

GEOFOAM

Geofoam is a lightweight, rigid foam plastic that has been used around the world as a fill for more than 30 years. EPS geofoam is approximately 100 times lighter than soil and at least 20 to 30 times lighter than other lightweight fill alternatives. This extreme difference in unit weight compared to other materials, makes EPS geofoam an attractive fill material. Because it is a soil alternative, EPS geofoam embankments can be covered to look like normal sloped embankments or finished to look like a wall.

Applications of Geofoam for highway construction and other void fills.

Geofoam can be used as an embankment fill to reduce loads on underlying soils, or to build highways quickly without staged construction

Geofoam Applications Include:

- Road Embankment Construction
- Road/Parking Lot Insulation
- Foundation Fill / Insulation
- Bridge Abutment Backfillt
- Retaining Wall Backfill
- Levees/Dikes/Berms
- Slope Stabilization
- Landscape Design
- Landscape Design
- Plaza Decks
- Green Roofs







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Facts about Geofoam include:

- Lightweight Minimize preloading, surcharging and staged construction
- Weather Resistant Withstands freeze-thaw cycles, moisture and road salts
- Insect and Mold Resistant Will not sustain mold or mildew growth, termite / ant repellant additive available
- Doesn't Settle Less structural inconsistencies
- Manufactured to Meet Your Job Specifications Multiple densities, various block sizes available
- Ease of Installation Lightweight, no heavy equipment needed, cuts easily with a hot wire or saw
- Environmentally Friendly 100% Recyclable, No HCFCs or Formaldehyde.

Examples of Geofoam Applications

EPS Geofoam can be used to create topography without adding significant load to underlying structures and surrounding areas. Some examples of this application include creating roof gardens for urban buildings. Vegetative roofs provide many benefits to a building, especially in urban areas. They reduce runoff by managing rainwater, improve air quality and reduce air temperatures. EPS Geofoam is ideal for this application because it can be cut or trimmed to fit odd geometries, can be installed on the roof without special equipment and does not add any appreciable load to the roof structure. EPS Geofoam is utilized in geo-technical applications such as lightweight fill for construction on soft ground, slope stabilization, retaining wall or abutment backfill, as well as sub-grade insulation and foundation insulation for roadways and runways. EPS Geofoam is naturally multifunctional, with applications ranging from foundations to road embankments. Engineers, architects, and builders can use it to design for important geo-synthetic functionalities and choose the optimal product combination to meet project objectives.







PRODUCT			EPS 12	EPS 15	EPS 19	EPS 22	EPS 29	EPS 39	EPS 46
Density, min.	lb./ft³		0.70	0.90	1.15	1.35	1.80	2.40	2.85
Compressive Resistance Deformation	1%	psi	2.2	3.6	5.8	7.3	10.9	15.0	18.6
	5%	psi	5.1	8.0	13.1	16.7	24.7	35.0	43.5
	10%	psi	5.8	10.2	16.0	19.6	29.0	40.0	50.0
Flexural Strength	psi		10.0	25.0	30.0	40.0	50.0	60.0	75.0
Water Absorption V	vol.%		4.0	4.0	3.0	3.0	2.0	2.0	2.0
Oxygen Index, min	vol.%		24	24	24	24	24	24	24
Buoyancy Force	lb./ft³		61.7	61.5	61.3	61.1	60.6	60.0	59.5

*See ASTM D6817 Standard for test methods and complete information.

*Combined live and dead load stresses should not exceed the compressive resistance at 1% deformation.

TERMITE RESISTANT

Poly Molding's Geofoam is fungus resistant, mold resistant and provides little nutritional benefit to insects. Termite protection solutions include adding a termiticide during the production process or creating a physical barrier around the EPS Geofoam, such as a geomembrane.

SIZE

Poly Molding's EPS Geofoam is available in regular 4'x4' or 4'x8' blocks up to 36" thick. Also, 16' Blocks are available upon request.

WARRANTY

Poly Molding Geofoam comes with a 10-year compressive resistance guarantee. Terms and conditions are detailed in Poly Molding's warranty.



