

Trusted Lightweight Fill.

R-Shield® Geofoam is a cellular plastic material that is strong, but has very low density (1% of traditional earth materials.) It is manufactured in block form and meets ASTM D6817, “Standard Specification for Rigid, Cellular Polystyrene Geofoam.”

Ready to Use.

R-Shield Geofoam maximizes onsite installation efficiency: material arrives ready to place, no weather delays.

Quality Assurance.

R-Shield Geofoam is manufactured under an industry leading quality control program monitored by UL and further recognized in UL Evaluation Report UL ER40361-01 and ICC ESR-4743. R-Shield meets ASTM D6817, “Standard Specification for Rigid, Cellular Polystyrene Geofoam.”



Size and Shape.

R-Shield Geofoam is produced in block form and is easily positioned at the work site. Standards sizes:

- 4’ (1.2 m) widths
- 8’ (2.4 m) up to 16’ (4.8 m) lengths
- 1” (25 mm) to 36” (914 mm) thickness

Other sizes and fabrication can be provided by the manufacturer.

Design.

For most applications, long-term design loads should not exceed the linear elastic range of R-Shield Geofoam. Combined live and dead load stresses should not exceed the compressive resistance at 1% strain.


Additional Information.

Please consult the R-Shield Geofoam TechData which provides additional information, design considerations, and technical information on the full range of Geofoam materials available. Please also refer to ASTM D6817, ASTM D7180, and ASTM D7557.

Termite Resistant.

One of the most destructive forces anywhere is termites. R-Shield can be manufactured with a proven and safe additive, that effectively resists termites.

R-Shield is treated to meet ICC ES AC239, “Acceptance Criteria for Termite-Resistant Foam Plastics”.

			
Density, min. ASTM C303	lb/ft ³ (kg/m ³)	2.40 (38.4)	
Compressive Resistance @ 1% deformation, min. ASTM D1621	psi psf (kPa)	15.0 2160 (103)	
Elastic Modulus, min. ASTM D1621	psi (kPa)	1500 (10300)	
Flexural Strength, min. ASTM C203, Procedure B	psi (kPa)	60.0 (414)	
Buoyancy Force	lb/ft ³ (kg/m ³)	60.0 (960)	
Water Absorption by total immersion, max., volume % ASTM C272			2.0
R-value Thermal Resistance per 1.0 in. thickness ASTM C518	25°F	°F·ft ² ·h/Btu (°K·m ² /W)	5.0 (0.88)
	40°F	°F·ft ² ·h/Btu (°K·m ² /W)	4.8 (0.84)
	75°F	°F·ft ² ·h/Btu (°K·m ² /W)	4.4 (0.77)
Flame Spread Index ¹ Smoke Developed Index ¹ ASTM E84/UL723			<25 <450
Oxygen Index, min., volume % ASTM D2863			24
ASTM D6817 Compliance, Type			EPS39

¹Please refer to UL certificate for complete information.