



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

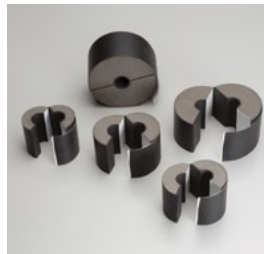
Helps prevent corrosion under insulation (CUI)

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

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) | |
| 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 C518/C177 |
| 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 Flame Spread - 25 Max. Some Dev. - 50 Max. | ASTM D 635 ASTM E 84 |
| Dimensional Stability | 7% Max. | ASTM C 356 |
| Corrosiveness | Pass | ASTM C692/DIN 1988 |
| Nitrosamine Content | 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 | UL 94 |
| 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

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|--|---|
| 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

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|-----------------------------------|--|
| 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 |