

Description

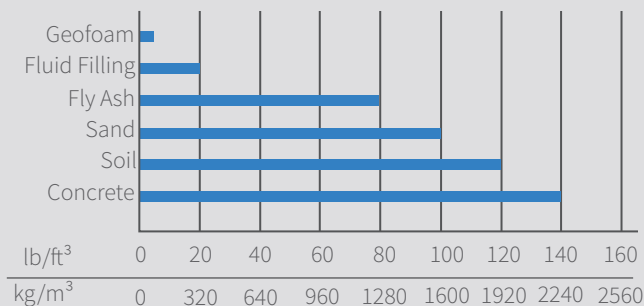
FANOSA® Geofoam is a block of expanded polystyrene (EPS) used as filler material. It is ideal for absorbing mechanical and structural loads, and reducing fatigue in underlying soil. Additionally, it contributes to the stabilization of roads, embankments, bridge abutments, and dissipates tension under tunnels or underground pipes..

Advantages

Lightweight and strong

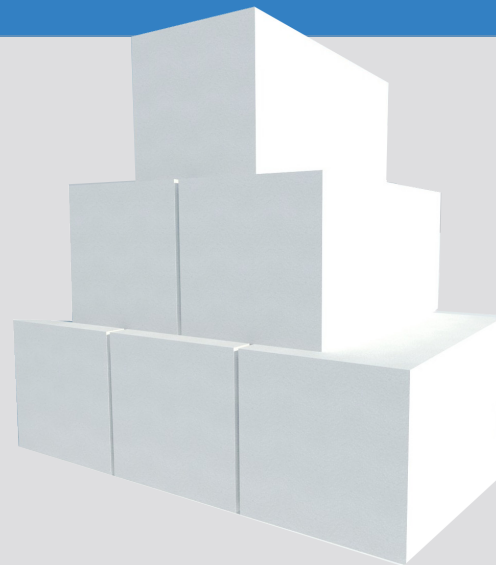
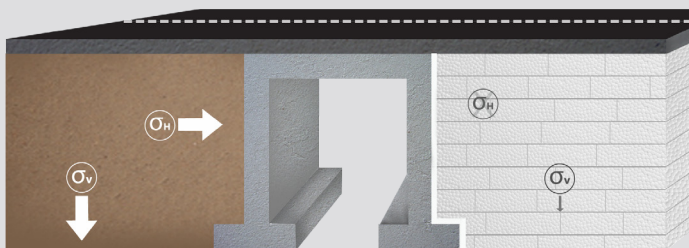
It is the lightest of traditional fillers.

It is approximately 100 times lighter than most soil types, and at least 20 to 30 times lighter than other lightweight filling alternatives but very similar in its resistance to compression.



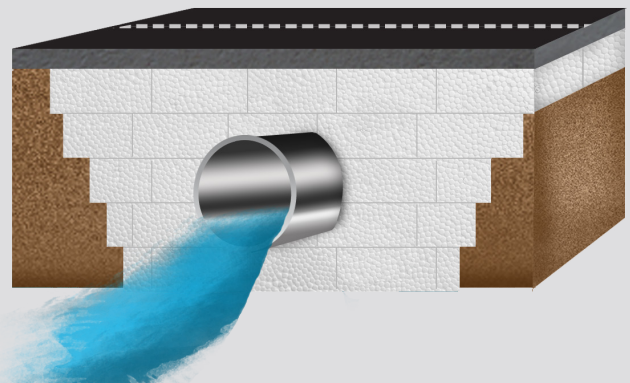
Reduction of Axial Loads

Due to its low density (lightweight), Geofoam-based filler does not generate major stress on retaining walls; pressure is virtually zero.



Weight reduction on buried utilities

Geofoam can reduce final loads on underground structures. This results in significant cost-savings as a less-demanding structure prevents special modifications.



Geofoam can also be used in the following applications:

- > Embankments.
- > Slope stabilization.
- > Bridges and accesses.
- > Rail Embankment.
- > Foundations.
- > Side hills.
- > Elevation changes.
- > Stadium and theater seating.
- > Landscaping and vegetative green roofs.
- > Levees.
- > Runways and taxiways.

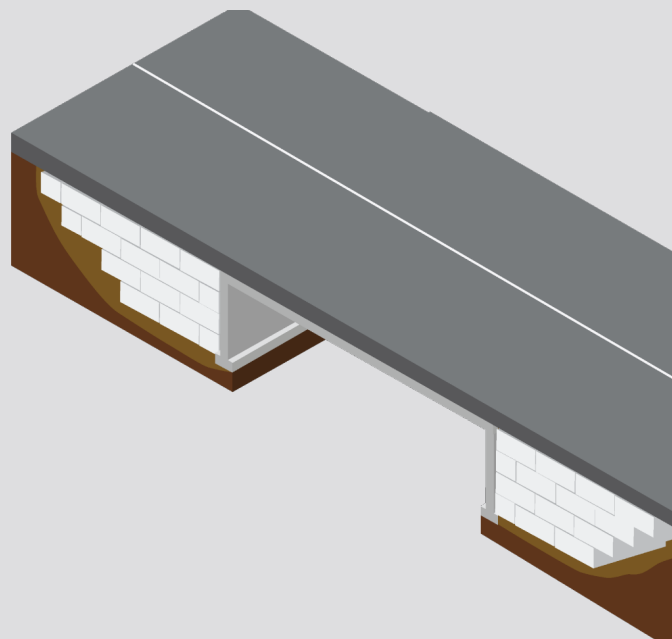


Dimensions

Geofoam dimensions can be produced according to the specifications of the standard ASTM D 6817 or as required by the project

Design Characteristics

- > Lightweight.
- > Strength.
- > Ease of handling.
- > Reduces construction time.
- > Lowers construction costs.
- > Stability.
- > Thermal insulation.
- > Buoyancy.
- > Low water absorption.
- > Sustainability.



PROPERTIES	UNITS	EPS12	EPS15	EPS19	EPS22	EPS29
Density	kg/m ³ (lb/ft ³)	11.20 (0.70)	14.40 (0.90)	18.40 (1.15)	21.60 (1.35)	28.80 (1.80)
Compressive Resistance, min., at 1%	kg/cm ² (psi)	0.15 (2.18)	0.26 (3.63)	0.41 (5.8)	0.51 (7.25)	0.76 (10.88)
Compressive Resistance, min., at 5%	kg/cm ² (psi)	0.36 (5.08)	0.56 (7.98)	0.92 (13.05)	1.17 (16.68)	1.73 (24.66)
Compressive Resistance, min., at 10%	kg/cm ² (psi)	0.41 (5.8)	0.71 (10.15)	1.12 (15.95)	1.38 (19.58)	2.04 (29.01)
Flexural Strength	kg/cm ² (psi)	0.70 (10.01)	1.75 (24.95)	2.11 (30.02)	2.81 (40.03)	3.52 (50.04)

Related ASTM Standards

C 165, C 168, C 177, C 203, C 272, C 303, C 390, C 518, C 550, C 870, D 1600, D 1621, D 1622, D 2126, D 2863, E 84, E 96.

* Higher densities can be made, for example: 39, 46 kg/m³ as referenced in ASTM D - 6817-07.

