



INSULATION SPECIALTIES OF AMERICA INC.

ISAFORM NCF 1800

ISAFORM is vacuum formed high temperature NCF (non-ceramic fiber) made from calcium, magnesium, silica fibers and binders. ISAFORM NCF products offer high temperature stability, uniform density, low thermal conductivity, excellent resistance to thermal shock, and superior wetting resistance to molten aluminum. In order to provide handling strength for the ISAFORM during manufacturing as well as during installation, small quantities of organic and inorganic binders are added to the formulation. The organic binders will burn out between 400-500^oF during the initial heat up by the end user of the product, causing the material to become brownish in color and give off a slight odor. Upon completion of the burnout the boards will be odorless and white in color.

PHYSICAL PROPERTIES

Color Before Firing	Cream
Color After Firing	White
Temperature Maximum	1832°F (1000°C)
Continuous Use	1800°F (982°C)
Melting Point	2300°F (1260°C)
Nominal Density lb/ft ³ (non-sprayed)	16-18
Post treated Density	20-23
Chemical Composition	
SiO ₂	60-70%
CaO	25-35%
MgO	2-10%
LOI (% by Weight)	4-7%
Typical Shrinkage (%) 24HRS @ 1800 ^o F	<5%
Thermal Conductivity (Calculated)	600 ^o F 0.527 K 1000 ^o F 0.802 K 1200 ^o F 0.961 K 1600 ^o F 1.341 K
MOR, PSI	
Green (typical)	125
Fired (typical)	50

Data is based on average / calculated properties and is presented for general reference only. This information should not be used for specification purposes – no warranty is expressed or implied.

