



# DEMS

## NAD 500

NAD-500 is an asbestos-free cement board with excellent electrical properties. A high density cement board reinforced with inorganic fibres.

Good mechanical strength at operating temperatures.



- Colour : Grey
- Dielectric strength-  
KV/mm (V/mil) :  
2.90 (73.70)
- Temperature : 500°C
- Applications : Cathode support pad, platen insulation, element support, oven cladding, furnace plate, induction furnaces.



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## DATA SHEET NAD 500

<u>PROPERTY</u>	TYPICAL RESULT	UNITS
DENSITY	1 750	Kg/m <sup>3</sup>
<b><u>MOISTURE ABSORPTION</u></b>		
24 HOUR IMMERSION IN WATER	15	%
SILICONE IMPREGNATED FOR 24 HOURS IN WATER	<0.5	%
24 HOURS IN 95 % RELATIVE HUMIDITY	2.5	%
100 HOURS IN 95 % HUMIDITY	3	%
<b><u>ELECTRIC PROPERTIES</u></b>		
DIELECTRIC STRENGTH	2.9 69	KV/mm V/mil
<b><u>MAX CONTINUOUS SERVICE TEMPATURE</u></b>	500	°C
<b><u>COMPRESSIVE STRENGTH</u></b>	118	MN/m <sup>2</sup>
<b><u>ARC RESISTANCE-SECONDS</u></b>	370	
<b><u>FLEXURAL STENGTH</u></b>		
350°C	24	MN/m <sup>2</sup>
500°C	22	MN/m <sup>2</sup>
<b><u>THERMAL CONDUCTIVITY</u></b>		
100°C	0.37	W/(m·K)
150°C	0.42	W/(m·K)
200°C	0.47	W/(m·K)
<b><u>THERMAL SHRINKAGE (AFTER 24 HOURS)</u></b>		
350°C	0.21	Linear %
500°C	0.25	Linear %
705°C	0.57	Linear %
<b><u>VOLUME RESITIVITY</u></b>	1.00 x 10 <sup>4</sup>	Ohm. cm