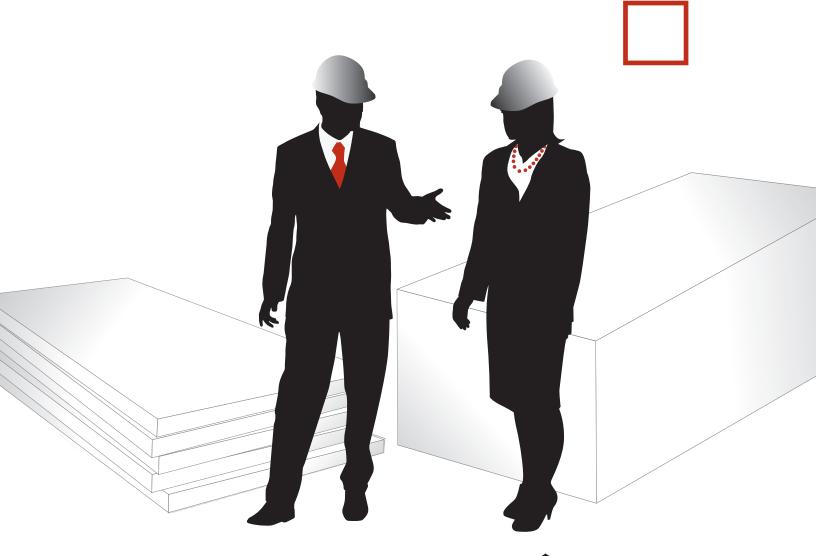
# **EXPANDED POLYSTYRENE**

# INSULATION OR GEOFOAM

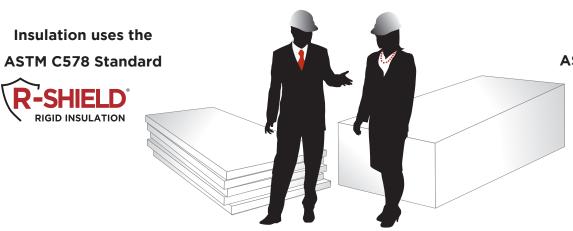






# **Insulation and Geofoam**

are both expanded polystyrene, but ...



Geofoam uses the ASTM D6817 Standard





## Insulation.

R-Shield is a quality building insulation that comes in a variety of compressive strengths and R-values with resistance to moisture gain and has quick drying potential. R-Shield insulation is used in foundations, walls, and roofs in all types of building construction and can be relied on to provide long lasting constant R-value performance.



Perimeter/Under-slab



**Paver Decks** 







# Lightweight fill material.

R-Shield Geofoam is a trusted lightweight structural fill with high compressive strength and unmatched durability. R-Shield Geofoam is used as structural fill for plaza areas, vegetative roofs, landscaping, elevation changes for floors/stairs/ramps, and many other building applications that need a structural lightweight fill solution.



**Elevation Changes** 



Landscaping

Plaza Areas

# **Specifications**

# Using the correct specifications for the application

Each project is unique and may require R-Shield insulation, R-Shield Geofoam, or both. It is important to develop specifications using the correct ASTM Standard.

## **Insulation specifications following ASTM C578**

Specifications following ASTM C578 are available at: rshieldinsulation.com/insulation-library/

# Geofoam specifications following ASTM D6817

Specifications following ASTM D6817 are available at: rshieldinsulation.com/geofoam-library/



R-Shield insulation is manufactured in sheet form and meets ASTM C578, "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation". Key properties are shown below.



Product		100	130	150	250	400	600
R-value per inch, @ 75°F	°F·ft²·h/Btu	3.9	3.9	4.2	4.4	4.4	4.5
	(°K·m²/W)	(0.68)	(0.69)	(0.73)	(0.77)	(0.77)	(0.78)
Compressive Strength <sup>2</sup>	psi	10	13	15	25	40	60
@ 10% deformation, min.	(kPa)	(69)	(90)	(104)	(173)	(276)	(414)
ASTM C578 Compliance, Type		I	VIII	Ш	IX	XIV	XV

- Please refer to R-Shield Insulation TechData for complete information.
   Compressive strength is measured at 10% in accordance with ASTM C578. A safety factor is required for long-term sustained loads. For static loads, a safety factor of 3:1 is recommended.



R-Shield Geofoam is manufactured in block form and meets ASTM D6817, "Standard Specification for Rigid, Cellular Polystyrene Geofoam". Key properties are shown below<sup>1</sup>.



Product		15	19	22	29	39	46
Compressive Resistance <sup>2</sup>	psi	3.6	5.8	7.3	10.9	15.0	18.6
@ 1% deformation, min.	(kPa)	(25)	(40)	(50)	(75)	(103)	(128)
Elastic Modulus,	psi	360	580	730	1090	1500	1860
min	(kPa)	(2500)	(4000)	(5000)	(7500)	(10300)	(12800)
ASTM D6817 Compliance, Type		EPS15	EPS19	EPS22	EPS29	EPS39	EPS46

- Please refer to R-Shield Geofoam TechData for complete information.
- 2. Compressive resistance is measured at 1% in accordance with ASTM D6817 and is the allowable long-term sustained loads.

# More than just foam—a complete system.

When you choose R-Shield, you're collaborating with a team of experts who work with you every step of the way. We're here to answer your questions, solve your problems, and do everything we can to make sure your project proceeds smoothly and ends successfully. R-Shield is manufactured by Premier Building Systems.



