

**ABT FOAM**  
Advanced Building Technologies Inc.

Strength.  
Design.  
Innovation.

[www.abtfoam.com](http://www.abtfoam.com)  
866-634-6057

# ABT Foam Packaging Solutions



STRENGTH • DESIGN • INNOVATION

## PROTECTIVE PACKAGING

ABT Foam is a leader in manufacturing expanded polystyrene (EPS) foam protective packaging for a wide range of industrial and consumer needs. ABT Foam has the capability of producing intricate profile cut parts or custom size flat sheets meeting the customers specifications.

## EXPANDED POLYSTYRENE (EPS)

EPS foam is produced in a variety of densities ranging from soft and low density of 0.85 pcf (8 psi) to the much more rigid and high density 2.0 pcf (25-33 psi). With this wide range in density and psi, EPS can be produced to meet the customer needs, applications and packaging solutions. EPS is manufactured with no recycled content (virgin EPS foam) or up to 35% recycled EPS.

EPS insulation should be covered with a thermal barrier or otherwise installed in accordance with applicable building code requirements.

## SHEETS, PADS, SPACERS AND BOX LINERS

ABT Foam's EPS foam is ideal for numerous packaging solutions requiring sheets, pads, spacers and box liners. With it's wide range in densities and sizes, EPS is ideal for affordable packaging and product shipping. ABT Foam manufactures custom parts per the customers specifications, sizes and densities. EPS foam sheets are made to almost any size is available with no tooling required.

## CUSTOM EPS SHAPES AND FABRICATIONS

Using the latest in computer design technology and precision cutting equipment, ABT Foam has the ability to design and produce a multitude of shapes, sizes, fabrications and configurations for specific protection and packaging applications. With professional and innovative design team, and experienced well trained production staff, ABT foam has the ability to produce precision parts to meet your specifications.

## ADVANTAGE TO THE CUSTOMER

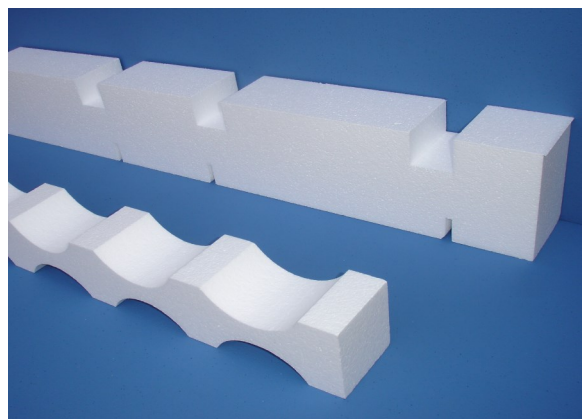
- CAD produced parts eliminating the cost for expensive tooling
- Any quantity eliminating the cost of expensive inventory
- Samples provided for first article and testing
- Easily altered to meet customers changing specifications

## APPLICATIONS

- Commercial and industrial engineered packaging
- Furniture
- Medical
- Appliances
- Electronics
- Drink shippers
- Automotive
- Fragile packaging



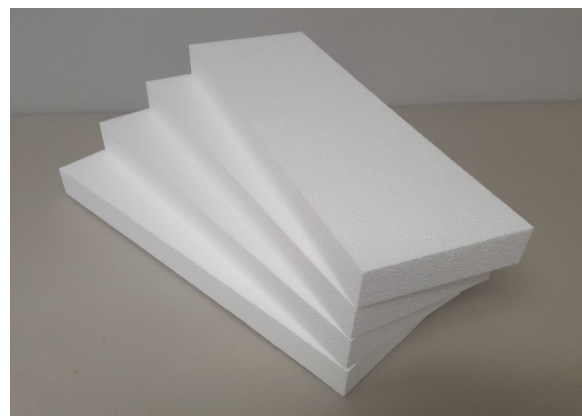
Profile Cut and Fabricated Parts



Cradles and Spacers



Commercial and Industrial



Sheets, Pads, Spacers Made To Order

# TYPICAL PHYSICAL PROPERTIES OF EPS

## Specification Reference: ASTM C578

				1.0# Density	1.25# Density	1.5# Density	2.0# Density
Property	Units	ASTM Test	Type XI	Type I	Type VIII	Type II	Type IX
Density, Min.	(pcf)	D 303 or D 1622	0.75	0.9	1.15	1.35	1.8
Density Range			0.70	0.90-1.14	1.15-1.34	1.35-1.79	1.80-2.20
Thermal Conductivity	at 25 F	BTU/(hr.)	C177 or C518	0.23	0.22	0.21	0.20
K Factor	at 40 F	(sq. Ft.)(F/in.)		0.24	0.235	0.22	0.21
	at 75 F			0.26	0.255	0.24	0.23
Thermal Resistance	at 25 F			4.35	4.54	4.76	5.00
R-Value*	at 40 F		3.30 - 3.43	4.0 - 4.17	4.20 - 4.25	4.40 - 4.55	4.60 - 4.76
	at 75 F		3.10 - 3.22	3.6 - 3.85	3.9 - 3.92	4.0 - 4.17	4.20 - 4.35
<b>Strength Properties</b>							
Compressive 10% Deformation	psi	D 1621	5.0	10 - 14	13 - 18	15 - 21	25 - 33
Flexural	psi	C 203	10.0	25 - 30	30 - 38	40 - 50	50 - 75
Tensile	psi	D 1623		16 - 20	17 - 21	18 - 22	23 - 27
Shear	psi	D 723		18 - 22	23 - 25	26 - 32	33 - 37
Shear Modulus	psi			280 - 320	370 - 410	460 - 500	600 - 640
Modulus of Elasticity	psi			180 - 220	250 - 310	320 - 360	460 - 500
<b>Moisture Resistance</b>							
WVT	perm. In.	E 96	5.0	2.0 - 5.0	1.5 - 3.5	1.0 - 3.5	0.6 - 2.0
Absorption (vol.)	%	C 272	4.0	less than 4.0	less than 3.0	less than 3.0	less than 2.0
Capillarity				none	none	none	none
Coefficient of Thermal Expansion	in./(in.)(F)	D 696		0.000035	0.000035	0.000035	0.000035
<b>Maximum Service Temperature</b>							
Long-term Exposure	Deg. F		167	167	167	167	167
Intermittent Exposure			180	180	180	180	180
Oxygen Index	%		24.0	24.0	24.0	24.0	24.0
Flame Spread			less than 25	less than 25	less than 25	less than 25	less than 25
Smoke Developed			less than 450	less than 450	less than 450	less than 450	less than 450
Physical Properties chart is reprinted with the permission by The Society of the Plastics Industry, Inc.							

Caution: EPS foam insulation contains a flame retardant. However, it should be considered flammable and should not be exposed to any source of combustion. This product should be used in accordance with local fire and building codes.

"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 FOA'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™





### STRENGTH

As a part of the ABT family of businesses, ABT Foam has the backing of a seasoned and experienced group of business leaders who know and understand the complexities of today's market place.

### DESIGN

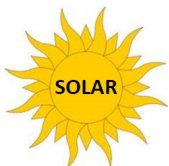
ABT Foam has the ability to design and produce a range of expanded polystyrene (EPS) foam products to fit a variety of uses and applications.

### INNOVATION

ABT Foam uses highly sophisticated processes and the latest technologies to manufacture and produce one of the most cost effective insulating, fabrication and packaging products in the world.



EPS Contains No Ozone Depleting CFCs



ABT Foam  
1405 Industrial Drive • Statesville, NC 28625  
Phone 704-873-9081 • Toll Free 866-634-6057 • Fax 704-873-908  
[www.abtfoam.com](http://www.abtfoam.com)



Made in USA