



# AEROFLEX EPDM<sup>™</sup>

Sheet & Roll Insulation  
*Available with standard and PSA back*





# 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, and equipment.

Meets minimum pipe insulation thickness and minimum R-value requirement of the International Energy Conservation Code® (IECC®) and ASHRAE 90.1 Energy Standard. To meet minimum R-value, insulation thickness may increase above the minimum thickness per IECC and 90.1.

Wide range of sizes and thicknesses to meet energy code and condensation control requirements. Most thicknesses available with or without pressure-sensitive adhesive backing. See back cover.

### Fast, simple to install

#### Available with acrylic pressure sensitive adhesive (PSA) back

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

GREENGUARD Gold Certified for low chemical emissions

Environmental Product Declaration (EPD)

Health Product Declaration (HPD)

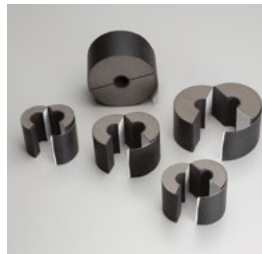
No CFCs, HFCs, HCFCs, PBDEs, formaldehyde, nitrosamine or fibers

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.



Courtesy of Nelson Insulation Company

#### 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.

\*\*For exterior applications, Aerocoat®, Aerocoat LVOC®, or an insulation jacket are recommended for UV protection to maximize the insulation's life cycle.

**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

**Installation Instructions:**



**Thermal Conductivity (K) Btu-in/hr-Ft<sup>2</sup> -°F (W/m.K)**

Mean Temperature	K Value	Test Method
50°F (10°C)	0.237 (0.0342)	ASTM C177/C518
75°F (24°C)	0.245 (0.0353)	
100°F (38°C)	0.252 (0.0363)	
125°F (52°C)	0.260 (0.0375)	
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 <sup>1</sup>
UV Resistance	Minimal Cracking or color change	ASTM G7
Ozone Resistance	No cracking	ASTM D1171
Water Vapor Permeability, Max	<b>0.02 perm-inch</b> (4.38 x 10 <sup>-11</sup> 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
VOC Emissions	Self-extinguishing	ASTM D635
	< 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

<sup>1</sup> 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





**AEROFLEX EPDM™ Sheet Insulation [36" x 48"] R-Values (75°F / 24°C mean temperature)**

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
<b>R-Value</b>	0.6	1.3	1.9	2.4	2.9	3.5	4.5	5.7	6.9	9.0	11.2	12.9

**AEROFLEX EPDM™ Roll Insulation [48" Wide] R-Values (75°F / 24°C mean temperature)**

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
<b>R-Value</b>	0.6	1.3	1.9	2.4	2.9	3.5	4.5	5.7	6.9	9.0	11.2	-

**NOTE:** The International Energy Conservation Code® (IECC®) and ASHRAE 90.1. Energy Standard require pipe insulation to meet either a minimum thickness or as an option minimum R-value (not both). Minimum thickness or R-value is determined by the authority having jurisdiction (federal, state, or local).

To meet minimum R-value, insulation thickness may increase above the minimum thickness specified by IECC and 90.1.

AEROFLEX EPDM™ pipe insulation thicknesses and R-values meet the minimum requirements of International Energy Conservation Code (IECC) and ASHRAE 90.1. Energy Standard.

Click [here](#) to learn more.