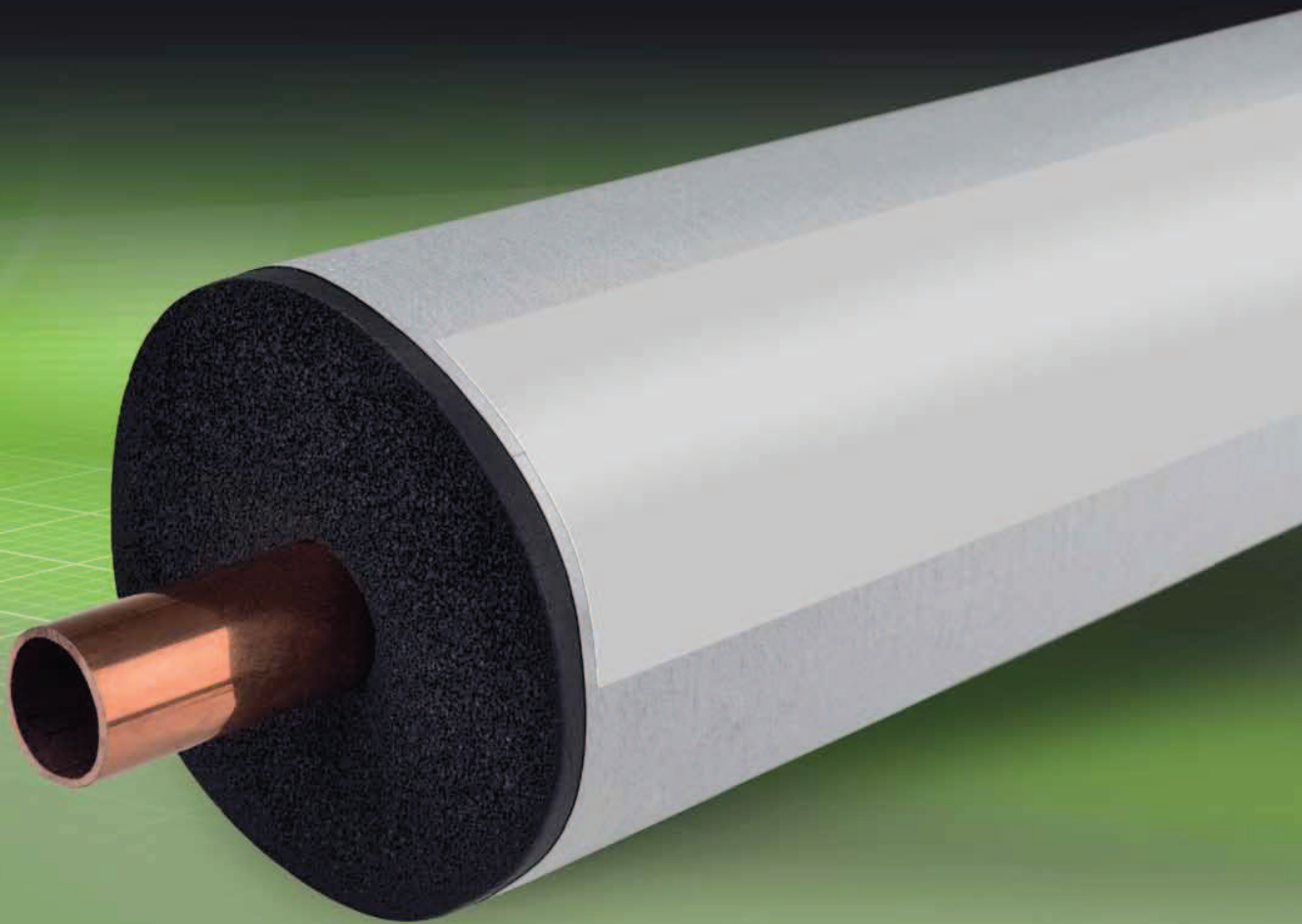


Fiber Free

## AP/Armaflex® Shield

Armaflex tube insulation laminated with a white, embossed jacketing.

The factory-applied, jacketed pipe insulation system engineered for demanding new construction piping applications where extra protection against mechanical impacts, condensation and UV damage is required



- The Armaflex insulation, along with the laminated cladding, provides zero water vapor permeability
- The white embossed jacketing surface does not require painting and is easy to maintain
- NSF Certified
- The combined insulation and jacketing construction decreases field-applied installation steps to reduce labor costs
- Recommended for use with Armaflex fabricated fittings, standard PVC fitting covers and Armaflex Shield Tape

 **armacell**  
advanced insulation



## Technical Data: AP Armaflex® Shield Insulation

### Description:

Black Armaflex tube insulation laminated with a white embossed jacketing

### Specifications Compliance:

ASTM C 534, Type I —Grade 1	ASTM D 1056, 2B1 ASTM E 84, NFPA 255, UL723	ASTM G21/C1338 ASTM G22	NFPA 90A, 90B UL 181
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### Approvals, Certifications, Compliances:

- NSF Certified – Meets NSF / ANSI Standard 169.
- 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: AP Armaflex Elastomeric Insulation Material

Specifications:	Values:	Test Method:
<b>Thermal Conductivity:</b> Btu • in./h • ft <sup>2</sup> • °F (W/mK)		
75°F Mean Temperature (24°C)	0.25 (0.036)	ASTM C 177 or C 518
90°F Mean Temperature (32°C)	0.256 (0.037)	
<b>Water Vapor Permeability:</b> Perm-in. [Kg/(s • m • Pa)]	0.05 (0.725 x 10 <sup>-13</sup> )	ASTM E 96, Procedure A
<b>Flame Spread and Smoke Developed Index:</b>	25/50 rated	ASTM E 84
<b>Water Absorption:</b> % by Volume	0.2%	ASTM C 209
<b>Mold Growth:</b>		UL181
<b>Fungi Resistance:</b>	Passed	ASTM G21/C1338
<b>Bacterial Resistance:</b>		ASTM G22
<b>Upper Use Limit:</b> <sup>1</sup>	220°F (105°C)	ASTM C534
<b>Lower Use Limit:</b> <sup>2</sup>	-297°F (-183°C) <sup>3</sup>	ASTM C534
<b>Ozone Resistance:</b>	Good	Ozone Chamber Test

### Typical Properties: Multi-layered Laminated Jacketing

Specifications:	Values:	Test Method:
<b>Total Thickness without Liner</b>	10.2 mils (0.259-mm)	PSTC-133
<b>Peel Adhesion to Stainless Steel</b>	130-oz/in (36.1-N/25mm)	PSTC-101
<b>Self Seal Peel Adhesion</b>	130-oz/in (36.1-N/25mm)	PSTC-101
<b>Shear Adhesion</b>	>72 hours @2.2 psi (15.2kPa)	PSTC-107
<b>Tensile Strength</b>	70 lbs/in (318-N/25mm)	PSTC-131
<b>Elongation</b>	83%	PSTC-131
<b>Permeance</b>	0.00 perms	ASTM E 96
<b>Burst Strength</b>	> 120-lbs/in (545N/25mm)	Fed. Std. 191
<b>Puncture Resistance</b>	43.4-lb (103-N)	ASTM D 1000
<b>Tear Strength</b>	8.3-lbs (37-N)	ASTM D 624
<b>Application Temperature Range</b>	25° F to 248° F (-32° C to 120° C)	HC Internal
<b>Minimum Continuous Use Temperature</b>	-30° F (-34° C)	HC Internal
<b>Maximum Continuous Use Temperature</b>	270° F (135° C)	HC Internal
<b>Surface Burning Characteristics</b>	<25 Flame <50 Smoke	UL 723 ASTM E 84

### Sizes:

<b>Wall Thickness:</b> (nominal) Form	1-1/2" (38mm)
<b>Inside Diameter:</b> Tubular Form	3/8" ID to 2-5/8" ID (10mm to 67mm)
<b>Length of Sections:</b> Feet, Tubular Form	3' (0.91m)

<sup>1</sup> On the heating cycle, AP Armaflex Pipe Insulation will withstand temperatures as high as 220°F (105°C). 520, 520 Black or 520 BLV Adhesive may be used with pipe insulation applications up to 220°F

<sup>2</sup> At temperatures below -20°F (-29°C), elastomeric insulation starts to become less flexible. This characteristic does not affect thermal efficiency and resistance to water vapor permeability of Armaflex insulation.

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

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AP/Armaflex Shield	Tube	Submittal	Eng/USA	4/2013
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