

Imcoa® Imcoa® SS Tubular Foam Insulation



Imcoa® and Imcoa SS premium quality closed-cell polyethylene foam insulations are used in residential, commercial and industrial projects to prevent heat loss and protect pipes from freezing. Imcoa SS has an integrated self-sealing system that makes it quick and easy to install.

APPLICATIONS

Imcoa is used to retard heat loss on hot water pipes and prevent freezing of all water pipes. It is available in wall thicknesses of 3/8", 1/2", 3/4" and 1", in sizes ranging from 3/8" CTS to 4" IPS.

Imcoa has a low thermal conductivity and very low water vapor transmission rate. This low density product demonstrates excellent thermal, physical and chemical resistant properties and has a broad service temperature range between -297°F and 200°F (-183°C and 93°C). It can be installed in commercial, industrial and residential insulation projects. It is acceptable for use with heat tracing/heat tape.

BENEFITS

Imcoa and Imcoa SS are fiber-free and 100% non-particulating polyethylene foam pipe insulation. Its closed-cell structure won't wick moisture and helps prevent the absorption of condensation that could cause mold to develop over time. Imcoa SS has an easy-to-install self-seal closure system.

INSTALLATION

Imcoa pipe insulation is semi-slitted, and can be completely slit by hand.

Imcoa SS is pre-slitted with a factory applied pressure sensitive adhesive (PSA) to both seam surfaces and has a release liner for easy installation. All butt joints should be properly sealed. Imcoa and Imcoa SS are easy to cut with a knife and can be fabricated to go around P-traps and fittings.

Features

- CFC/HCFC Free
- Non-porous
- Low VOCs
- Halogen Free
- Fiber Free
- Resistant to Mold Growth
- Made in USA

Specification Compliance

- ASTM C-1427, Type 1, Grade 1
- ASTM E 84 1" 25/50
- Specification Compliance ASTM C 1427, NFPA 90 A/B / Acceptable for use in duct/plenum applications
- Dade Co., FL, Product Control Approved, Acceptance 95-1215.08
- New York City OTCR #13-09 USDA Requirements
- Sound transmission co-efficient = 11 at 1" per ASTM E90
- City of Los Angeles, Gen. Approval, Research Report RR 8316
- Greenguard Gold Certified (formerly children & schools)

Technical Data: Imcoa® and Imcoa SS

Approvals, Certifications, Compliances:

- GREENGUARD Gold Certified.
- Manufactured without CFCs, HFCs, HCFCs, PBDEs, or Formaldehyde
- Plenum Rated

Physical Properties

| Physical Properties | Testing Parameters | Imcoa Insulation | Test Methods |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------|
| Thermal Conductivity (K) Btu • in/hr • ft² • °F (W/mK) | 90°F (32°C) Mean Temperature 75°F (24°C) Mean Temperature 50°F (10°C) Mean Temperature | 0.280 (0.040) 0.275 (0.040) 0.270 (0.039) | ASTM C 177/C 518 |
| Operating Temperature Range Flexible to -100° F (-73° C) | Upper range Lower Range | 200°F (93°C) -297°F (-183°C) | |
| Water Vapor Permeability Dry Cup. Perm-In | | 0.0 | ASTM E 96 Procedure A |
| Ozone Resistance | | Pass | ASTM D 1171 |
| Chemical / Solvent Resistance | | Good | |
| Mildew Resistance / Air Erosion | | Pass | UL 181 |

Typical Properties

| | | |
|----------------------------------------------------------------------|-------------|-----------|
| Flame Spread and Smoke Developed Index through 1" (25 mm) thickness* | 25/50 rated | ASTM E 84 |
|----------------------------------------------------------------------|-------------|-----------|

* Cellular plastics and thermoplastics, such as polyethylene/polyolefin insulation, that may drip, melt, delaminate or draw away from the fire, present unique problems and require careful interpretation of the test results.

R-Values

| Pipe O.D. or Nominal | | R Value | R Value | R Value | R Value |
|----------------------|--------|-------------------|-------------------|-------------------|-----------------|
| Insulation I.D. | | 3/8" (10 mm) Wall | 1/2" (13 mm) Wall | 3/4" (19 mm) Wall | 1" (25 mm) Wall |
| 3/8" | 10 mm | 2.8 | 3.8 | 5.9 | 8.4 |
| 1/2" | 13 mm | 2.5 | 3.3 | 5.4 | 7.7 |
| 5/8" | 16 mm | 2.5 | 3.2 | 5.0 | 7.1 |
| 3/4" | 19 mm | 2.3 | 3.1 | 4.9 | 6.8 |
| 7/8" | 22 mm | 2.3 | 3.0 | 4.6 | 6.5 |
| 1-1/8" | 29 mm | 2.2 | 3.0 | 4.3 | 6.1 |
| 1-3/8" | 35 mm | 2.1 | 2.9 | 4.4 | 6.1 |
| 1-5/8" | 41 mm | 2.1 | 2.6 | 4.1 | 5.6 |
| 2" | 50 mm | 1.8 | 2.3 | 3.7 | 5.1 |
| 2-1/8" | 54 mm | 2.1 | 2.6 | 3.9 | 5.4 |
| 2-3/8" | 62 mm | 1.8 | 2.3 | 3.6 | 5.0 |
| 2-5/8" | 67 mm | 2.1 | 2.5 | 3.8 | 5.1 |
| 2-7/8" | 72 mm | 1.8 | 2.3 | 3.4 | 4.8 |
| 3-1/8" | 79 mm | 2.1 | 2.5 | 3.7 | 5.0 |
| 3-1/2" | 89 mm | 1.8 | 2.3 | 3.3 | 4.6 |
| 3-5/8" | 92 mm | 2.5 | 2.5 | 3.6 | 5.0 |
| 4-1/8" | 105 mm | 2.5 | 2.5 | 3.6 | 4.9 |
| 4-1/2" | 115 mm | 1.7 | 2.2 | 3.2 | 4.4 |

Note: "R" values were calculated using a K factor of 0.275 (75° F, 24° C mean temp.) and nominal all thickness in each case. Lower operating temperatures will result in improved R values. Contact Technical Services for specific recommendations.

Sizes

Wall Thickness (nominal) 3/8" 1/2", 3/4" and 1" (10, 13, 19 and 25 mm)
 Inside Diameter, Tubular 3/8" to 4" IPS ID (10 mm to 114 mm ID)
 Length of Sections, Tubular 6' (1.83 m)

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