















This table outlines a few key physical properties of R-Shield® expanded polystyrene insulation in accordance with ASTM C578, “Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation” compared to R-Shield Geofoam in accordance with ASTM D6817, “Standard Specification for Rigid Cellular Polystyrene Geofoam”.

PRODUCT																
ASTM C578 ² Compliance, Type		XI	I	VIII	II	IX	XIV	XV								
ASTM D6817 ¹ Compliance, Type									EPS12	EPS15	EPS19	EPS22	EPS29	EPS39	EPS46	
Density ^{1,2} , min., ASTM C303	lb/ft ³ (kg/m ³)	0.70 (12)	0.90 (15)	1.15 (18)	1.35 (22)	1.80 (29)	2.40 (38)	3.0 (48)	0.70 (11)	0.90 (15)	1.15 (18)	1.35 (22)	1.80 (29)	2.40 (38)	2.85 (46)	
Compressive Strength @10% ² , min., ASTM D1621	psi (kPa)	5 (35)	10 (69)	13 (90)	15 (104)	25 (173)	40 (276)	60 (414)								
Compressive Resistance @1% deformation ¹ , min., ASTM D1621	psi (kPa)								2.2 (15)	3.6 (25)	5.8 (40)	7.3 (50)	10.9 (75)	15.0 (103)	18.6 (128)	
R-value ² , Thermal Resistance, per inch, ASTM C518	°F·ft ² ·h/Btu (°K·m ² /W)	3.2 (0.56)	3.9 (0.68)	3.9 (0.69)	4.2 (0.73)	4.4 (0.77)	4.4 (0.77)	4.5 (0.78)								
Flexural Strength ^{1,2} , min. ASTM C203	psi (kPa)	10 (69)	25 (173)	30 (208)	35 (242)	50 (345)	60 (414)	75 (517)	10 (69)	25 (172)	30 (207)	35 (240)	50 (345)	60 (414)	75 (517)	
Oxygen Index ^{1,2} , min.	vol. %	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24

¹ Please refer to ASTM D6817 specification for complete information.

² Please refer to ASTM C578 specification for complete information.