

Ordinary Nano-Aerogel Felt

RS Nano-aerogel felt is a flexible thermal insulation material composed of nano-silica aerogel composite with a fibrous substrate (such as glass fiber or pre-oxidized fiber). It exhibits an extremely low thermal conductivity (approximately 0.015-0.023 W/m-K). For equivalent insulation



Thinner, longer-lasting, more flexible: Next-generation nano-scale high-efficiency insulation materials.

Product properties in accordance with ASTM C578

Property	Performance	Test standard
Thermal conductivity	≤ 0.015 - 0.023 W/m.K	ASTM C518 / EN 12667
Maximum use temperature	200°C 650°C -200 -600	ASTM C411
Sag resistance	Excellent / No sagging	ASTM C203
Linear shrinkage	≤1%	GB/T 8811
Reaction to Fire	A1/A2 A1	GB 8624 / EN 13501
Compressive Strength	≥150 kPa (Density-dependent) 100kPa	ASTM D1621
Water Vapor Permeability	≤3.0ng/(Pa·s·m)	ASTM E96
Water Repellency	≥99 %	GB/T 10299
Water Absorption	≤0.5%	ISO 2896
Density ⁶⁾	180-220kg/m ³	ASTM D1622

All values are nominal values for standard industrial production. Standard industrial production tolerances applicable.

Compliance

- Standard Fulfillment: RS Aerogel Insulation Blanket fully complies with the requirements as set by internationally recognized standards like ASTM C1728, EN 13501-1, and GB/T 34336.
- Superior Hydrophobicity: High water repellency (≥99%) protects against Corrosion Under Insulation (CUI) and maintains stable thermal performance in humid environments.
- Ultimate Thermal & Fire Performance: The nanoporous structure provides world-leading low thermal conductivity, while its non-combustible nature ensures Class A fire safety for high-temperature applications.

Disclaimer

As RS has no control over insulation design and workmanship, accessory materials or applications conditions, RS does not warranty the performance or result of any installation containing RS products. RS overall liability and the remedies available are limited by the general terms and conditions of sale. This warranty in lieu of all other warranties and conditions expressed or implied, including the warranties of merchantability and fitness for a particular purpose. RS Insulation reserves the right to make necessary product changes at any time. Technical specifications are thus stated subject to change.

