

	INDIANA AND MICHIGAN POWER D. C. COOK NUCLEAR PLANT UPDATED FINAL SAFETY ANALYSIS REPORT	Revision: 16.1 Table: 9.7-3 Page: 1 of 1
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1100 ALLOY ALUMINUM PHYSICAL AND MECHANICAL PROPERTIES

Density	0.098 lb/cu. in. , 2.713 gm/cc
Melting Range	1190-1215 °F, 643-657 °C
Thermal Conductivity (77 °F)	128 BTU/hr/sq ft/°F/ft, 0.53 cal/sec/sq cm/°C/cm
Coef. of Thermal Expansion (68-212 °F)	13.1x10 ⁻⁶ /°F, 23.6x10 ⁻⁶ /°C
Specific heat (221 °F)	0.22 BTU/lb/°F, 0.23 cal/gm/°C
Modulus of Elasticity	10x10 ⁶ psi
Tensile Strength (75 °F)	13,000 psi annealed, 18,000 psi as rolled
Yield Strength (75 °F)	5,000 psi annealed , 17,000 psi as rolled
Elongation (75 °F)	35-45% annealed, 9-20% as rolled
Hardness (Brinell)	23 annealed, 32 as rolled
Annealing Temperature	650 °F, 343 °C