





Aerocel[®] AC

Sheet & Roll Insulation

HVAC | Refrigeration | Chilled Water | Equipment Duct Wrap | Hot and Cold Water Piping

Closed-cell elastomeric foam insulation in smooth, durable sheets and rolls. Ideal for large pipes, fittings, chillers, tanks, equipment and duct wrap. Reduces both structure-borne sound and air-borne sound. <u>Most thicknesses available with or without</u> <u>pressure-sensitive adhesive backing</u>.

Proprietary blend of non-polar EPDM rubber is key to consistent, long-lasting thermal performance and protection against moisture and environmental stresses.

Wide range of sizes and thicknesses to meet energy code and condensation control requirements. See back cover.

Fast, simple to install

Available with pressure sensitive adhesive (PSA) backing

Low thermal conductivity - reduced insulation thicknesses

Built-in vapor retarder - No supplemental vapor barrier required for most applications*

Superior environmental stability

Non-polar - does not induce or react with water

Greater UV resistance than NBR/PVC insulation

Non-corrosive on stainless steel and copper piping

Suitable for interior and exterior applications**

Safe and quiet

Attenuates lower frequency mechanical noise

Superior fire safety - 25/50 rated (ASTM E84), NFPA 90A/90B and self-extinguishing (ASTM D635) thru 2-inch thick

GREENGUARD Gold Certified for low chemical emissions (VOCs)

Verified Environmental Product Declarations (EPD's) and Health Product Declarations (HPD's)

No CFCs, HFCs, HCFCs, PBDEs, formaldehyde, nitrosamine or fibers

Ultra-low PVC content – less than 1%

Naturally mold-resistant with a smooth, cleanable surface



Aeroflex insulation system solutions



Aerofix®

Light-weight, rigid pipe supports, pre-insulated with closed-cell EPDM foam rubber and encased with zero-perm EPDM polymer membrane. Includes built-in pressure sensitive Protape[®] closure system.

AeroFit™

Pre-fabricated fitting covers made of closed-cell EPDM rubber for fast installation on HVAC and plumbing piping.



Protape[®]

Zero-perm EPDM-based, self-adhering rubber tape for sealing glued insulation seams and termination points.



Aeroflex Adhesives

Specially formulated adhesives for bonding and vapor-sealing Aerocel insulation. Fast tack and LVOC formulations available.

*Supplemental vapor barrier may be required in extreme lowtemperature or high-humidity applications. Protective jacket required for direct-bury applications and if insulation may be subjected to mechanical damage.

Note: National, state & local energy codes require protection of cellular foam pipe insulation from solar radiation for exterior applications. Jackets and insulation coatings are acceptable. Adhesive tapes are not permitted. **Product: Closed-cell EPDM (Ethylene Propylene Diene Monomer)-based rubber elastomeric foam insulation for HVAC, refrigeration and plumbing piping and equipment.

Installation Instructions: www.aeroflexusa.com/wp-content/uploads/2021/06/Aeroflex_Installation-Guide_062521-1.pdf

Standard Specification: ASTM C534 Type II Grade 1

Thermal Conductivity (K) Btu-in/hr-Ft² -°F (W/m.K)

Mean Temperature	K Value	Test Method
50°F (10°C)	0.237 (0.0342)	
75°F (24°C)	0.245 (0.0353)	
100°F (38°C)	0.252 (0.0363)	
125°F (52°C)	0.260 (0.0375)	ASTM C518/C177
150°F (66°C)	0.267 (0.0385)	
200°F (93°C)	0.282 (0.0406)	
250°F (121°C)	0.315 (0.0454)	

Physical and Operational Properties

Property	Test Value/Rating	Test Method					
Service Temperature, CONTINUOUS	-297°F/-183°C to 257°F/125°C -22°F/-30°C to 248°F/120°C with PSA	ASTM C411 ¹					
UV Resistance	Minimal Cracking or color change	ASTM G7					
Ozone Resistance	No cracking	ASTM D1171	ASTM D1171				
Water Vapor Permeability, Max	0.03 perm-inch (4.38 x 10 ⁻¹¹ g/Pa.s.m)	ASTM E96					
Water Absorption (% by Volume), Max	0.2%	ASTM C209					
	Class V-O	UL 94					
Fire Safety Characteristics thru 2" thickness	25/50	ASTM E84					
	Pass	NFPA 90A/90B					
	Self-extinguishing	ASTM D635					
Corrosion of Stainless Steel	Non-corrosive	ASTM C692, DIN 1988					
Fungi Resistance	No Growth	ASTM C1318/G21					
Mold Resistance	No Growth	UL181 Section 13					
Flexibility	Pass	ASTM C534					
Air Erosion	Pass	UL181 Section 18					

¹ AEROCEL flexibility begins to decrease at -70°F and below. This does not impact the insulating properties of the material.

Additional Approvals, Certifications & Compliance

ASTM D1056, 2C1	Standard Specification for Flexible Cellular Materials-Sponge or Expanded Rubber
ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1	International Green Construction Code® (igCC®)
ANSI/ASHRAE/IES Standard 90.1	Energy Standard for Buildings Except Low-Rise Residential Buildings
Buy American	Buy American, Federal Acquisition Regulation, FAR 52.225 Buy American
CA Title 24	California Building Energy Efficiency Standards
CDPH Specification 01350	California Department of Public Health (VOC Emissions)
EPA TSCA Section 6(h)	Toxic Substances Control Act Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
IECC®	International Energy Conservation Code®
LEED®	U.S. Green Building Council - Leadership in Energy and Environmental Design
MEA #171-04-M	City of New York Material and Acceptance Pipe Insulation
MIL-P-15280 (Form S, Form T)	U.S. Department of Defense - Qualified Products List (06/24/2005)
REACH	European Chemicals Agency (ECHA) - Registration, Evaluation, Authorization and Restriction of Chemicals
RoHS	European Union - Restriction of Hazardous Substances

Potential LEED® Credit Contributions

Prerequisite: Minimum Energy Performance					
Credit: Optimize Energy Performance					
Credit: Building Product Disclosure and Optimization - Environmental Product Declarations (EPD), Product Specific Type III					
Credit: Building Product Disclosure and Optimization - Material Ingredients, verified HPD					
Credit: Low-Emitting Materials					
Credit: Indoor Air Quality Assessment					
Credit: Thermal Comfort					
Credit: Acoustic Performance					
Credit: Occupant Comfort Survey					

















Aerocel®AC Sheet Insulation R-Values												
Wall Thickness (inches)	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3
R-value	0.5	1.0	1.6	2.1	2.6	3.1	4.1	5.2	6.1	8.0	10.0	12.0

Aerocel®AC Roll Insulation R-Values												
Wall Thickness (inches)	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3
R-value	0.5	1.0	1.6	2.1	2.6	3.1	4.1	5.2	6.1	8.0	10.0	-

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