

EPS Geofoam

Description:

Columbia Green EPS Geofoam is used as lightweight fill material on the rooftop to reduce stresses on the structure. Geofoam is a cellular plastic material manufactured in block form that is strong with a low density.

- Size: 4' widths, 8' up to 16' lengths, 1" to 36" thicknesses, EPS 19 recommended for green roof infill.
- Meets or exceeds the requirements of ASTM D6817, "Standard Spec. for Rigid, Cellular Polystyrene Geofoam".
- Unaffected by moisture, does not cause swelling and resistant to termites, mold and mildew

Installation

- Product arrives ready to place and can be prefabricated or cut on the jobsite, no staging required.
- Sweep with broom and then use air compressor to blow remaining dust and debris from substrate before laying out geofoam
- Butt Geofoam Blocks against each other. Cut to fit per drawings.
- Under windy conditions, provide temporary ballast to avoid wind disturbance during installation.
- Remove all debris from surface prior to Green roof System or roof component installation. Exercise care working over Geofoam.

Storage:

- Store components in a dry area away from sources of ignition and extremely high temperatures.
- If stored outdoors, cover with opaque film or tarp. Ballast to prevent displacement by wind or weather.
- Handle and store materials, and place equipment in a manner to avoid overloading roof structure or damaging roofing membrane.

Precautions:

- Avoid prolonged exposure to sunlight, heat, sparks and open flames.
- Avoid Contact with adhesives, Coating and chemicals such as esters, ketones, ethers, aromatic and aliphatic hydrocarbons and their emulsions, among others.
- Wash exposed skin prior to eating, drinking or smoking and at the end of each shift.
- Use caution when cutting and laying product.

Property		ASTM D6817						
		EPS12	EPS15	EPS19	EPS22	EPS29	EPS39	EPS46
Density ¹ , min.	lb/ft ³ (kg/m ³)	0.70 (11.2)	0.90 (14.4)	1.15 (18.4)	1.35 (21.6)	1.80 (28.8)	2.40 (38.4)	2.85 (45.7)
Compressive Resistance ^{1,2} @ 1% deformation, min.	psi psf (kPa)	2.2 320 (15)	3.6 520 (25)	5.8 840 (40)	7.3 1050 (50)	10.9 1570 (75)	15.0 2160 (103)	18.6 2680 (128)
Elastic Modulus ¹ , min	psi (kPa)	220 (1500)	360 (2500)	580 (4000)	730 (5000)	1090 (7500)	1500 (10300)	1860 (12800)
Flexural Strength ¹ , min.	psi (kPa)	10.0 (69)	25.0 (172)	30.0 (207)	35.0 (240)	50.0 (345)	60.0 (414)	75.0 (517)
Water Absorption ¹ by total immersion, max.,	vol. %	4.0	4.0	3.0	3.0	2.0	2.0	2.0
Oxygen Index ¹ , min.	vol. %	24	24	24	24	24	24	24
Buoyancy Force	lb/ft ³ (kg/m ³)	61.7 (990)	61.5 (980)	61.3 (980)	61.1 (980)	60.6 (970)	60.0 (960)	59.5 (950)