



AEROFLEX®

EPDM Pipe Insulation With PVC Jacket



Aerocel® with SaniGuard™

EPDM Pipe Insulation With PVC Jacket



Aerocel® with SaniGuard™ available in white only



Aerocel[®] with SaniGuard[™]

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[™] PVC sections are factory formed and cut into 38" lengths that ship with 3' sections Aerocel[®] 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 Aerocel unslit tube (AC, White/Gray) and Aerocel Stay-Seal[®] with Protape[®] (SSPT[™]) 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

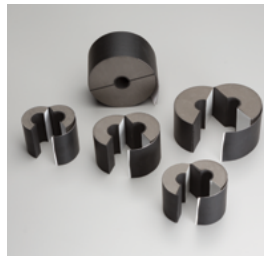
Helps prevent corrosion under insulation (CUI)

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 insulation system solutions



Aerofix[®]

Light-weight, rigid pipe supports, pre-insulated with closed-cell EPDM foam rubber 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 Aerocel insulation. Fast tack and LVOC formulations available.



Protape[®]

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

GREENGUARD Gold Certified for low chemical emissions (Low-VOC)

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: www.aeroflexusa.com/wp-content/uploads/2021/06/Aeroflex_Installation-Guide_062521-1.pdf

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 C518/C177
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	ASTM C411 ¹
UV Resistance	Minimal cracking or color change	ASTM G7
Ozone Resistance	No cracking	ASTM D1171
Odor Emission	Pass	ASTM C 1304
Fungi Resistance	No Growth	ASTM C 1338/G 21/UL 181
Water Absorption	0.2% Max.	ASTM C 209
Water Vapor Permeability	0.03 perm-inch (4.38 x 10 ⁻¹¹)	ASTM E 96
Fire Safety Characteristics thru 2" thickness	Class V-O	UL 94
	Pass	NFPA 90A/90B
	Self-Extinguishing	ASTM D 635
Dimensional Stability	Flame Spread - 25 Max.	ASTM E 84
	Some Dev. - 50 Max.	
Corrosiveness	7% Max.	ASTM C 356
Nitrosamine Content	Pass	ASTM C692/DIN 1988
	None Detected	U.S. FDA CPG No. 7117.11 BSEN 12868

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

Physical and Operational Properties (SaniGuard)

Property	Test Value/Rating	Test Method
Surface Burning Characteristics, @30 mils	Flame Spread: <25	ASTM E 84
	Smoke Dev.: <50	
	Class V-O	
Service Temperature	-20°F to 150°F	Internal
	-28°C to 65°C	
Water Vapor Permeability	.02 perm	ASTM E 96
Specific Gravity	1.44	ASTM D 792 @ 100 mils
Rockwell Hardness	112R	ASTM D 785 @ 250 mils
Tensile Strength @ yield	6400 PSI	ASTM D 882 @ 30 mils
Elongation @ Failure	61%	ASTM D 882 @ 30 mils
Tensile Modulus	370,000 PSI	ASTM D 882 @ 30 mils
Flexural Strength	11,600 PSI	ASTM D 882 @ 125 mils
Izod Impact	73°F [22°C] - 3.0 ft. lbs./inch	ASTM D 256 @ 125 mils
	32°F [0°C] - 1.7 ft. lbs./inch	
	-20°F [28°C] - 1.1 ft. lbs./inch	
	-40°F [-40°C] - 1.0 ft. lbs./inch	
Emissivity	.91	Internal
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
CDPH Specification 01350	California Department of Public Health (VOC Emissions)
EPA TSCA Section 6(h)	Toxic Substances Control Act Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
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
MIL-P-15280 (Form S, Form T)	U.S. Department of Defense - Qualified Products List (06/24/2005)
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

SaniGuard™ Pipe Insulation R-Values (Aerocel® Tube or SSPT™)

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