

CEE-NC002 FIRE RETARDANT ELECTRICALLY CONDUCTIVE NICKEL COATED GRAPHITE FILLED SILICONE ELASTOMER**Product overview**

CEM-NC002 is a fire retardant, electrically conductive composite material comprising of silicone elastomer and nickel coated graphite particles. It is formulated for the production of sheet materials and gaskets that offer a combined high level of EMI shielding and environmental sealing over a wide temperature range. The silicone elastomer base provides excellent resistance to extremes of temperature and long term ageing.

CEM-NC002 is UL94 V0 compliant and meets the requirements of BS 6853:1999 Incorporating amendment No1. Low smoke and low toxicity.

CEM-NC002 also exhibits good galvanic (electro-chemical) stability when used in combination with aluminium alloys, particularly in humid or damp environments.

Available forms

This material is available as die cut flat gaskets, sheet, strips and custom moulded components. The equivalent material type is also available in the form of extruded sections (CEE-NC002) Gaskets and sheet material can be supplied with a self adhesive backing to assist installation / assembly.

CEE-NC002 FIRE RETARDANT ELECTRICALLY CONDUCTIVE NICKEL COATED GRAPHITE FILLED SILICONE ELASTOMER

Cured Properties	
Colour	Dark grey
Density	2.0 gcm ⁻³
Hardness	60 Shore A
Volume resistivity	<0.1Ω.cm
Tensile strength	1.8MPa
Tear strength	7kN/m
Elongation	300%
Compression set – 72 hours at 100°C	10%
Service temperature range	-55°C to 160°C
Maximum intermittent temperature	200°C
UL94 Flammability Rating	UL94 V0

Shielding Effectiveness	
200kHz (H field)	75dB
100MHz (E field)	>100dB
500MHz (E field)	>100dB
2GHz (Plane wave)	>100dB
10GHz (Plane wave)	>100dB

**CEE-NC002 FIRE RETARDANT ELECTRICALLY CONDUCTIVE NICKEL
COATED GRAPHITE FILLED SILICONE ELASTOMER****Smoke and Toxicity Results**

Oxygen index to BS EN ISO 4589-2: 1999	Oxygen 41.6%
Smoke density to BS 6853:1999: Annex D.8.3	Average Ao (on) 0.00944
	Average Ao (off) 0.0104
NF X 70-100-1: 2006	Conventional index
NF X 70-100-2: 2006	of Toxicity (CIT) 8.19

Shielding Solutions Ltd
410 Avenue West
Skyline 120
Great Notley
Essex
CM77 7AA

Tel: 01376 330033
Fax:01376 339163
Web: www.shielding-solutions.com

SSL/TDS/113 ISS 2
21/08/2013