

# SUPER MAT

WITH SILICONE TOPCOAT



## Product Description

- Flexible, durable, breathable and corrosion resistant
- One-sided silicone coating, 1 mm thick. Does not impair breathability. Perfect as weather/ rain barrier where suitable as an alternative to metal jacket
- Hydrophobic to 315°C (600°F) continuous
- Constructed of type E fiberglass and impregnated with fluorocarbon resins
- Maximum use temperature 650°C (1200°F)
  - When used above 315°C (600°F), safe for outdoors and well-ventilated areas
- Very good thermal conductivity
- Easy to handle, fabricate and install
- Dust generation is nil
- Available in various width rolls up to 180 cm (72 in.)
- Small width rolls of (8mm thickness) can be spiral wrapped, like tape, for efficient installation on small diameters
- Perfect for piping and equipment where insulation must remain dry

## Physical Properties

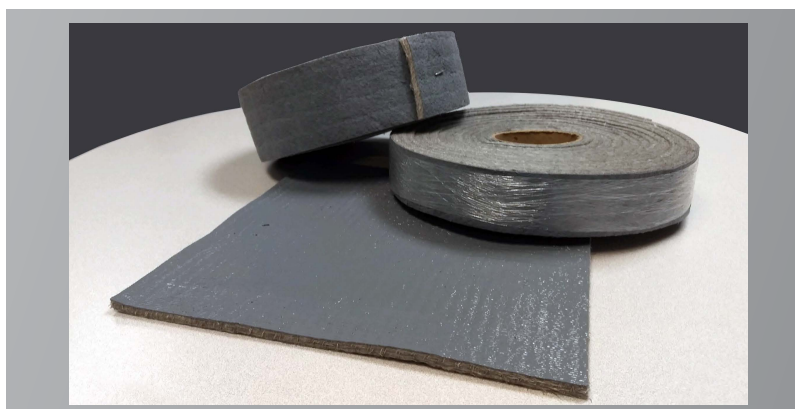
<b>Color</b>	Grey
<b>Density</b>	144 to 192 kg/m <sup>3</sup> (9 to 12 lb/ft <sup>3</sup> )
<b>Thickness</b>	8 mm (0.3 in), 16 mm (0.63 in), 20 mm (0.78 in), 25 mm (1 in)
<b>Maximum Use Temp</b>	E-glass 649°C; S-glass 760°C; 90%+ SiO <sub>2</sub> 982°C
<b>Hydrophobic</b>	Continuous to 315°C (600°F)
<b>Width</b>	8 mm thick: 5 cm (2 in) to 182 cm (72 in) 16, 20, & 25 mm: 70 cm (30 in) to 182 cm (72 in)

## Material Performance Data\*

Test Method	Performance	Value
ASTM C356	Linear Shrinkage Under Soaking Heat	<2% @ 649°C
ASTM C795	Corrosiveness over Austenitic SS	Passed
ASTM C1101	Classifying Flexibility	Resilient Flexibility
ASTM C1104	Water Vapor Sorption	<1% (by wt)
ASTM C1338	Fungi Resistance	Passed
ASTM C1763	Water Absorption by Immersion	Procedure B, <5%
ASTM C1511	Liquid Water Retention Post-submersion, after heat aging per test method	<5%
ASTM E84	Surface Burning Characteristics	FSI=5 ; SDI=75

\* Third party test reports available upon request

Thickness (mm)	Roll Length Meter (ft)
8	~15.2 (50)
Available in other lengths and thicknesses. Also in "Blanket" form up to 1.524 meter (60in) wide and 38.1 meter (125ft) long.	



## Thermal Performance per ASTM C177\*

Temperature (°C)	0	100	200	300	400	500	600
Thermal Conductivity (mW/mK)	32.5	43.4	55.7	71.2	85.2	102.5	133.4
Temperature (°F)	32	212	392	572	750	932	1112
Thermal Conductivity (Btu·in/hr·ft <sup>2</sup> ·°F)	0.23	0.30	0.39	0.49	0.59	0.71	0.93

\* Third party test reports available upon request

**CAUTION:** Super Mat is not recommended for INDOOR applications to equipment which will operate above 600°F (315°C).

This information is given in good faith and is believed to be accurate. No expressed or implied warranty of any kind including those of merchantability or fitness for a particular purpose is made as to the performance of an installation. Super Insulation, LLC does not take any responsibility for misuse of these products and recommends testing before use.

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