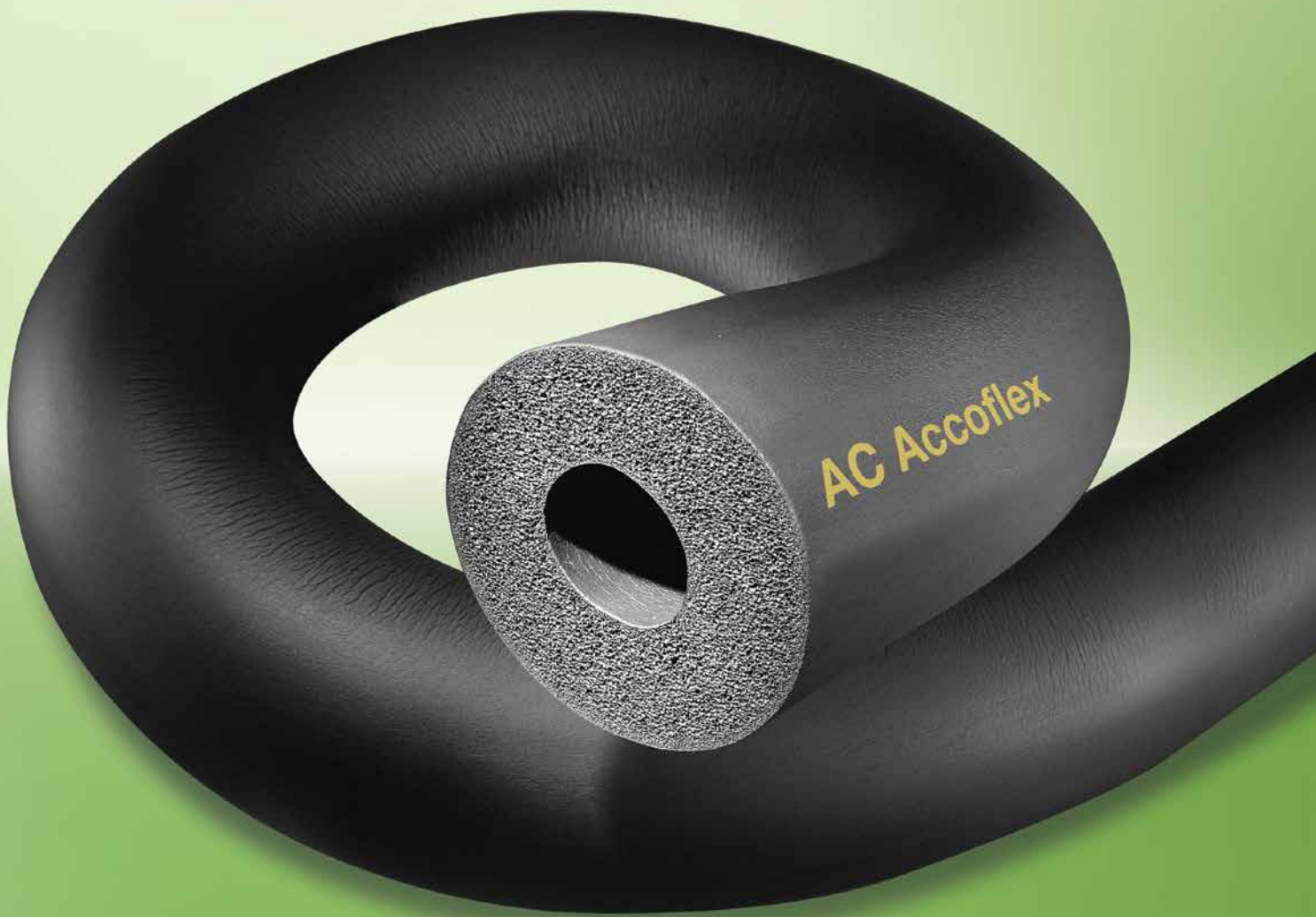


Fiber Free

AC/Accoflex[®]

Tube Insulation

Fiber-free, flexible, elastomeric pipe insulation for reliable protection against condensation, mold, energy loss and ultraviolet radiation in residential and commercial applications



- Closed-cell structure provides excellent condensation and energy loss control
- Effectively retards degradation due to ultraviolet radiation
- Flexible material with dusted, relaxed ID's for easy installation. Superior toughness to withstand on-site handling
- Built-in vapor retardant barrier eliminates need for additional vapor retarder

 **armacell[®]**



Technical Data: AC Accoflex® Pipe Insulation

Description:

Black flexible elastomeric thermal pipe insulation

Specifications Compliance:

ASTM C 534, Type I - Tubular Grade 1

Approvals, Certifications, Compliances:

- Manufactured without CFCs, HFCs, HCFCs, PBDEs, or Formaldehyde.
- All Armacell facilities in North America are ISO 9001:2008 certified.

Typical Properties

Specifications:	Values	Test Method:
Thermal Conductivity: Btu • in./h • ft ² • °F (W/mK) 75°F Mean Temperature [24°C] 90°F Mean Temperature [32°C]	0.27 (0.039) 0.276 (0.040)	ASTM C 177 or C 518
Water Vapor Permeability: Perm-in. [Kg/(s • m • Pa)]	0.08 (1.16 x 10 ⁻¹³)	ASTM E 96, Procedure A
Flame Spread and Smoke Developed Index:	25/50 rated	ASTM E 84
Water Absorption, % by Volume:	0.2%	ASTM C 209
Mold Growth: Fungi Resistance : Bacterial Resistance:	Passed	UL181 ASTM G21/C1338 ASTM G22
Upper Use Limit: ¹	220°F (105°C)	ASTM C534
Lower Use Limit: ²	-297°F (-183°C) ³	ASTM C534
Ozone Resistance:	GOOD	—

Sizes:

Wall Thickness (nominal)	3/8" 1/2", 3/4" and 1" (10, 13, 19 and 25 mm)
Inside Diameter, Tubular	3/8", ID to 4-1/8" ID (10 mm ID to 105 mm ID)
Length of Sections, Tubular	6' (1.83 m)

Outdoor Use

No painting is necessary for performance of the product. However, all elastomeric-based cellular insulation will show surface defects after prolonged exposure to UV radiation. Painting will minimize these defects if installed outdoors.

¹ AC Accoflex can withstand temperatures as high as 250°F for 96 hour time periods when tested according to ASTM C411 - Standard Test Method for Hot-Surface Performance of High-Temperature Thermal Insulation.

² At temperatures below -20°F (-29°C), elastomeric insulation starts to become less flexible. However, this characteristic does not affect thermal efficiency and resistance to water vapor permeability of Accoflex insulation.

³ For applications of -40°F to -297°F (-40°C to -183°C), contact Armacell.

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AP/Armaflex® Black LapSeal™

Tube Insulation with
Reinforced Lap Seal

Fiber Free

The original flexible elastomeric pipe insulation with a new and improved lap seal for greater seam security and increased protection against condensation, mold and energy loss.



- Angled cut with more surface area for a better bond
- A single interior adhesive liner for quicker application
- New durable, low-profile lap seal with wider release tab, stays closed and looks neat
- Easy to install – an excellent choice for retrofit applications
- 25/50 rated for use in air plenums
- Fiber-free, formaldehyde-free, low VOC and non-particulating formulation protects indoor air quality
- Microban® antimicrobial product protection inhibits the growth of mold and mildew in the insulation

GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg.

 armacell®



Microban antimicrobial product protection is limited to the product itself and is not designed to protect the users of these products from disease causing microorganisms, or as a substitute for normal cleaning and hygiene practices. *

Technical Data: AP Armaflex® Black LapSeal™ Tube Insulation

Description:

Black flexible closed-cell elastomeric thermal insulation in tubular form with a self-seal system reinforced with lap seal tape

Applications:

Insulation for piping associated with HVAC, VRV and VRF systems, chillers, hot and cold water, refrigeration

Specifications Compliance:

ASTM C 534, Type I – Grade 1
ASTM E 84
NFPA 255

UL 723
NFPA 90A, 90B
UL 181

ASTM G-21/C1338
ASTM G-22
ASTM D 1056, 2B1

Approvals, Certifications, Compliances:

- Key physical properties are approved by Factory Mutual.
- GREENGUARD Gold Certified.
- Manufactured without CFCs, HFCs, HCFCs, PBDEs, or Formaldehyde.

- Made with EPA registered Microban® antimicrobial product protection..
- All Armacell facilities in North America are ISO 9001:2008 certified.

Typical Properties

Specifications:	Values:		Test Method:
	3/8" through 1" Walls	1-1/2" and 2" Walls	
Thermal Conductivity: Btu • in./h • ft ² • °F (W/mK)			
75°F Mean Temperature (24°C)	0.245 (0.0353)	0.28 (0.040)	ASTM C 177 or C 518
90°F Mean Temperature (32°C)	0.254 (0.0366)	0.286 (0.041)	
Water Vapor Permeability: Perm-in. [Kg/(s • m • Pa)]	0.05 (0.725 x 10 ⁻¹³)	0.08 (1.16 x 10 ⁻¹³)	ASTM E 96, Procedure A
Flame Spread and Smoke Developed Index:	25/50 rated	25/50 rated	ASTM E 84
Water Absorption, % by Volume:	0.2%	0.2%	ASTM C 209
Mold Growth:	Passed	Passed	UL181
Fungi Resistance:			ASTM G21/C1338
Bacterial Resistance:			ASTM G22
Upper Use Limit:	220°F (105°C)	220°F (105°C)	ASTM C534
Lower Use Limit: ¹	-297°F (-183°C) ²	-297°F (-183°C) ²	ASTM C534
Ozone Resistance:	GOOD	GOOD	Ozone Chamber Test

Sizes:

Wall Thickness (nominal) Form	3/8", 1/2", 3/4", 1", 1-1/2", 2" (10 mm, 13 mm, 19 mm, 25 mm, 38 mm, 50 mm)
Inside Diameter, Tubular Form	3/8" ID to 6" (10 mm to 153 mm)
Length of Sections, Tubular Form	6' (1.8m)

Outdoor Use

Painting with WB Finish or other protective jacketing is required to prevent damage to the insulation in exterior applications and to comply with the insulation protection sections of the International Energy Conservation Code (IECC) and ASHRAE 90.1.

¹ At temperatures below -20°F (-29°C), elastomeric insulation starts to become less flexible. However, this characteristic does not affect thermal efficiency and resistance to water vapor permeability of Armaflex insulation.

² For applications of -40°F to -297°F (-40°C to -183°C), contact Armacell.

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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-slit, and can be completely slit by hand.

Imcoa SS is pre-slit 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
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* 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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