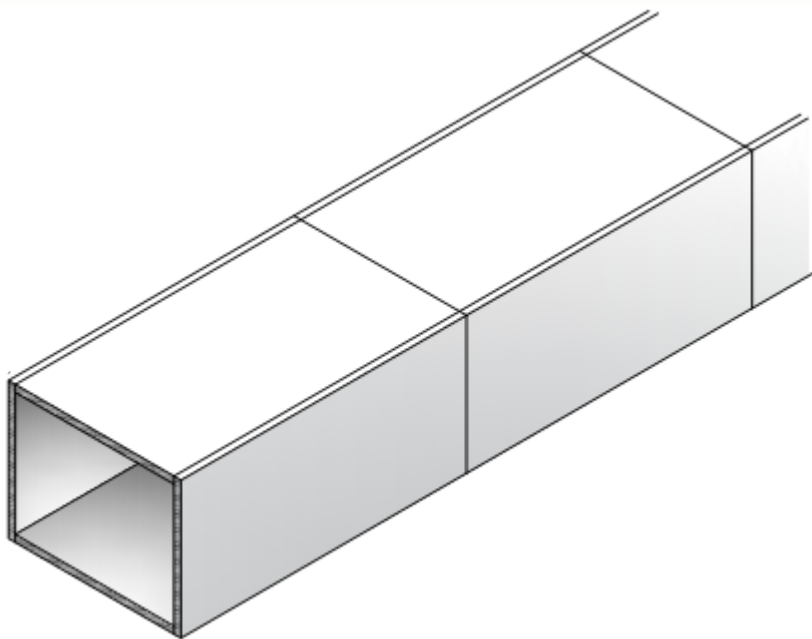
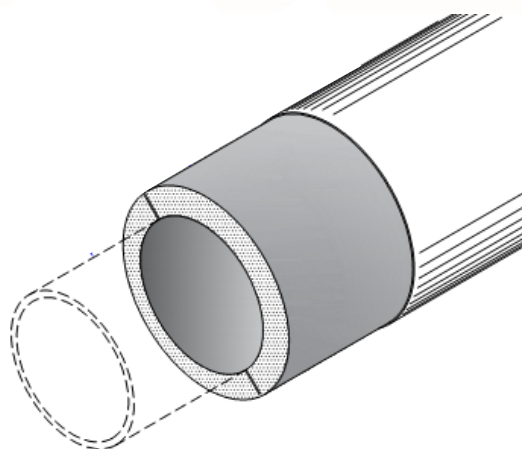


ABT Foam Pipe and Duct Insulation



ABT FOAM™ PIPE INSULATION

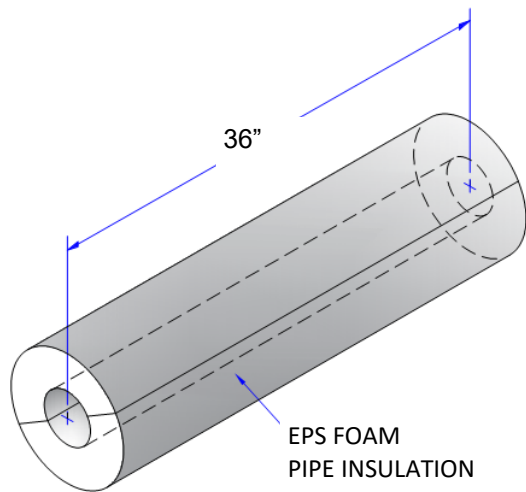
ABT Foam Pipe Insulation is manufactured from high quality expanded polystyrene (EPS) ridged foam. A tough and durable Jacketing is field applied to the EPS to add to the durability and weather proofing. Pipe insulation is custom manufactured to fit all sizes of pipe.

To meet industry demands, the EPS foam insulation is manufactured in three densities, 1.0#, 1.5# and 2.0# (pcf). These options provide the engineer or contractor with the R-value, toughness and PSI required for their specific applications. EPS offers excellent performance properties including consistent thermal resistance, dimensional stability, chemical inertness and sustainability, making it well suited for use as pipe and duct insulation. Additionally, EPS closed-cell structure provides minimal water absorption and low vapor permeance, an important design consideration for damp environments. When combining the EPS performance with the numerous Jacketing options, ABT Foam Pipe and Duct is an excellent choice for your project.

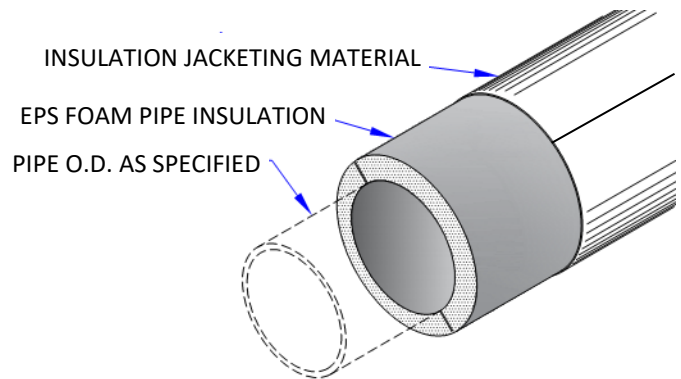
EPS FOAM INSULATION ADVANTAGE

- Cost efficient
- Manufactured to fit any size pipe and duct
- Able to withstand the abuse of temperature cycling
- R-values may be used without adjustment for aging
- Closed cell insulation
- Low vapor permeance
- Minimal water absorption
- Mold resistant
- Dimensionally stable
- No Formaldehyde
- No Chlorofluorocarbons (CFCs)
- No Hydrochlorofluorocarbons (HCFCs)
- Does not affect indoor air quality
- No nutritional value to insects and rodents
- Sustainable

PIPE INSULATION



TYPICAL VIEW OF PIPE INSULATION



TYPICAL VIEW OF PIPE INSULATION AND JACKETING MATERIAL

EPS FOAM ADVANTAGE

- EPS insulation thickness varies per specification
- Manufactured to fit any size of pipe I.D. & O.D.
- Available in three densities, 1.0#, 1.5# & 2.0# (pcf) Nom.
- R-value per inch ranges from 3.85 to 4.76 per

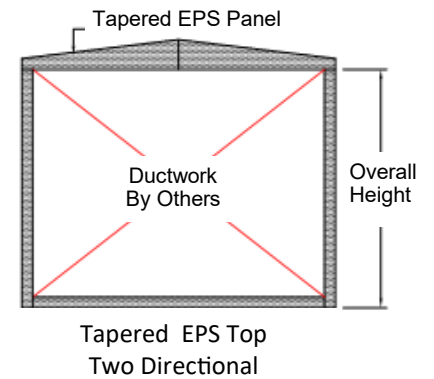
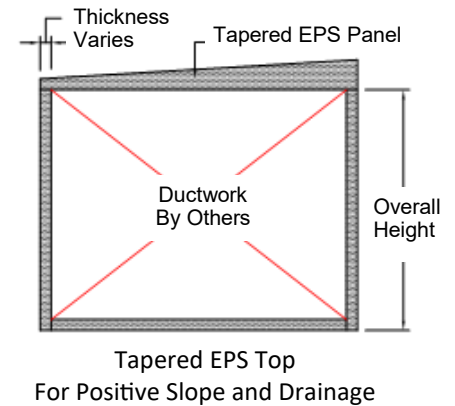
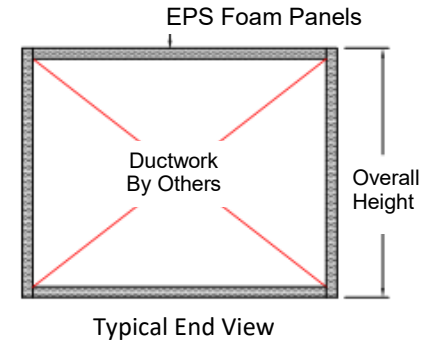
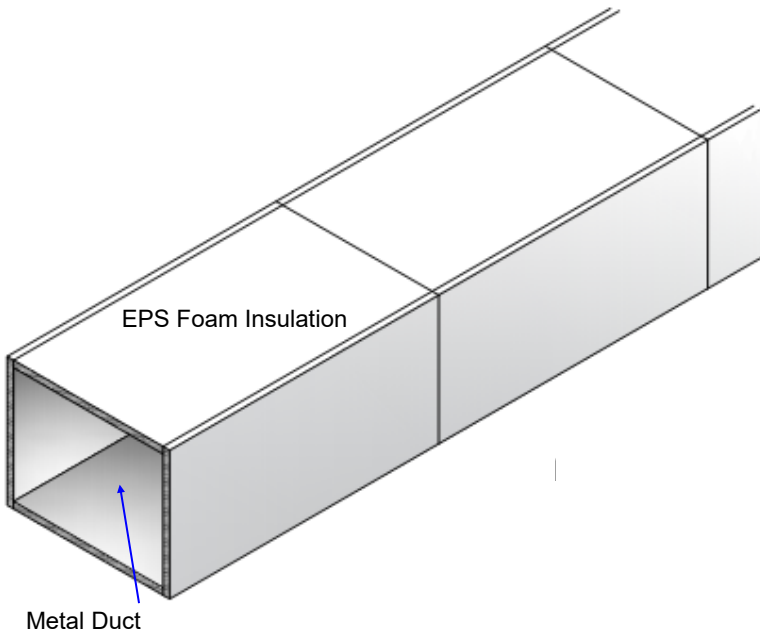
EPS FOAM ADVANTAGE

- Manufactured in two halves for fast and easy installation
- Customization is available
- 3 Feet long sections
- Jacketing or waterproofing is field applied by contractor

DUCT INSULATION

ABT FOAM DUCT INSULATION

ABT Foam Duct Insulations is made from the same high quality EPS foam as the pipe insulation. EPS Duct Insulation is manufactured in natural white EPS (not covered with jacketing) and the contractor will field apply the specified jacketing for durability and weather proofing. EPS foam sheets are available in sizes; 48" x 96", 48" x 48", 24" x 48" or 24" x 96" or made to order for project specific. The thickness ranges from 1/2" minimum and up to 12" thick (greater if needed). Tapered panels are available to assist in positive drainage for the top surface of duct. These panels are made to order per each project.



FEATURES & BENEFITS

- EPS thickness varies from 1/2" up to 12" (greater if needed)
- Sheet sizes: 48" x 96", 24" x 48", 24" x 96" & 48" x 48"
- Three EPS densities, 1.0#, 1.5# & 2.0# (pcf nominal)
- R-values range from 3.85 to 4.76 per inch, no adjustment for aging
- Jacketing or waterproofing is field applied by contractor
- Tapered top panels for positive slope for drainage
- One or two directional slope
- Custom manufactured to fit any size duct
- Custom systems available and shop drawings provided

R-Value Chart

EPS Foam Thickness	1.0# Density	1.5# Density	2.0# Density
1"	3.85	4.25	4.76
1-1/2"	5.77	6.37	7.14
2"	7.7	8.5	9.52
2-1/2"	9.62	10.62	11.9
3"	11.55	12.75	14.28
3-1/2"	13.47	14.87	16.66

R-values are calculated @ 75° F. and full density and thickness. Other thickness is available upon request.

TYPICAL PHYSICAL PROPERTIES OF EPS INSULATION

Property	Units	ASTM Test	ASTM Type I 1.0# Density	ASTM Type II 1.5# Density	ASTM Type IX 2.0# Density
Density Range	(pcf)	D303 or D1622	0.90 - 1.14	1.15 - 1.34	1.80 - 2.20
Thermal Resistance, R-value	75° F	C518	3.6 - 3.85	4.20 - 4.25	4.60 - 4.76
Compressive 10% Deformation	psi	D1621	10 - 14	13 - 18	25 - 33
Moisture Resistance - WVT	Perm. In.	E96	2.0 - 5.0	2.0 - 5.0	0.60 - 2.0
Moisture Resistance - Absorption	(vol.) %	C272	Less than 4.0	Less than 3.0	Less than 2.0
Service Temp. Max. Long Term	Degrees F.		167° F.	167° F.	167° F.
Service Temp. Max. Long Term	Degrees F.		180° F.	180° F.	180° F.
Flame Spread		E84	Less than 25	Less than 25	Less than 25
Smoke Developed		E84	Less than 450	Less than 450	Less than 450

Caution: Expanded Polystyrene (EPS) contains a flame retardant. However, it should be considered flammable and should not be exposed to any source of combustion. EPS insulation should be covered with a thermal barrier or otherwise installed in accordance with applicable building code requirements.

Solvent Attack: EPS is subject to attack by petroleum based solvents. Care should be taken to prevent contact between EPS and these solvents or their vapors.

Storage: EPS foam products must be stored flat on the original shipping runners, pallet or cartons. The material must be elevated above floor or ground level. If stored outdoors, must be covered with UV and waterproof covering. Do not store close to open flame.

EPS FOAM INSULATION

Expanded Polystyrene (EPS) is a closed cell, light weight, resilient foamed plastic insulation. EPS is able to withstand the abuse of temperature cycling while assuring long term performance. ABT Foam manufactures EPS foam insulation to meet or exceed the requirements of ASTM C578 for industry standards. EPS foam insulation can be produced in a wide range of densities from the lower cost effective 1.0# (pcf) density, up to the high performance 2.0# (pcf), meeting the demands of many construction applications.

EPS ENVIRONMENTAL IMPACT

EPS insulation is an inert, organic material produced from petroleum and natural gas by-products. EPS insulation does not contain CFC's, HCFC's, adhesives or formaldehyde. EPS foam insulation provides no nutritive value to plants, animals, or micro-organisms. It will not rot and is highly resistant to mildew and mold resistant (Tested in accordance with ASTM C1338 "Standard Test Method for Determining Fungi Resistance of Insulation Materials and Facings).

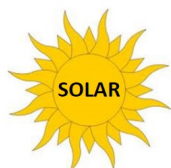
LONG TERM INSULATION VALUE

R-value means the resistance to heat flow. The higher the R-value the greater the resistance to heat flow. The thermal performance of EPS insulation, as with any insulation product, depends upon the correct installation using good building practice. When properly installed, the R-value of EPS insulation remains constant for the life of the application. This is because the closed cell structure of EPS only contains air. As a result, the R-value of EPS insulation provided for each product type may be used as a design value without any adjustment for age.

TEMPERATURE CYCLING

EPS is able to withstand the riggers of temperature cycling, assuring long term performance. In a series of tests, conducted by the Dynatech Research Development Co., Cambridge, MA, core specimens removed from existing freezer walls, some as old as 16 years, demonstrates EPS withstands freeze-thaw cycling without loss of structural integrity or other physical properties.

"DISCLAIMER: The customer and the customer's architects, engineers, consultants and other professionals are completely responsible for the selection, installation, and maintenance of any product purchased from ABT FOAM, LLC., and EXCEPT AS EXPRESSLY PROVIDED IN ABT FOAM'S STANDARD WARRANTIES, ABT FOAM MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY, DESIGN, MERCHANTABILITY, OR FITNESS OF THE PRODUCT FOR CUSTOMER'S APPLICATION. Copies of ABT FOAM'S standard warranties are available upon request." ABT FOAM'S Trade Mark Products: Advanced Wrap™, DropSide™ and PreFur™



ABT Foam
1405 Industrial Drive • Statesville, NC 28625
Phone 704-873-9081 • Toll Free 866-634-6057 • Fax 704-873-908
www.abtfoam.com

