



**AEROFLEX®**

EPDM Pipe Insulation With PVC Jacket



# AEROFLEX® with SaniGuard™

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AEROFLEX® with SaniGuard™ available in white only



# AEROFLEX<sup>®</sup> with SaniGuard<sup>™</sup>

## Closed-Cell EPDM Pipe Insulation with PVC Jacket

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

Closed-cell and lightweight EPDM-rubber elastomeric pipe insulation with a highly cleanable 30 mil PVC surface jacket. SaniGuard<sup>™</sup> PVC sections are factory formed and cut into 38" lengths that ship with 3' sections AEROFLEX EPDM<sup>™</sup> pipe insulation.

Perfect, out-of-the box solution for high performance, sanitary applications like clean rooms, food processing, pharmaceutical, cold storage and projects that require compliance with FDA and USDA wash down standards.\*

SaniGuard is available with standard AEROFLEX EPDM<sup>™</sup> unsplit and self-seal tubes.

Wide range of ID's (3/8"- 4-1/8") and thicknesses (1/2" - 2") plus white 2" PVC tape and welding adhesive (tape and welding adhesive sold separately). See back cover.

### Fast, simple to install

Prefabricated 30-mil PVC jacket, ready to install right out of the factory carton

Prefabricated 90° elbows available

Available with 2" white PVC tape for quick sealing of SaniGuard seams (sold separately)

\*Meets FDA and USDA standards when installed with PIC Welding Adhesive (must be installed for warranty purposes)

### Superior performance

Non-corrosive on stainless steel piping

Helps prevent corrosion under insulation (CUI)

Suitable for interior and exterior applications\*\*

**CAUTION:** The correct insulation thickness must be specified to maintain an outside insulation surface temperature of 150°F (65°C) or below. Failure of the SaniGuard surface will occur when outside surface of insulation exceeds 150°F (65°C).



### AEROFLEX EPDM<sup>™</sup> insulation system solutions



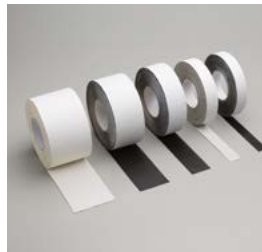
#### Aerofix<sup>®</sup>

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<sup>®</sup> closure system.



#### AEROFLEX<sup>®</sup> Adhesives

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



#### Protape<sup>®</sup>

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

### Safe for indoor and outdoor environments

Supplemental UV and mechanical protection\*\*

Superior fire safety - 25/50 rated and self-extinguishing

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

Verified Environmental Product Declaration (EPD)

Naturally mold-resistant; no added biocides required

\*\*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) rubber elastomeric foam pipe insulation with 30-mil PVC jacket 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-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 - AEROFLEX® Pipe Insulation**

Property	Test Value/Rating	Test Method
Service Temperature, CONTINUOUS	-297°F to 257°F -183°C to 125°C	ASTM C411 <sup>1</sup>
UV Resistance	Minimal cracking or color change	ASTM G7
Ozone Resistance	No cracking	ASTM D1171
Odor Emission	Pass	ASTM C1304
Fungi Resistance	No Growth	ASTM C1338/G 21/UL 181
Water Absorption	0.2% Max.	ASTM C209/C1763
Water Vapor Permeability	<b>0.02 perm-inch</b> (4.38 x 10 <sup>-11</sup> )	ASTM E96
Surface Burning/Flammability (through 2" thick)	Pass	UL94 V-0
	Pass	NFPA 90A/90B
	Self-Extinguishing	ASTM D635
Linear Shrinkage	< 7.0%	ASTM E84, UL723
Corrosiveness	Pass	ASTM C692/DIN 1988
Nitrosamine Content	None Detected	U.S. FDA CPG No. 7117.11 BSEN 12868

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

**Physical and Operational Properties - PVC Jacket**

Property	Test Value/Rating	Test Method
Surface Burning Characteristics, @30 mils	Flame Spread: <25	ASTM E84
	Smoke Dev.: <50	
	Class V-0	UL94
Service Temperature	-20°F to 150°F -28°C to 65°C	Internal
Water Vapor Permeability	.02 perm	ASTM E96
Specific Gravity	1.44	ASTM D792 @ 100 mils
Rockwell Hardness	112R	ASTM D785 @ 250 mils
Tensile Strength @ yield	6400 PSI	ASTM D882 @ 30 mils
Elongation @ Failure	61%	ASTM D882 @ 30 mils
Tensile Modulus	370,000 PSI	ASTM D882 @ 30 mils
Flexural Strength	11,600 PSI	ASTM D882 @ 125 mils
Izod Impact	73°F [22°C ] - 3.0 ft. lbs./inch	ASTM D256 @ 125 mils
	32°F [0°C ] - 1.7 ft. lbs./inch	
	-20°F [28°C ] - 1.1 ft. lbs./inch	
Emissivity	-40°F [-40°C ] - 1.0 ft. lbs./inch	Internal
	.91	
UV Resistance	Good	Internal





### 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
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® with SaniGuard™ EPDM Pipe Insulation R-Values

Pipe Size (inches)	IPS (inches)	Wall Thickness (inches)				
		1/2	3/4	1	1-1/2	2
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
4-1/8	3-1/2	2.9	4.1	5.2	8.9	12.5