AEROFLEX EPDM™

Sheet & Roll Insulation
Available with standard and PSA back

BUY AMERICAN COMPLIANT

Low VOC™
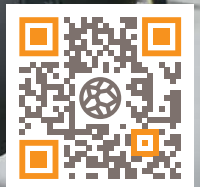
AEROFLEX

AEROFLEX EPDM™

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. Most thicknesses available with or without pressure-sensitive adhesive backing.

Proprietary blend of nonpolar 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

Nonpolar – 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, UL723, CAN/ULC-S102), NFPA 90A/90B and self-extinguishing (ASTM D635) thru 2-inch thick

Indoor Advantage™ Gold Certified for low chemical emissions

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

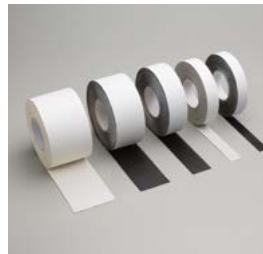## AEROFLEX EPDM™ insulation system solutions

Aerofix®
Light-weight, rigid pipe supports, pre-insulated with high-density, load-bearing closed-cell foam and encased with zero-perm EPDM polymer membrane. Includes built-in pressure sensitive Protape® closure system.

AeroFit™
Pre-fabricated fitting covers made of AEROFLEX EPDM™ rubber for a high-quality 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 AEROFLEX EPDM™ insulation. Fast tack and LVOC formulations available.

*Supplemental vapor barrier may be required in extreme low-temperature 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.

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 C177/C518
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 to 257°F [-183°C to 125°C] -22°F to 248°F [-30°C to 120°C] PSA	ASTM C411[1]
UV Resistance	Minimal Cracking or color change	ASTM G7
Ozone Resistance	No cracking	ASTM D1171
Water Vapor Permeability, Max	**0.02 perm-inch** (4.38 x 10⁻¹¹ g/Pa.s.m)	ASTM E96
Water Absorption (% by Volume), Max	0.2%	ASTM C209/C1763
Surface Burning/Flammability (through 2" thick)	Pass	UL94 V-0
	25/50	ASTM E84, UL723, CAN/ULC-S102
	Pass	NFPA 90A/90B
	Self-extinguishing	ASTM D635
VOC Emissions	< 0.5 mg/m3	CDPH Standard Method v1.2
Corrosion of Stainless Steel	Non-corrosive	ASTM C692, DIN 1988
Fungi Resistance	No Growth	ASTM C1338/G21
Mold Resistance	No Growth	UL181
Linear Shrinkage	< 7.0%	ASTM C534
Air Erosion	Pass	UL181

[1] AEROFLEX EPDM™ 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
California Specification 01350	OC Emissions, Standard Method v1.2
EPA	Toxic Substances Control Act (TSCA) Persistent, Bioaccumulative, and Toxic (PBT) Chemicals, Per- and Polyfluoralkyl Substances (PFAS)
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
REACH	European Chemicals Agency (ECHA) - Registration, Evaluation, Authorization and Restriction of Chemicals
RoHS	European Union - Restriction of Hazardous Substances

Potential LEED® Credit Contributions

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

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AEROFLEX EPDM™ Sheet Insulation [36" x 48"] 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	1.1	1.7	2.2	2.6	3.3	4.2	5.3	6.4	8.4	10.5	12.6

AEROFLEX EPDM™ Roll Insulation [48" Wide] 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	1.1	1.7	2.2	2.6	3.3	4.2	5.3	6.4	8.4	10.5	-