









AEROFLEX Breathe-EZ™ EPDM Duct Insulation

Fiber-free acoustic duct liner and wrap | Plenum-rated

Available with standard and PSA back







AEROFLEX Breathe-EZ[™]

Fiber-Free EPDM Duct Insulation

Duct Liner | Duct Wrap | Listed & Labeled*

Fiber-free, microbial-resistant, acoustic, closed-cell elastomeric duct insulation for safely lining and wrapping HVAC ductwork for thermal efficiency and condensation control. Attenuates lower-frequency airborne and structure-borne sound.

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

Available in rolls: 1/2" [13 mm], 1" [25 mm], 1-1/2" [38 mm], and 2" [50 mm] thicknesses to meet energy code and condensation control requirements.

See back cover for R-Values and acoustic performance.

*Complies with International Mechanical Code's "Listed & Labeled" requirement for duct insulation contained within plenums.

Fast, simple to install

Available with pressure sensitive adhesive (PSA) back

Low thermal conductivity – reduced insulation thicknesses

Easy to install as a wrap over rectangular, round and oval ducts

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

Superior environmental stability

Non-particulating

Nonpolar (hydrophobic) – does not induce or react with water

Smooth skin facing airstream easy to maintain

Suitable for interior and exterior applications***

Safe and quiet

Fiber-free

Naturally microbial-resistant with a smooth, cleanable surface

Indoor Advantage™ Gold Certified for low chemical emissions

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 I50 mml thick

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

Ultra-low PVC content - less than 1%



AEROFLEX EPDM™ insulation system solutions



AEROFLEX® Adhesives

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



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.



Aerocoat LVOC®

A low-VOC UV protective coating, best choice for LEED® projects.

^{**}Supplemental vapor barrier may be required in extreme lowtemperature or high-humidity applications. Protective jacket required for applications when 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 safely lining and wrapping HVAC ductwork. Skin 2 sides: 1" [25 mm], 1-1/2" [38 mm], 2" [50 mm], 1/2" [13 mm]. Roll widths 48" [122 cm], 56-1/4" [143 cm], 59" [150 cm], and 60" [152 cm]. See size range on back cover.

Installation Instructions:



Standard Specification: ASTM C534 Type II Grade 1, C1534 Type I

Apparent Thermal Conductivity (K) Btu-in/hr-Ft² -oF (W/m.K)

Mean Temperature	K Value	Test Method		
75°F (24°C)	0.255 (0.0368)	ASTM C177/C518		
100°F (38°C)	0.260 (0.0375)	— ASTM CIT/(CSI6		

Physical and Operational Properties

Property	Test Value/Rating	Test Method
Flame Spread Index (FSI)	< 25	ASTM E84, UL723, CAN/ULC-S102
Smoke Developed Index (SDI)	< 50	ASTM E84, UL723, CAN/ULC-S102
Sorvice Temperatures	-70°F to 257°F (-57°C to 125°C)	ASTM C411 ¹
Service Temperatures	-22°F to 250°F (-30°C to 121°C) with PSA	ASTM C4II
Water Vapor Sorption	$0.08 \text{ perm-inch } (4.38 \text{ x } 10^{-11} \text{ g/Pa.s.m})$	ASTM E96
Water Absorption	0.2%	ASTM C209/C1763
Dimensional Stability	< 7.0%	ASTM C356
VOC Emissions	< 0.5 mg/m3	CDPH Standard Method v1.2
Odor Emission	Pass	ASTM C1304
Corrosiveness	Pass	ASTM C665
Fungi Resistance	No Growth	ASTM C1338/G21
Erosion Resistance	No evidence of erosion @ 10,000 fpm (2.5 x 4,000 fpm)	ASTM C1071/UL181
Mold Resistance	No Growth	UL 181
Sound Absorption Coefficient	See back cover	ASTM C423

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 C1534, Type I	Standard Specification for Flexible Polymeric Foam Sheet Insulation Used as a Thermal and Sound Absorbing Liner for Duct System
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
CAN/ULC-S102	UL and Standard Council of Canada
EPA	Toxic Substances Control Act (TSCA) Persistent, Bioaccumulative, and Toxic (PBT) Chemicals, Per- and Polyfluoralkyl Substances (PFAS)
IECC®	International Energy Conservation Code®
IMC Listed & Labeled	International Mechanical Code, Duct Coverings and Linings within plenums
LEED®	U.S. Green Building Council - Leadership in Energy and Environmental Design
NFPA 90A/90B	National Fire Protection Association, Standard for the Installation of Air-Conditioning and Ventilating Systems/Standard for the Installation of Warm Air Heating and Air-Conditioning Systems
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 Breathe-EZ™ EPDM Duct Insulation R-Values						
Thickness (inches)	1/2	1	1-1/2	2			
R-value	2.1	4.2	6.1	8.1			

AEROFLEX Breathe-EZ [™] EPDM Duct Insulation <u>with PSA</u> R-Values						
Thickness (inches)	1/2	1	1-1/2	2		
R-value	2.1	4.2	6.1	8.1		

ROLL SIZE							
Thickness (inches)	Skin	48"	56-1/4"	59"	60"		
1/2"	2 sides	48"x100"	56-1/4"x100'	59"x100'	60"x100"		
1"	2 sides	48"x50'	56-1/4"x50'	59"x50'	60"x50'		
1-1/2"	2 sides	48"x40'	56-1/4"x40'	59''x40'	60''x40'		
2"	2 sides	48"x20'	56-1/4"x20'	59''x20'	60"x20'		

Sound Absorption Coefficients (min) Using Test Method ASTM C423 Type A Mounting Practice E795								
Frequency	125	250	500	1000	2000	4000	NRC	SAA
1/2" (13 mm)	0.03	0.04	0.11	0.37	0.60	0.29	0.30	0.30
1" (25 mm)	0.08	0.13	0.69	0.44	0.47	0.46	0.45	0.46
1-1/2" (25 mm)	0.10	0.27	0.82	0.36	0.49	0.53	0.50	0.54
2" (50 mm)	0.09	0.43	0.63	0.55	0.49	0.55	0.56	0.56

