

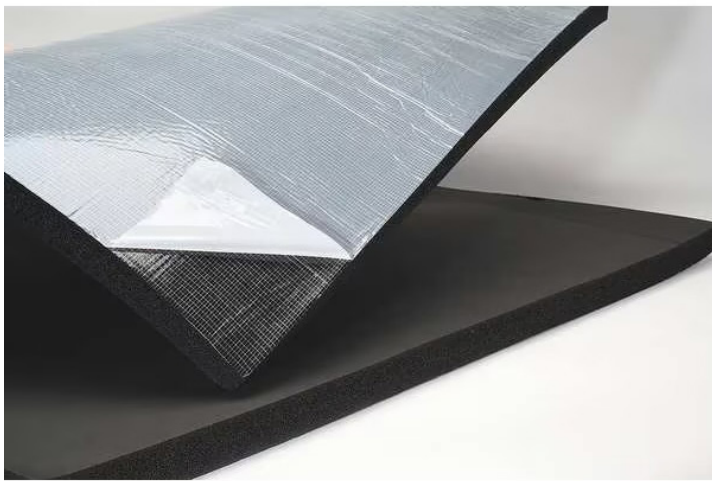


Zialoc Z-Flex - Closed Cell Flexible Elastomeric Foam Insulation

This material is a closed-cell elastomeric foam insulation, available in sheets and rolls. Z-Flex is a NBR/PVC based material and key to consistent, long-lasting thermal performance and protection against moisture and environmental stresses.

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
- Inherently resists moisture vapor
- Made from UV retardant elastomeric blend
- Superior fire safety – 2” (50 mm) and below has a flame spread rating of 25 or less and a smoke development rating of 50 or less as tested to ASTM E84
- GREENGUARD Gold Certified for low VOC emissions
- No CFCs, HFCs, HCFCs, PBDEs, formaldehyde, or fibers
- Naturally mold-resistant with a smooth, cleanable surface



Applications:

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

ZIALOC Z-FLEX INSULATION R-VALUES

| Wall Thickness (Inches) | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | 1 | 1-1/2 | 2 |
|-------------------------|-----|-----|-----|-----|-----|---|-------|---|
| R-Value | .5 | 1 | 1.5 | 2 | 3 | 4 | 6 | 8 |

SPECIFICATION COMPLIANCE

| |
|---|
| ASTM C534 Type 2, Grade 1 |
| RoHS Compliant |
| UL 94-5V, V0 Flammability Classification (#E300774) |
| ASTM E84 25/50-rated (to 2”) - tested to UL 723, NFPA 255 and CAN/ULC S102-03 |
| FMVSS 302 |
| FAR 25.853 |
| NFPA No. 101 Class A Rating |
| NFPA 90A, 90B |
| R-8 (2”) meets IECC requirements for Outdoor Ductwork |
| UL GREENGUARD® Gold Certified |
| Meets energy code requirements of ASHRAE 90.1 and 189.1 |



Zialoc Z-Flex - Closed Cell Flexible Elastomeric Foam Insulation

TECHNICAL DATA

| PHYSICAL PROPERTY | ZIALOC Z-FLEX | TEST METHOD |
|--|---|---|
| Main Composition | Flame-retarded NBR/PVC-based elastomeric foam | |
| Thermal Conductivity (K) Btu-in/hr-Ft ² -°F (W/mK) | 90°F (32°C) Mean Temp = 0.258 (0.0372) 75°F (24°C) Mean Temp = 0.245 (0.0353) 32°F (0°C) Mean Temp = 0.235 (0.0339) | ASTM C177 |
| Density | 3-6 lb/ft ³ | ASTM D1667 |
| Operating Temperature Range | -40°F (-40°C) to +220°F (104°C) | ASTM C534 |
| Water Vapor Permeability (Dry Cup) | <0.01 perm-in | ASTM E96 |
| Water Absorption (Volume Change) | 0% | ASTM C209 |
| Flame Spread / Smoke Development (up to 2" wall) | <25/50 | ASTM E84 |
| Flammability | Self-Extinguishing | ASTM D635 |
| Dimensional Stability | <7% Linear Shrinkage | ASTM C534 |
| Hot Surface Performance (250°F for 96 hours) | No Cracking or Delamination | ASTM C411 |
| Ozone Resistance | Pass | ASTM D1171 |
| Odor Emissions | No Objectionable Odor | ASTM C1304 |
| Chemical/Solvent/Oil/Grease Resistance | Good | Compatibility Data Available on Request |
| Flexibility | Excellent Pass: Cold Crack Test at -40°F (-40°C) | ASTM C534 ASTM D1056 |
| Mildew Growth Resistance/Air Erosion | Pass | UL 181, ASTM G21 |
| Corrosion Risk | pH neutral: 6.6±0.04 | DIN 1988 |
| Leachable Chlorides | <0.05% water-soluble chloride ions | DIN 1988 |
| UV / Weather Resistance | Good | ASTM G90 |
| Sound Transmission Class (1") | 13 | ASTM E90 |

SOUND ABSORPTION COEFFICIENTS AT FREQUENCY (HZ) (ASTM C423)

| Thickness | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|---------------|------|------|------|------|------|-------|------|
| 1/2" (12mm) | 0.03 | 0.02 | 0.06 | 0.10 | 0.22 | 0.27 | 0.10 |
| 1" (25mm) | 0.00 | 0.07 | 0.13 | 0.59 | 0.20 | -0.05 | 0.25 |
| 1-1/2" (38mm) | 0.00 | 0.15 | 0.81 | 0.29 | 0.31 | 0.27 | 0.40 |
| 2" (50mm) | 0.22 | 0.65 | 0.48 | 0.54 | 0.47 | 0.45 | 0.55 |

