



AEROFLEX®

EPDM Insulation Fittings



AeroFit™

AEROFLEX EPDM™ Insulation Fittings for
Standard and Grooved Pipe Fittings





AeroFit™ EPDM Insulation Fittings

HVAC | Refrigeration | VRF | Chilled Water
Hot & Cold-Water Piping

Factory-fabricated insulation fittings for high-quality installation on piping systems insulated with AEROFLEX EPDM™ closed-cell elastomeric foam insulation. Made with the same proprietary EPDM-based formula as AEROFLEX® insulation, AeroFit insulation fittings help maintain the superior performance of your nonpolar EPDM insulating system.

Precise factory fabrication saves field labor and improves overall aesthetics of installation. Ensures consistent, long-lasting thermal performance and protection against moisture and environmental stresses.

Available in AEROFLEX® Black and White/Gray formulations.

Wide range of ID's (3/8"- 6" IPS) and thicknesses (1/2" - 2"). See back cover.

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

No CFC's, HFC's, HCFC's, PBDE's, nitrosamine or fibers

Naturally mold-resistant; no added biocides required

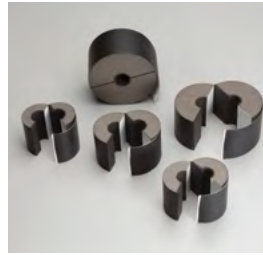
Environmental Product Declaration (EPD)

Health Product Declaration (HPD)

Ultra-low PVC content – less than 1%

*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.

AEROFLEX EPDM™ insulation system solutions



Aerofix®

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



AEROFLEX® Adhesives

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



Courtesy of Nelson Insulation Company

Protape®

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



Aerocoat®

Premium insulation coating specially formulated for AEROFLEX EPDM™ insulation to provide UV protection for exterior applications and as a decorative finish.

Fast, simple to install

Factory-fabricated for standard and grooved fittings, 45° and 90° elbows, tees and p-traps

Saves labor - Eliminates need for jobsite/shop fabrication

Ready to slit, install and glue with AEROFLEX® adhesive and Protape®

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

Superior performance

Nonpolar - does not induce or react to water

Ensures full insulation thickness on fittings to manage heat gain/loss, prevent condensation and corrosion under insulation (CUI)

Non-corrosive on stainless steel piping

Helps prevent corrosion under insulation (CUI)

Suitable for interior and exterior applications**

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

Product: Factory fabricated EPDM insulation fittings for insulating fittings on HVAC (VRF, chilled water & refrigeration) and plumbing piping.

Standard Specification: ASTM C534 Type I and II Grade 1

Installation Instructions:



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 | 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 (Black); 0.03 perm-inch (White/Gray) (4.38 x 10 ⁻¹¹ g/Pa.s.m) | ASTM E96 |
| Water Absorption (% by Volume), Max | 0.2% | ASTM C209 |
| 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 |

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 | VOC 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 |





Size Availability - AeroFit™ EPDM Insulation Fittings

| Fitting | Thickness Range (inches) | ID Range (inches) |
|---------------------------|--------------------------|-------------------|
| Elbow - short radius | 1/2, 3/4, 1, 1-1/2, 2 | 3/8 - 6 IPS |
| Elbow - long radius | 1/2, 3/4, 1, 1-1/2, 2 | 3/8 - 6 IPS |
| Elbow - 45 degree | 1/2, 3/4, 1, 1-1/2, 2 | 3/8 - 6 IPS |
| P-Trap | 1/2, 3/4, 1, 1-1/2 | 5/8 - 2-1/8 |
| Tee's (Equal Leg) | 1/2, 3/4, 1, 1-1/2, 2 | 1/2 - 6 IPS |
| Mechanical Grooved | | |
| Elbow - 90 degree | 1/2, 3/4, 1, 1-1/2 | 3/4 IPS - 6 IPS |
| Elbow - 45 degree | 1/2, 3/4, 1, 1-1/2 | 3/4 IPS - 6 IPS |
| Tee's | 1/2, 3/4, 1, 1-1/2 | 3/4 IPS - 6 IPS |
| Coupling S77 | 1/2, 3/4, 1 | 3/4 IPS - 6 IPS |

Installation: All fitting seams must be glued with AEROFLEX® adhesive and wrapped with Protape® for exterior applications!

Lead times (order-to-ship date): Most standard shapes & sizes are stocked or 1-week. Mechanical grooved fittings run 2-3 weeks.

Customization: Special shapes and sizes will be considered based on manufacturing capabilities.

AeroFit™ EPDM Insulation Fitting R-Values

| Pipe Size (inches) | IPS (inches) | Wall Thickness (inches) | | | | |
|--------------------|--------------|-------------------------|-----|-----|-------|------|
| | | 1/2 | 3/4 | 1 | 1-1/2 | 2 |
| 3/8 | | | 6.0 | 9.0 | 15.8 | 24.0 |
| 1/2 | 1/4 | 3.4 | 5.5 | 8.3 | 14.4 | 21.9 |
| 5/8 | 3/8 | 3.2 | 5.2 | 8.0 | 13.5 | 20.6 |
| 3/4 | | 3.1 | 5.0 | 7.7 | 13.0 | 19.7 |
| 7/8 | 1/2 | 3.2 | 5.3 | 7.4 | 12.9 | 18.5 |
| 1-1/8 | 3/4 | 3.0 | 5.0 | 6.9 | 12.1 | 17.3 |
| 1-3/8 | 1 | 3.1 | 5.0 | 6.5 | 11.3 | 16.2 |
| 1-5/8 | 1-1/4 | 3.0 | 4.8 | 6.3 | 11.1 | 15.9 |
| 1-7/8 | 1-1/2 | 2.9 | 4.7 | 6.0 | 10.6 | 15.2 |
| 2-1/8 | | 3.0 | 4.6 | 5.9 | 10.3 | 14.8 |
| 2-3/8 | 2 | 3.0 | 4.5 | 5.8 | 10.0 | 14.3 |
| 2-5/8 | | 2.9 | 4.4 | 5.7 | 9.8 | 14.0 |
| 2-7/8 | 2-1/2 | 2.9 | 4.3 | 5.5 | 9.5 | 13.6 |
| 3-1/8 | | 2.9 | 4.3 | 5.5 | 9.4 | 13.4 |
| 3-1/2 | 3 | 3.0 | 4.2 | 5.3 | 9.1 | 12.9 |
| 3-5/8 | | 3.0 | 4.2 | 5.3 | 9.1 | 12.9 |
| 4-1/8 | | 2.9 | 4.1 | 5.2 | 8.9 | 12.5 |
| 4-1/2 | 4 | 2.9 | 4.0 | 5.1 | 8.7 | 12.2 |
| 5-1/2 | 5 | 2.8 | 3.9 | 5.0 | 8.4 | 11.7 |
| 6-5/8 | 6 | 2.8 | 3.9 | 4.9 | 8.1 | 11.3 |