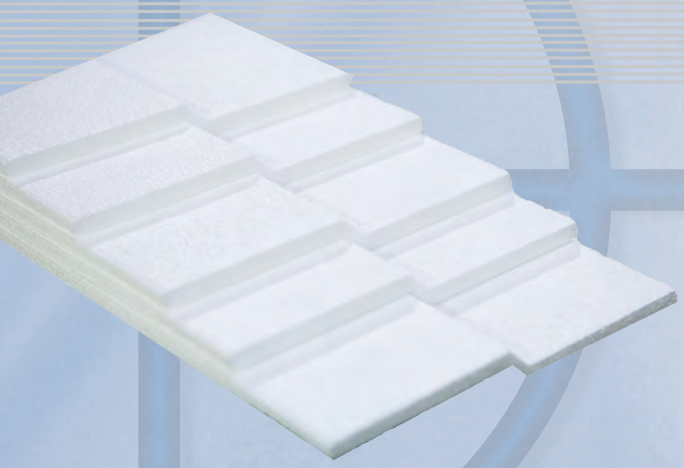
eps•lite

by Benchmark Foam

A versatile and cost-effective solution among rigid insulation boards is **Benchmark Foam's eps•lite**. Offering the best R-Value per dollar spent, eps•lite is known for its versatility. When you choose Benchmark Foam, you receive superior products from a Midwest manufacturer with the only **On-Time Guarantee** in the industry, combining the best in quality, service and value for you and your customers.

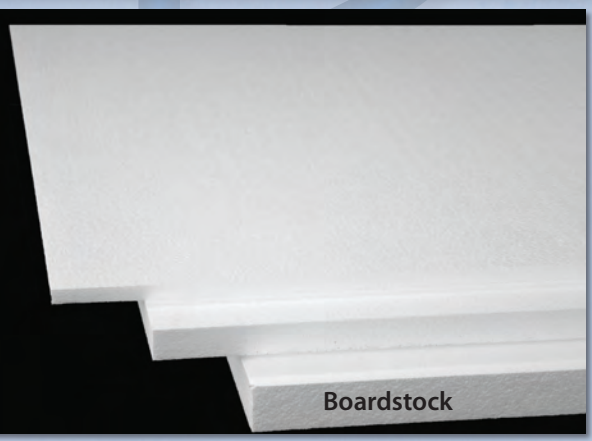
BENCHMARK FOAM INC.

Quick response is our guarantee.



eps·lite APPLICATIONS

Benchmark Foam's eps·lite expanded polystyrene (EPS) can be used in many residential or commercial applications. eps·lite's versatility and cost effectiveness make it an ideal insulation solution.


Boardstock

EPS BOARDSTOCK SHEETS

- Available in standard ½", ¾", 1", 1½" or 2" - 4x8 sheets.
- Versatile EPS allows for use in commercial or residential applications.
- Economical insulation solution for various projects.
- Verified ASTM-compliant by quality assurance program.
- Customize to meet any project needs.


Siding Backer

SIDING BACKER

- Custom fabricated to meet siding underlayment requirements.
- Reduces air infiltration.
- Contributes to firm support behind siding.
- Reduces exterior noise.
- Strengthens protection against accident and weather damage.
- Adds insulation value.
- Lightweight material offers installation ease.


Friction Flex

FRICTION FLEX

- Compresses, then recoils to meet variable cavity wall dimensions.
- Customize a cavity wall insulation to meet exact needs.
- Attain an R-21 insulating value with standard 2" x 6" cavity wall.
- Adaptable to custom sizes.

CUSTOM CUTS

- All eps·lite products are available for custom specifications.
- Choose the size, thickness and density to suit your needs.
- Can be customized to meet any specific building dimension.

ADVANTAGES OF BENCHMARK FOAM'S eps·lite

DESIGN FLEXIBILITY

- Turn ideas into reality with eps·lite, known for its versatility.
- Virtually unlimited design means EPS answers construction insulation problems.
- Customize a product to fit any jobsite specification or unique structure.
- Capable of customizing to intricate shapes and sizes to help make your project seamless.
- Made of durable, lightweight materials, EPS is ideal for all projects, including those that do not require thermal resistance.

COST EFFECTIVE

- Reduces energy costs through long-term, stable R-Value.
- Best R-Value per dollar spent among rigid insulation boards.
- Cuts labor costs with easy installation.
- No re-insulating costs as EPS does not sag or condense like fiberglass insulation.
- Most economical insulation board available on the market - with superior quality from Benchmark Foam.

INNOVATIVE SOLUTIONS

- Knowledgeable staff can solve last minute jobsite problems.
- State of the art technology allows better results in less time.
- Delivers insulation solutions for almost any construction application imaginable.
- Engineering staff creates and produces solutions compatible with jobsite requirements.

ON-TIME GUARANTEE

- Guarantees delivery by agreed-to date or 10 percent off.
- Gives customer confidence, even if order needs to be rushed.
- No truckload quotas.
- Only On-Time Guarantee in the industry.
- Assures customer needs with quick response customer service.

Customized eps·lite used to insulate a machine shed with two layers of foam to eliminate common seams, with the outer layer including an accessible firring strip.

Custom cut eps·lite used to insulate an attic, including the tailored nook for the peak.

eps·lite customized for wood frame insulation to achieve R-16.

PHYSICAL PROPERTIES OF EPS

Specification Reference ASTM C578-08				**Type XI**	**Type I**	**Type VIII**
Property		***Units***	***ASTM Test***			
Density, nominal				3/4#	1#	1 1/4#
Density, minimum		(pcf)	C303 or D1622	0.70	0.90	1.15
Thermal Conductivity	@ 25F	BTU/hr.	C177 or C518	0.290	0.238	0.227
"K Factor"	@ 40F	(sq. ft.)		0.303	0.250	0.238
	*@ 75F	(°F/in.)		0.322	0.277	0.263
Thermal Resistance	@ 25F	at 1 in. thickness		3.45	4.35	4.54
"R Value"	@ 40F			3.30	4.17	4.25
	*@ 75F			3.10	3.85	3.92
Strength Properties, minimum						
Compressive 10% deformation		psi		5.0	10.0	13.0
Flexural		psi	C203	10	25	30
Tensile		psi	D1623	--	16	17
Shear		psi	D732	--	18	23
Shear Modulus		psi		--	280	370
Moisture Resistance, maximum						
WVT (water vapor transmission)		perm/in	E96	5.0	5.0	3.5
Absorption (volume)		%	C272	< 4.0	< 4.0	< 3.0
Capillarity		--		none	none	none
Coefficient of Thermal Expansion		in./(in.) (°F)	D696	0.000035	0.000035	0.000035
Maximum Service Temperature		°F				
Long-term				--	180	167
Intermittent				180	180	180
Flame Spread		UL®	E84	20	20	20
Smoke Development		UL®	E84	300	300	300

All values are based on data available from Flint Hills Resources, NOVA Chemical Company and BASF Corporation.
**Federal Trade Commission ruling: Use the 75° R-Value when calculating R-Values for residential construction (fact sheet available upon request).*

DESIGN CONSIDERATIONS

Flammability: Like many construction materials, expanded polystyrene (EPS) is combustible. It should not be exposed to flame or other ignition sources. Current building code requirements should be met for adequate protection or separation from occupied areas.

Water Absorption Properties: EPS water absorption is low. Moisture takes the path of least resistance and travels around individual beads rather than through them; the non-interconnecting cell structure prevents capillary absorption.

Water Vapor Transmission: EPS has low permeability, but is not considered a vapor barrier.

Solvent Exposure: EPS is subject to attack by petroleum-based solvents and adhesives, and coal-tar pitch products. Care should be taken to prevent EPS direct contact with these products and their vapors. Use only adhesives approved for EPS applications.

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