

*Quality People. Building Solutions.*

Comfort Systems USA (Arkansas), Inc.  
P.O. Box 16620  
Little Rock, AR 72231  
Phone 501-834-3320  
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**Date:** 1/17/2024

**Return Request:** 1/27/2024

**Project:** Academies of Math & Science Little Rock

**Supplier:** Pro Insulation

**Manufacturer:** Various

**Submittal:** HVAC Piping Insulation

**Submittal Number:** 23 00 00-04

**Drawing # and Installation:** Mechanical Drawings

**ARCHITECT**

Lewis Architects Engineers  
11225 Huron Lane, Suite 104  
Little Rock, AR 72211  
501-223-9302

**ENGINEER**

Lewis Architects Engineers  
11225 Huron Lane, Suite 104  
Little Rock, AR 72211  
501-223-9302

**GENERAL CONTRACTOR**

Clark Contractors  
15825 Cantrell Rd.  
Little Rock, AR 72223  
501-223-9302

**MECHANICAL SUBCONTRACTOR**

Comfort Systems USA (Arkansas), Inc.  
9924 Landers Rd.  
N. Little Rock, AR 72117  
501-834-3320

Notes:

**CSUSA PROJECT NO.**

**23-1028**

[jon@comfortar.com](mailto:jon@comfortar.com)

9924 Landers Rd.  
No. Little Rock, AR 72117

# Pro Insulation

4414 South 16<sup>th</sup> Street  
Ft. Smith, AR 72901  
Ph. 479-646-5644  
Fax 479-646-5654

January 12, 2024

Comfort Systems USA, Inc.  
P.O. Box 16620  
Little Rock, AR 72231

Mr. Jon Davis

Re: Mechanical Insulation Submittals for Academy of Math & Science, Little Rock,  
Arkansas.

Spec section 23 00 00.

The following items will be insulated with Armacell Armaflex black lap seal pipe cover.  
All joints and seams will be sealed with 520 Adhesive.

Item #1 Refrigerant Lines----- ¾” Thick

Item #2 HVAC Condensate----- ¾” Thick

Thank You,

Mike Galatzer

# AP/Armaflex® Black LapSeal™

Tube Insulation with  
Reinforced Lap Seal

Fiber Free

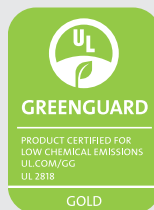
The original flexible elastomeric pipe insulation with a new and improved lap seal for greater seam security and increased protection against condensation, mold and energy loss.



- 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](http://ul.com/gg).





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	
<b>Thermal Conductivity:</b> Btu • in./h • ft <sup>2</sup> • °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)	
<b>Water Vapor Permeability:</b> Perm-in. [Kg/(s • m • Pa)]	0.05 (0.725 x 10 <sup>-13</sup> )	0.08 (1.16 x 10 <sup>-13</sup> )	ASTM E 96, Procedure A
<b>Flame Spread and Smoke Developed Index:</b>	25/50 rated	25/50 rated	ASTM E 84
<b>Water Absorption, % by Volume:</b>	0.2%	0.2%	ASTM C 209
<b>Mold Growth:</b>	Passed	Passed	UL181
<b>Fungi Resistance:</b>			ASTM G21/C1338
<b>Bacterial Resistance:</b>			ASTM G22
<b>Upper Use Limit:</b>	220°F (105°C)	220°F (105°C)	ASTM C534
<b>Lower Use Limit:</b> <sup>1</sup>	-297°F (-183°C) <sup>2</sup>	-297°F (-183°C) <sup>2</sup>	ASTM C534
<b>Ozone Resistance:</b>	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.

<sup>1</sup> 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.

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

**ARMACELL LLC**  
TEL: 800.866.5638  
FAX: 919.304.3847

info.us@armacell.com  
www.armacell.us  
7600 Oakwood Street Extension, Mebane, NC 27302



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Fiber Free

# Armaflex® 520 Adhesive

An air-drying contact adhesive that is excellent for joining seams and butt joints of Armaflex Pipe and Sheet Insulations



- Formulated for Armaflex Insulations
- Air-drying contact adhesive
- Years of on-the-job performance
- Meets MIL-A-24179A and Amend-2

armacell®



## Technical Data: Armaflex 520 Adhesive

### Description:

An air-drying contact adhesive that is excellent for joining seams and butt joints of Armaflex Pipe and Sheet Insulations

### Specifications Compliance:

MIL-A-24179A Amend-2, Type II, Class 1

### Approvals, Certifications, Compliances:

- All Armacell facilities in North America are ISO 9001:2008 certified.

### Typical Properties

Specifications:	Values	
<b>Color:</b>	Light Tan	
<b>Net Weight:</b>	6.9 pounds per gallon (828 g/l)	
<b>Composition:</b>	Synthetic rubber base with synthetic resins and fillers added; hydrocarbon- and ketone-type solvents.	
<b>Volatile Organic Compounds (VOC) Content:</b>	596 g/l	
<b>Solids Content</b>	Approximately 22% by weight	
<b>Coverage</b>	200 sq ft (5m <sup>2</sup> /l) per gallon max, single coat (depending upon porosity of materials bonded and air temperature)	
<b>Shelf Life</b>	1-1/2 years in original sealed container; storage temperature 60°F to 80°F (16°C to 27°C)	
<b>Temperature Limits</b>	250°F (120°C) — Armaflex Pipe Insulation seams and joints 180°F (82°C) — Full bonding sheet insulation	
<b>Tack Time</b>	1-5 minutes depending on ambient conditions	
<b>Bond Time</b>	Immediate	
<b>Full Cure Time</b>	36 hours	
<b>Container Sizes</b>	Half-pint and pint brush-top cans and pint, quart, and gallon containers	
<b>Wet Flash Point</b>	Below 20°F (-7°C) (TOC)	
<b>Flame Spread and Smoke Developed Index:</b>	25/50 rated	ASTM E 84
<b>Minimum Application Temperature:</b>	40°F (4°C)	

### ARMACELL LLC

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