



# Zialoc Z-Flex - Closed Cell EPDM Sheet & Roll Insulation

This material is a closed-cell elastomeric foam insulation, available in sheets and rolls. This product reduces both structure-borne sound and air-borne sound. The proprietary blend of nonpolar EPDM rubber is key to consistent, long-lasting thermal performance and protection against moisture and environmental stresses.

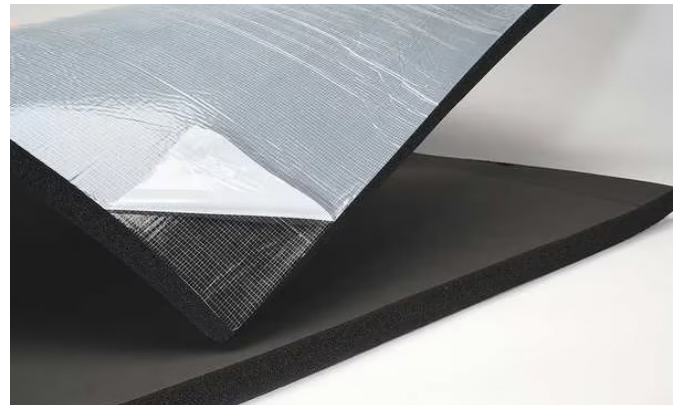
TBP has the ability to laminate with adhesive, cut to shape, and create custom kits for ease of assembly. Most thicknesses are available with or without pressure-sensitive adhesive backing.

## Benefits:

- Available with acrylic pressure sensitive adhesive (PSA) back
- Low thermal conductivity – reduced insulation thicknesses
- Built-in vapor retarder – No supplemental vapor barrier required for most applications
- Superior environmental stability
- Nonpolar – does not induce or react with water
- Greater UV resistance than NBR/PVC insulation
- Non-corrosive on stainless steel and copper piping
- Suitable for interior and exterior applications
- 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 thick
- GREENGUARD Gold Certified for low chemical emissions
- No CFCs, HFCs, HCFCs, PBDEs, formaldehyde, nitrosamine or fibers
- Ultra-low PVC content – less than 1%
- Naturally mold-resistant with a smooth, cleanable surface

## Applications:

- HVAC
- Refrigeration
- Chilled Water
- Equipment
- Duct Wrap
- Hot and Cold Water Piping



### ZIALOC Z-FLEX SHEET INSULATION [36" X 48"] R-VALUES (75°F / 24°C MEAN TEMP.)

|                         |     |     |     |     |     |     |     |       |       |     |       |      |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|-------|-----|-------|------|
| Wall Thickness (Inches) | 1/8 | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 1   | 1-1/4 | 1-1/2 | 2   | 2-1/2 | 3    |
| R-Value                 | 0.6 | 1.3 | 1.9 | 2.4 | 2.9 | 3.5 | 4.5 | 5.7   | 6.9   | 9.0 | 11.2  | 12.9 |

### ZIALOC Z-FLEX ROLL INSULATION [48" WIDE] R-VALUES (75°F / 24°C MEAN TEMP.)

|                         |     |     |     |     |     |     |     |       |       |     |       |   |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|-------|-----|-------|---|
| Wall Thickness (Inches) | 1/8 | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 1   | 1-1/4 | 1-1/2 | 2   | 2-1/2 | 3 |
| R-Value                 | 0.6 | 1.3 | 1.9 | 2.4 | 2.9 | 3.5 | 4.5 | 5.7   | 6.9   | 9.0 | 11.2  | - |



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## 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) |                |

## ADDITIONAL APPROVALS, CERTIFICATIONS, AND 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           | OC 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  |

## PHYSICAL AND OPERATIONAL PROPERTIES

| PROPERTY  | TEST VALUE/RATING   | TEST METHOD                   |
|---|---|-------------------------------|
| Service Temperature, CONTINUOUS                 | 297°F to 257°F [-183°C to 125°C]<br>-22°F to 248°F [-30°C to 120°C] PSA | ASTM C4111                    |
| UV Resistance                                   | Minimal Cracking or color change  | ASTM G7                       |
| Ozone Resistance                                | No cracking   | ASTM D1171                    |
| Water Vapor Permeability, Max                   | 0.02 perm-inch (4.38 x 10 <sup>-11</sup> g/Pa.s.m)                      | ASTM E96                      |
| Water Absorption (% by Volume), Max             | 0.2%  | ASTM C209/C1763               |
| 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/m <sup>3</sup>   | CDPH Standard Method v1.2     |
| Corrosion of Stainless Steel                    | Non-corrosive   | ASTM C692, DIN 1988           |
| Fungi Resistance                                | No Growth   | ASTM C1338/G21                |

## POTENTIAL LEED® CREDIT CONTRIBUTIONS

|                                   |   |
|-----------------------------------|---|
| Energy & Atmosphere (EA)          | Prerequisite: Minimum Energy Performance<br>Credit: Optimize Energy Performance   |
| Materials & Resources (MR)        | Credit: Building Product Disclosure and Optimization - Environmental Product Declarations (EPD), Product Specific Type III<br>Credit: Building Product Disclosure and Optimization - Material Ingredients, verified HPD |
| Indoor Environmental Quality (EQ) | Credit: Low-Emitting Materials<br>Credit: Indoor Air Quality Assessment<br>Credit: Thermal Comfort<br>Credit: Acoustic Performance  |
| Innovation (IN)                   | Credit: Occupant Comfort Survey   |

