

THERMALJACS547® INSULATION



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PRODUCT DESCRIPTION

Conforming to ASTM C547 (Standard Specification for Mineral Fiber Pipe Cover), ThermalJacs547® Preformed pipe insulation is Precision Fabricated from 8lb/ft³ (128 kg/m³) nominal density, premium quality mineral wool, bonded together with a high temperature binder. Advanced manufacturing technology ensures consistent product quality, with high fiber density and low shot content, for excellent performance in thermal control and fire resistance applications. ThermalJacs547® is manufactured to form all standard and custom pipe dimensions.

PRODUCT APPLICATION

ThermalJacs547® Preformed pipe insulation is produced to precisely fit NPS & tubing sizes for commercial and industrial applications at temperatures ranging from -20°F to 1200°F (-29°C to 650°C). See PSA Workability under Product Characteristics. ThermalJacs547® is manufactured in 36" sections for iron pipe sizes ½" to 72"+ NPS. ThermalJacs547® is available in single layer thickness from 1" to 4" and double layered thickness from 2 ½" in ½" nominal increments per ASTM C 585.

ADVANTAGES

ThermalJacs547® is used in applications to maximize control of heat loss, increase Thermal Performance, reduce operating costs, and achieve greater energy savings. ThermalJacs547® is shipped flat from the factory until formed on site which drastically reduces freight costs when shipping. Pipe sections can also be shipped preformed for ease of use or preference. Finished goods are manufactured in accordance with ASTM C585 pipe dimensional standards to ensure a precise fit. Other advantages of using ThermalJacs547® is that the insulation holds very low in-service shrinkage, preventing gaps from forming at the joints causing costly thermal breaks. ThermalJacs547® is easy to handle, install, and fabricate fittings or cut-outs, with clean handling properties and factory applied facers that help reduce dust and skin irritation, also minimizing job cleanup time and expenses. ThermalJacs547® is less expensive than other non-wool materials, it doesn't absorb moisture, so it is resistant to mold, and can naturally help prevent Corrosion Under Insulation (CUI) when installed in a proper system. It is also fully recyclable (where programs are available), and has a minimal ecological footprint.

AVAILABLE FORMS & SIZES STANDARD THICKNESSES

SINGLE LAYER	1" – 4" thick
DOUBLE LAYER	≥ 2 ½" in ½" increments

manufactured in 36" sections | available for pipe sizes ½" – 72"+ | available in iron and copper tubing sizes | Also available as Tank & Vessel Fit for 72" and above

FACINGS AVAILABLE

Fiberglass Matte, ASJ & FSK. Custom facings available upon request.

PRODUCT & INSULATION SPECIFICATION COMPLIANCE

Standard of Compliance	Description	Compliance
ASTM C547	Standard Specification for Mineral Fibre Preformed Pipe Insulation; Grade A; Type II, Type III	Pass
ASTM C411	Standard Test Method for Hot-Surface Performance of High Temperature Insulation	In Accordance
ASTM C447	Maximum Service Temperature	1200°F (650°C)
ASTM C585	Standard Practice for Inner and Outer Diameters of Thermal Insulation for Nominal Sizes of Pipe and Tubing	Conforms
ASTM C795/C871 Nuclear Regulatory Guide# 1.36	Standard Test Methods for Chemical Analysis of Thermal Insulation Materials for Leachable Chloride, Fluoride, Silicate, and Sodium Ions	Conforms
ASTM C692/C795	Stress Corrosion Evaluation on external stress corrosion cracking tendency of austenitic stainless steel	Pass
ASTM C1045	Standard Practice for Calculating Thermal Transmission Properties Under Steady-State Conditions	In Accordance

FUNGI AND BACTERIA The insulation material does not promote the growth of fungi or bacteria. Lab results are available upon request.

PRODUCT CHARACTERISTICS

Standard of Compliance	Description	Compliance
ASTM C356	Linear Shrinkage at 1200°F (649°C)	<1%
ASTM C1104	Water Sorption by Volume & Weight	<1%
ASTM C1335	Shot Content	<20%
ASTM E84	Surface Burning Characteristics of Building Materials	25/50 or less
Recovery ASTM C165	After 25% compression	100%
PSA* WORKABILITY	Product must be brought back to workability temperature for adhesive to re-activate if ambient temperatures fall below +5C° (41°F)	≥ +5°C (41°F)

*PSA: Pressure Sensitive Adhesive

THERMAL CONDUCTIVITY

MEAN TEMP.	°F	100	200	300	400	500	600	700
	°C	38	93	149	204	260	316	371
Btu.in/hr.ft ²	°F	0.25	0.30	0.35	0.41	0.48	0.56	0.65
	°C	0.035	0.043	0.051	0.059	0.069	0.080	0.093

test method ASTM C335/C335M | Calculations as per ASTM C1045

NOTE: Ideal Products strives to manufacture the highest quality of mineral fiber pipe cover, and a variety of other materials used in the mechanical insulation industry. The physical and chemical properties presented herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. As Ideal Products has no control over installation, design, workmanship, accessory materials, or application conditions, Ideal Products does not warrant the performance results of any installation containing our products. Ideal Products overall liability and the remedies available are limited by the general terms and conditions of sale. For any further technical inquiries or up to date information, please send your inquiries to customerservice@idealproducts.ca.

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