

# Poly Pipe Insulation

Visit [jonesstephens.com](http://jonesstephens.com) for full offering.

Job Name \_\_\_\_\_  
 Location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Contractor \_\_\_\_\_  
 Tag \_\_\_\_\_ PO# \_\_\_\_\_

## Specifications

Polyethylene-based closed cell, flexible foam insulation with a high resistance to moisture vapor intrusion. This insulation also has low thermal conductivity. Sold in carton quantities only.

## Applications

For use on hot or cold plumbing lines. For outdoor use, paint with a high quality exterior acrylic latex paint.

## Materials

Polyethylene. Foam.

## Certifications/Listings/Approvals

- ASTM C1527 Type I Pipe, Type II Sheet (Specification for Extruded Preformed Flexible Cellular Polyolefin Thermal Insulation in Sheet and Tubular Form.)
- ASTM E84 25/50 rated (to 1") - tested according to UL 723. NFPA 255 NFPA 90A/B - Acceptable for plenum applications.
- UL 94 HF - Flammability Classification (#E300774)
- Greenguard Gold Certified
- Contains no halogens
- Fiber Free
- Non-dusting
- Tolerance of +/- .03 and -.06



POLY PIPE INSULATION ⇄ TECHNICAL DATA				
Physical properties	POLY PIPE INS	Test methods	Required	Pass/Fail
Nominal Density, pcf	1.5 +/- 0.5	ASTM D 1622		
Specification		ASTM C 1427, Type I, Type II		
*Upper Use Limit, °F (°C)	200 (93)	ASTM C 411	200 (93)	Pass
Lower Use Limit, °F (°C)	-200 (-129)		-150 (-101)	Pass
Thermal Conductivity, Btu-in./hr-ft² °F (W/(m·K))		ASTM C 177 OR C 518		
75°F (24°C) Mean Temp	.27 (.039)		<0.35 (.050)	Pass
120°F (49°C) Mean Temp	.295 (.042)		<0.37 (.053)	Pass
Water Vapor Permeability	<0.05	ASTM E 96	0.05 max	Pass
Water Absorption Max %	<0.20	ASTM C 209	% by volume (0.20 max)	Pass
Linear Shrinkage at Max Use Temp (200°F)	-1.2%	ASTM C 1427	% change (2.0 max)	Pass
** Flame/Smoke Rating (max)* Up to and including 1" Thickness	25/50	ASTM E 84	25/50	Pass
Microbial Resistance	Excellent	ASTM G 21	No Growth	Pass
Fungi Resistance	Excellent	UL 181	No Growth	Pass
Odor Emission	None	ASTM C 1304	None	Pass
Corrosion Resistance (Steel, Copper, AL)	None	ASTM C 665	None	Pass
Ozone Resistance (50 mPa)	No Cracks	ASTM D 1171	No Cracks	Pass
VOC Content	< 0.22 mg/m3	CDPH Standard Method v 1.2	< 0.5 mg/m3	Pass

\* Meets the requirements of NFPA 90A/90B when tested at 250°F (125°C)  
 \*\* Numerical flammability ratings alone may not define the performance of products under actual fire conditions. They are provided only for the use in the selection of products

POLY PIPE INSULATION ⇄ THICKNESS RECOMMENDATIONS - TO PREVENT CONDENSATION												
SERVICE TEMPERATURE	50°F (10°C)			35°F (2°C)			0°F (-18°C)			-20°F (-29°C)		
Pipe Size	Mild	Normal	Severe	Mild	Normal	Severe	Mild	Normal	Severe	Mild	Normal	Severe
3/8" ID to 1-1/8" ID	3/8"	3/8"	3/4"	3/8"	1/2"	3/4"	1/2"	3/4"	-	1/2"	1"	-
1-3/8" ID to 4-1/2" ID	3/8"	3/8"	3/4"	3/8"	3/4"	1"	1/2"	1"	-	3/4"	-	-

Thickness listed for the specified ranges will prevent condensation on indoor piping under the defined design conditions. Normal 85°F and 70% R.H. Mild: Most air conditioned spaces and arid climates: 80°F and 50% R.H. Severe: Areas where excessive moisture is introduced or in poorly ventilated areas where the temperature may be depressed below the ambient. 90°F and 80% R.H.

## RANGE

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

POLY PIPE INSULATION ⇄ "R" VALUES							
Nominal insulation I.D.	Copper tube size (nom. I.D. plumbing)	Copper tube size (O.D. HVAC/R)	IPS nominal	3/8"	1/2"	3/4"	1"
3/8"	1/4"	3/8"	1/8"	2.6	3.5	5.5	8.4
1/2"	3/8"	1/2"	1/4"	2.5	3.3	5.2	7.9
5/8"	1/2"	5/8"	3/8"	2.9	3.2	5.3	7.4
3/4"	5/8"	3/4"	1/2"	2.3	3.0	5.3	7.3
7/8"	3/4"	7/8"	-	2.2	3.1	5.3	7.0
1"	-	-	3/4"	2.2	3.1	5.2	7.2
1-1/8"	1"	1-1/8"	-	2.2	3.0	5.4	6.9
1-1/4"	1-1/8"	1-1/4"	-	2.2	3.2	5.3	6.8
1-3/8"	1-1/4"	1-3/8"	1"	2.1	3.1	5.1	7.2
1-5/8"	1-1/2"	1-5/8"	1-1/4"	2.4	3.0	5.0	6.9
2"	-	-	1-1/2"	2.3	2.9	4.8	6.6
2-1/8"	2"	2-1/8"	-	2.3	2.9	4.8	6.5
2-3/8"	-	-	2"	2.3	2.9	4.7	6.4
2-5/8"	2-1/2"	2-5/8"	-	2.2	3.0	4.6	6.2
2-7/8"	-	-	2-1/2"	2.2	3.0	4.5	6.1
3-1/8"	3"	3-1/8"	-	2.2	3.0	4.5	6.1
3-1/2"	-	-	3"	2.3	3.0	4.5	6.0
3-5/8"	3-1/2"	3-5/8"	-	2.3	3.1	4.5	6.0
4-1/8"	4"	4-1/8"	-	2.2	3.1	4.5	5.8
4-1/2"	-	-	4"	2.3	3.1	4.6	5.9