

## 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 most 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.

#### Other GeoFoam applications include:

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

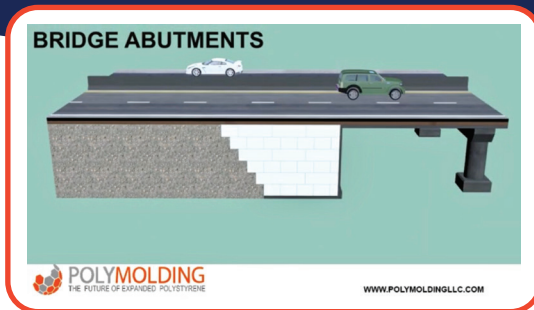
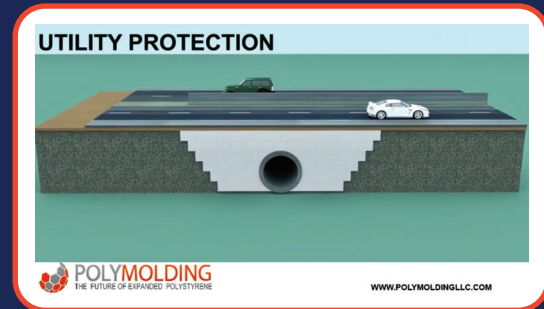
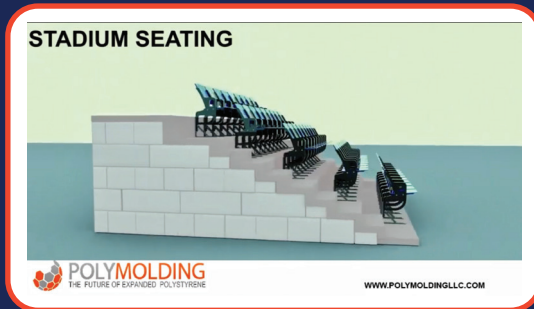
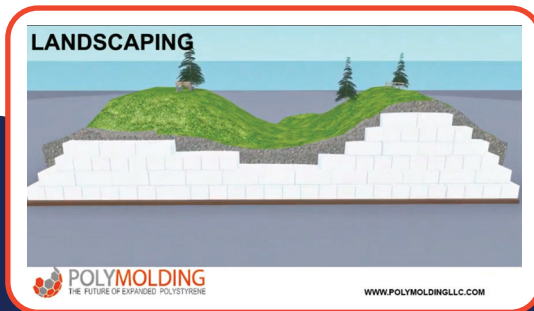


## Facts about Geofoam include:

- ◆ Lightweight – Minimize preloading, surcharging and staged construction.
- ◆ Weather Resistant – Withstands freeze-thaw cycles, moisture and road salts.
- ◆ Doesn't Settle – Less structural inconsistencies.
- ◆ Insect and Mold Resistant – Will not sustain mold or mildew growth, termite / ant repellent additive available.
- ◆ 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 services. 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.



# ASTM D6817

## Geofoam | Expanded Polystyrene Physical Property Requirements

TYPE		EPS12	EPS15	EPS19	EPS22	EPS29	EPS39	EPS46
PROPERTY	ASTM TEST	VALUES						
Density lb/ft3	D162	.70 min.	.90 min.	1.15 min.	1.35 min.	1.80 min.	2.40 min.	2.85 min.
Compressive Resistance Min. psi @ 1% Min. psi @ 5% Min. psi @ 10%	D1621 D1621 D1621	2.2 5.1 5.8	3.6 8.0 10.2	5.8 13.1 16.0	7.3 16.7 19.6	10.9 24.7 29.0	15.0 35.0 40.0	18.6 43.5 60.0
Flexural Strength Min.psi	C203	10	25	30	35	50	60	75
Oxygen Index Min. Volume %	D2863	24	24	24	24	24	24	24
Water Absorbtion (by total immersion) Max % by volume	C272	4.0	4.0	3.0	3.0	2.0	2.0	2.0