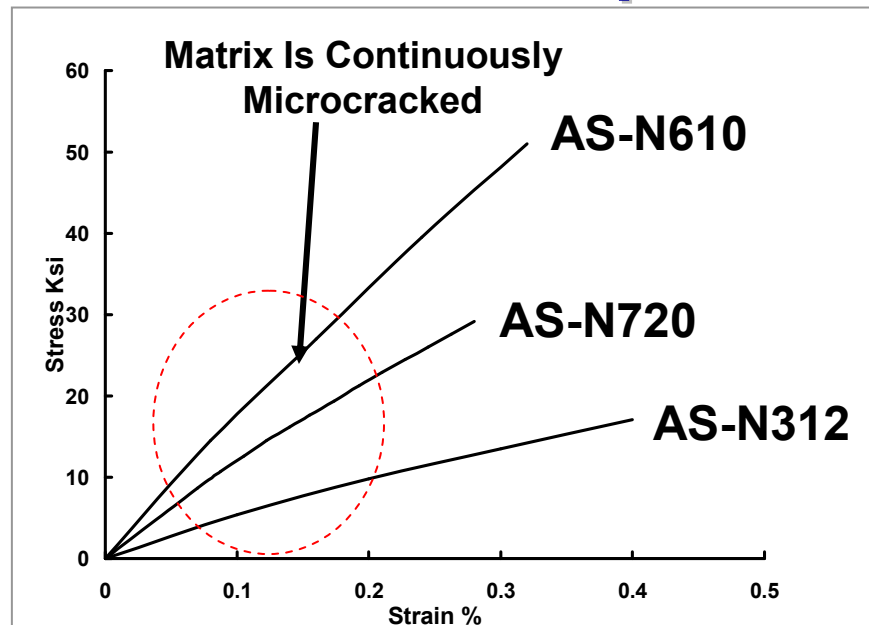


# Aluminosilicate Matrix CMCs

## Mechanical Properties



Property	AS-N312	AS-N720	A-N720	AS-N650	AS-N610
Composite Density (gm/cc)	2.30	2.60	2.73	2.80	2.83
Nominal Fiber Volume (%)	48	45	45	39	51
Open Porosity (%)	24	25	25	25	25
RT Tensile Modulus (GPa)	31	76	70	96	124
RT Tensile Strength (MPa)	124	220	169	261	365
Short Beam Shear (MPa)	9.0	14.3	12.5	-	15.0
Thermal Expansion ( $10^{-6}/^{\circ}\text{C}$ )	4.8	6.3	6.0	8.0	8.0
Maximum Temperature ( $^{\circ}\text{C}$ )	650	1100	1200	1000	1000

Key: AS – Aluminosilicate matrix; A – Alumina matrix