

TERRAFOAM[®] EPE

Non-Collapsing, Rebounding Fill Suitable for Hydrocarbon Exposures



PRODUCT DESCRIPTION

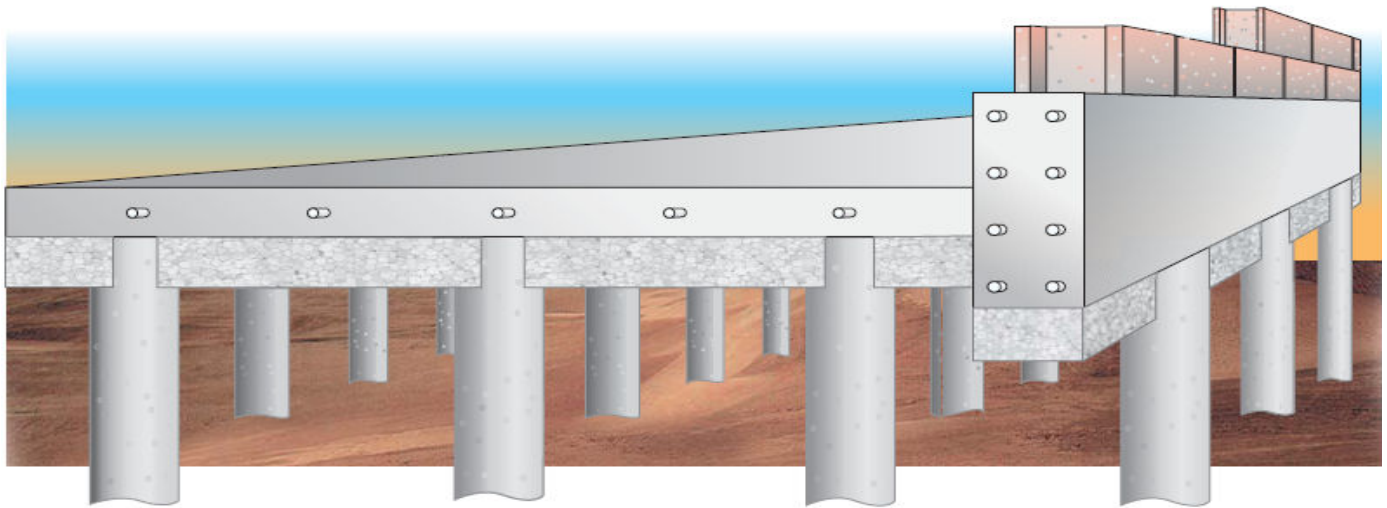
TERRAFOAM EPE is an extruded foamed polyethylene product that can be used in a wide range of construction applications. It is highly suited to protecting grade beams, structural slabs, and pile caps. It will absorb large strains from swelling clays and freezing moist sub-grades through elastic compression before heaving or cracking of structures occurs. TERRAFOAM EPE is made from low density closed cell extruded polyethylene (EPE), and provides all-weather installation and operational performance. It is also an excellent choice for certain hydrocarbon exposures. (See Chemical Resistance chart below.)

TERRAFOAM EPE does not collapse or crush on compression. It has a low modulus of elasticity, and has excellent recovery from large rates of cyclic strain, thereby preventing water collection and the subsequent expansive forces from ice formation under concrete elements. It has long term buoyancy characteristics, with very low water absorption. TERRAFOAM EPE also functions as thermal insulation, with a resistance rating of RSI 0.56 per 25 mm. (R-3.2 per inch)

CHEMICAL RESISTANCE PROPERTIES (*see note)

Substance	Behavior@20C	Behavior@60C	Substance	Behavior@20C	Behavior@60C
Acetone	Limited Resistance	Not Resistant	Kerosene	Limited Resistance	Not Resistant
Benzene	Limited Resistance	Not Resistant	Ketones	Limited Resistance	Not Resistant
Bitumen	Resistant	Limited Resistance	Methanol	Resistant	Resistant
Crude Oil	Resistant	Limited Resistance	MEK	Limited Resistance	Not Resistant
Diesel Fuel	Resistant	Not Resistant	Petroleum	Limited Resistance	Not Resistant
Fuel Oil	Limited Resistance	Not Resistant	Toluene	Limited Resistance	Not Resistant
Gasoline	Limited Resistance	Not Resistant	Xylene	Limited Resistance	Not Resistant

Note - Chemical resistance properties are taken from industry-developed accepted data for LDPE

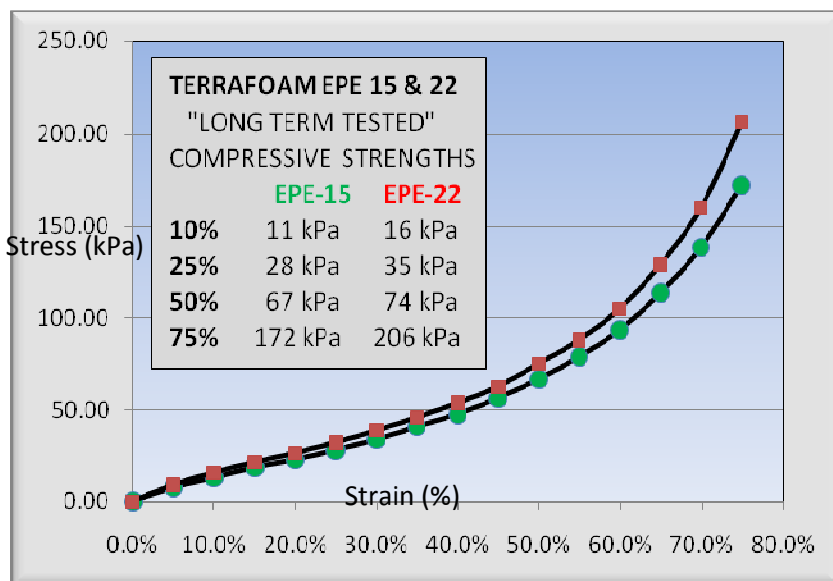


PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	UNITS	PE-15	PE-22
Compressive Strength	ASTM D-3575 SUFFIX D	kPa (psi) @ 25%	28-48 (4-7)	34-76 (5-11)
		kPa (psi) @ 50%	69-103 (10-15)	83-117 (12-17)
Compressive Set	ASTM D-3575 SUFFIX B	% @ 2 hours	32	34
		% @ 24 hours	20	25
Nominal Density		kg/m ³ (lbs/ft ³)	> 9.6 (1.6)	> 12.6 (2.1)
Service Temperature °C		Degrees Celsius	-35 to +180	-35 to +180
Compressive Creep	ASTM D-3575 SUFFIX BB	%	3 at 1 psi 3 at 7 kPa	10 at 2 psi 10 at 14 kPa
Water Absorption	ASTM D-3575 SUFFIX L	kg/m ² (lbs/ft ²)	0.138 (0.02)	0.069 (0.01)
		% by volume	< 0.4%	< 0.2%

SPECIFYING POLYETHYLENE FOAM FOR GEOTECHNICAL APPLICATIONS

Most of the performance data for foamed polyethylene has been developed for use in protective packaging “drop” applications, and therefore may not apply directly to relatively slow-moving earth forces. However, Beaver Plastics has developed long term testing procedures for geotechnical use, thus permitting comparative evaluations of EPS and EPE products used in construction applications. Consult Beaver Plastics for a technical review and recommendation for protective geotechnical EPS and EPE products.



TERRAFOAM EPE is available in 4' x 9' sheets, and in a variety of thicknesses.

DISTRIBUTED BY:

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