Thermablok®

Aerogel Energy Conservation

a product from Acoustiblok, Inc.

ASTM E84 Class A Fire Rated

MADE IN USA

100% Recyclable

North American Office
6900 Interbay Boulevard
Tampa, FL 33616 USA
Phone: 813-980-1400
Fax: 813-549-2653
www.thermablok.com
www.acoustiblok.com
sales@acoustiblok.com

Product Information

Thermablok's® insulation strips virtually eliminate ***thermal bridging***, until now a prime unresolved factor in energy loss. Comprised mainly of silica aerogel developed by NASA, Thermablok is a patented flexible, nanoporous aerogel insulation. By simply adding one strip to each stud edge before drywall, Thermablok interrupts the ***thermal bridging*** process through the studs.

Thermablok is an energy efficiency innovation & a green building component. This NASA based technology used on the shuttle and mars missions, is over 90% air and has the lowest thermal conductivity of any known material (13.5mW/mK).

Whether commercial, residential, municipal, new construction or urban retrofit, Thermablok strips *increases the whole wall R-value,* regardless of cavity insulation choice or framing material. Tested assemblies have increased whole wall R-values by over 40% (United States Dept of Energy Oakridge National Research Laboratory & J.M. Lab)

Extensive research studies by the Dept. of Energy (O.R.N.L) indicates. that 10-15% of the U.S. residential energy consumption is lost through thermal bridging. ***Thermal bridging*** is not generally accounted for in analysis of building loads, HVAC sizing or whole building energy consumption calculations.

Thermablok's patented chemistry offers both hydrophobic performance and an ability to breathe - in the same material. This allows for the design of both venting concepts and also installation where water would be a problem to traditional insulation materials. Material performance is unaffected by moisture and will not support mold growth.

Thermablok's unique properties – extremely low thermal conductivity, superior flexibility, compression resistance, hydrophobicity, and ease of use – make it essential for those seeking the ultimate in thermal protection.

Physical Properties

Size*	Strip Form - 1/4in x 1 1/2in x 4ft 6.35mm x 38mm x 1.22m Blanket Form - 1/4in x 57in x 125ft 6.35mm x 1,450mm x 41.15m
Fire Rating ASTM E84	Class A Flame Spread 20 / Smoke Index 50
Application Temp Range	-328˚ F to +400˚ F -200˚ C to + 200˚ C
Color	White
Density*	9.4 lb/ft^3 (0.15 g/cc)
Hydrophobic	Yes

*Nominal values. 3/8" (10mm) before installation and 1/4" (6mm) when installed
**Information on this data sheet is subject to change without notice and should not be used for writing specifications.

Simple Peel and Stick Adhesion to Metal Framing for Low Cost Installation

Features & Benefits

- Energy Savings – Energy & CO^2 Payback in Less Than 12 Months Typical. Low Up Front Cost with Lifecycle Savings
- Energy Efficient Tax Credit Eligibility Potential. Refer to 2005 Energy Policy Act "EPAct" – IRC Section 179D
- MBDC Cradle to Cradle Silver Certified
- Easy to Install. No Jobsite Water Concern
- Environmentally Safe – RoHS Compliant. 100% Recyclable. No Respirable Fiber Content.
- Ultra Light Weight Means Low Cost Shipping and Energy Use.
- LEED Credit Categories: Optimized Energy Performance, Recycled Content, and Mold Prevention
- Lowest Thermal Conductivity of any Insulation. Achieve Whole Wall R-value Increases up to 42%.
- No Physical Property Changes with Age, Compression or Moisture. Super Hydrophobic, yet Breathable.
- ASTM E84 Class A Fire Rated and Euroclass Fire Test E Rated.
- Enhanced Acoustical Properties. Acoustical Dampening and Decoupling Characteristics Added to Assemblies

Middle East Office
Kingdom Tower, Suite 1442 - 28th Floor, Riyadh, Kingdom of Saudi Arabia
Phone: + 966-1-211-8193