

**Product Data Sheet
Geofoam Expanded Polystyrene (EPS)****GEOFOAM**

For more than 30 years, geotechnical engineers have specified Expanded Polystyrene (EPS) Geofoam for numerous geotechnical applications worldwide. Geotechnical engineers have long recognized the utility of lightweight fill to reduce mass and associated gravitational driving forces.

Geofoam EPS is a closed cell, light weight, low density foamed plastic fill material. Geofoam is used where soil and construction conditions do not allow for heavier conventional fill materials such as soil, sand, gravel etc. The density of Geofoam is 50 to 100 times lower than soils.

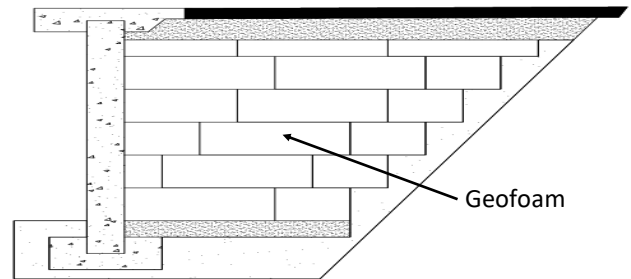
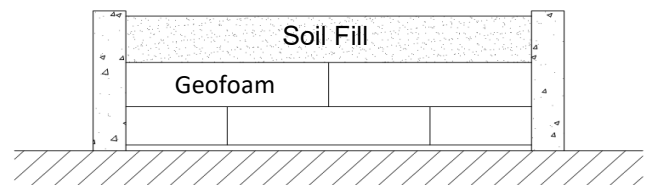
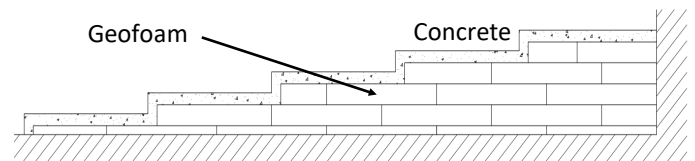
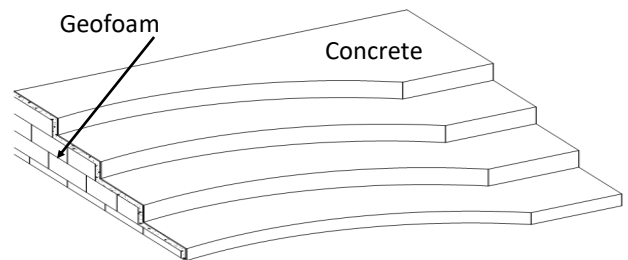
Geofoam EPS is an inert, organic material produced from petroleum and natural gas by-products. EPS does not contain ozone depleting chlorofluorocarbons (CFC's) or hydrochlorofluorocarbons (HCFC's). EPS provides no nutritive value to plants, animals, or micro-organisms. It will not rot, and is highly resistant to mold and mildew.

ABT Foam manufactures Geofoam EPS billet sizes ranging from a maximum of 36" thick x 48" wide x 192" long trimmed, and half billets 36" thick x 48" wide x 96" long trimmed. Other sizes and shapes are available to meet the demand of today's construction needs and specifications. Full size billets can also be provided un-trimmed leaving the natural molding skin in place or trimmed insuring dimensional stability and squareness.

ABT Foam manufactures Geofoam EPS from the light density EPS 12 at 0.70 density minimum to the heavier EPS 29 with a density of 1.80 minimum. For additional physical properties please see the chart "Physical Property Requirements of RCPS Geofoam".

TYPICAL USES

- Sandy and unstable soil conditions
- Highway embankments
- Bridge abutments
- Theater, auditorium and stadium
- Retaining wall
- Backfill
- Rooftop and plaza deck planter fill
- Light weight fill beneath concrete
- Cold storage

**Back Fill****Rooftop and Plaza Deck Planter Fill****Theater, Auditorium and Stadium Fill****Radius Theater, Auditorium and Stadium Fill**

Note: The above drawings are for illustration purpose only. These drawings are not intended for engineering.

Typical Physical Property Requirements of RCPS Geofoam - ASTM D6817

Type	EPS12	EPS15	EPS19	EPS22	EPS29
Density, min. Kg/m ³ (lb/ft ³)	11.2 (0.70)	14.4 (0.90)	18.4 (1.15)	21.6 (1.35)	28.8 (1.80)
Compressive Resistance, min. kPa (psi) at 1%	15 (2.2)	25 (3.6)	40 (5.8)	50 (7.3)	75 (10.9)
Compressive Resistance, min. kPa (psi) at 5%	35 (5.1)	55 (8.0)	90 (13.1)	115 (16.7)	170 (24.7)
Compressive Resistance, min. kPa (psi) at 10%	40 (5.8)	70 (10.2)	110 (16.0)	135 (19.6)	200 (29.0)
Flexural Strength, min. kPa (psi)	69 (10.0)	172 (25.0)	207 (30.0)	276 (40.0)	345 (50.0)
Oxygen index, Min. Volume %	24.0	24.0	24.0	24.0	24.0

Imperial/Metric Conversion

Length	1 foot	0.308 meter
Force	1 pound force	4.448 Newton
Stress (modulus of elasticity)	1 pound force per square foot (psf)	47.88 Pascal
	1 pound force per square inch (psi)	6.898 kilopascal (kPa)

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.

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 microorganisms. 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).

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

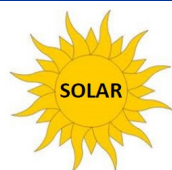
EPS foam products must be stored flat on the original shipping runners, pallet or cartons. The material must be elevated above floor or ground level. If stored outdoors, must be covered with UV and waterproof covering. Do not store close to open flame.

ULTRAVIOLET DEGRADATION

Prolonged exposure to sunlight will cause slight discoloration and surface dusting of EPS insulation. The insulating properties will not be significantly affected under normal usage. EPS stored outside should be protected with a light-colored opaque tarpaulin.

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ABT Foam, LLC Trade Mark Products: Advanced Deck™, Advanced Tilt™, Advanced Wrap™, PreFur™, PreFur™ Plus, and DropSide™



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