

AEROFLEX EPDM[™]

Standard EPDM Pipe Insulation





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HVAC | VRF | Chilled Water | Refrigeration
Hot and Cold Water Piping

Closed-cell elastomeric foam pipe insulation slides easily over new piping or can be slit to snap over existing piping.

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. See back cover.

Fast, simple to install

Slides easily over new piping installations

Can be slit and snapped over existing piping

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

Superior environmental stability

Nonpolar - does not induce or react with water

Low thermal conductivity - reduced insulation thicknesses

Greater UV resistance than NBR/PVC insulation

Non-corrosive on stainless steel & copper piping

Suitable for interior & exterior applications**

Safe for indoor environments

Superior fire safety - 25/50 rated (ASTM E84, UL723, CAN/ULC-S102) and self-extinguishing (ASTM D635) thru 2-inch thick

GREENGUARD Gold Certified for low chemical emissions

Environmental Product Declaration (EPD)

Health Product Declaration (HPD)

Does not contain asbestos, fibers, formaldehyde, lead, mercury, mercury compound, or nitrosamine

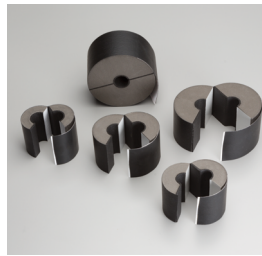
Compliant with EPA TSCA - does not contain PFAS, PBT, and POP chemicals

Naturally mold-resistant: no biocides required

Ultra-low PVC content – less than 1%



AEROFLEX EPDM™ insulation system solutions



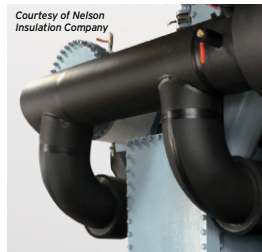
Aerofix®

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 insulation fittings made of AEROFLEX® EPDM rubber for 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.

**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 pipe insulation for HVAC (VRF, chilled water & refrigeration) and plumbing piping.

Installation Instructions:



Standard Specification: ASTM C534 Type I 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) | 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 ^{1,2} | -297°F to 257°F -183°C to 125°C | ASTM C411 ¹ |
| UV Resistance | Minimal Cracking or color change ASTM G7 | ASTM D1171 |
| Ozone Resistance | No cracking ASTM D1171 | ASTM E96 |
| 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 FSI, < 50 SDI (25/50) | ASTM E84, UL723, CAN/ULC-S102 |
| | Self-extinguishing | NFPA 90A/90B 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 Section 13 |
| Density | 3.0-6.0 lb/ft ³ | ASTM D1667 |
| Linear Shrinkage | < 7.0% | ASTM C534 |

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

² Approved for intermittent operating temperatures to 300°F / 150°C for up to 30 minutes within a 24-hour period.

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 |
| BABA | Build America, Buy America Act |
| Buy American | Buy American, Federal Acquisition Regulation, FAR 52.225 Buy American |
| CA Title 24 | California Building Energy Efficiency Standards |
| California Specification 01350 | VOC Emissions, Standard Method v1.2 |
| EPA | Toxic Substances Control Act (TSCA) Persistent, Bioaccumulative, and Toxic (PBT) Chemicals, Per- and Polyfluoralkyl Substances (PFAS), Persistent Organic Pollutants (POP) |
| 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 |
| Montreal Protocol | Manufactured without CFC and HCFC ozone-depleting blowing agents |
| 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™ Standard Pipe Insulation R-Values (75°F / 24°C mean temperature)

| Pipe Size (inches) | IPS (inches) | Wall Thickness (inches) | | | | | | | |
|-----------------------|-----------------|-------------------------|-----|-----|-----|------|-------|------|------|
| | | 1/4 | 3/8 | 1/2 | 3/4 | 1 | 1-1/2 | 2 | 3 |
| 1/4 | | 2.1 | 3.0 | 4.0 | 6.7 | 10.1 | 16.9 | | |
| 3/8 | 1/8 | 1.9 | 2.7 | 3.6 | 6.1 | 9.1 | 15.3 | 24.5 | |
| 1/2 | 1/4 | 1.8 | 2.5 | 3.3 | 5.6 | 8.3 | 14.1 | 22.4 | |
| 5/8 | 3/8 | 1.7 | 2.4 | 3.2 | 5.2 | 8.1 | 13.4 | 21.1 | 33.3 |
| 3/4 | | 1.7 | 2.3 | 3.0 | 5.0 | 7.7 | 12.8 | 20.2 | 31.9 |
| 7/8 | 1/2 | 1.6 | 2.3 | 3.2 | 5.3 | 7.4 | 12.9 | 18.9 | 31.2 |
| 1-1/8 | 3/4 | 1.6 | 2.2 | 3.0 | 5.0 | 7.0 | 12.1 | 17.7 | 29.1 |
| 1-3/8 | 1 | | 2.1 | 3.1 | 5.1 | 6.6 | 11.4 | 16.6 | 27.3 |
| 1-5/8 | 1-1/4 | | 2.3 | 3.0 | 4.9 | 6.3 | 11.1 | 16.3 | 26.5 |
| 1-7/8 | 1-1/2 | | 2.3 | 2.9 | 4.7 | 6.1 | 10.7 | 15.5 | 25.2 |
| 2-1/8 | | | 2.2 | 3.0 | 4.6 | 6.0 | 10.4 | 15.1 | 24.6 |
| 2-3/8 | 2 | | 2.2 | 3.0 | 4.5 | 5.8 | 10.2 | 14.6 | 23.7 |
| 2-5/8 | | | 2.2 | 2.9 | 4.4 | 5.7 | 9.9 | 14.3 | 23.2 |
| 2-7/8 | 2-1/2 | | 2.1 | 2.9 | 4.4 | 5.6 | 9.7 | 13.9 | 22.4 |
| 3-1/8 | | | 2.1 | 2.9 | 4.3 | 5.5 | 9.5 | 13.7 | 22.1 |
| 3-1/2 | 3 | | 2.1 | 3.0 | 4.2 | 5.4 | 9.3 | 13.3 | 21.3 |
| 3-5/8 | | | 2.1 | 3.0 | 4.2 | 5.4 | 9.3 | 13.2 | |
| 4-1/8 | 3-1/2 | | 2.1 | 2.9 | 4.1 | 5.3 | 9.0 | 12.8 | 20.5 |
| 4-1/2 | 4 | | 2.1 | 2.9 | 4.1 | 5.2 | 8.9 | 12.5 | 20.0 |
| 5-1/8 | | | | | 4.0 | 5.1 | 8.7 | 12.2 | 19.4 |
| 5-1/2 | 5 | | | 2.8 | 4.0 | 5.0 | 8.5 | 12.0 | 19.0 |
| 6-1/8 | | | | 2.8 | 4.0 | 5.0 | 8.4 | 11.8 | |
| 6-5/8 | 6 | | | 2.8 | 3.9 | 4.9 | 8.3 | 11.6 | 18.2 |

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.