



# TECHNICAL NOTE #101

## GEOFOAM EPS TECHNICAL SPECIFICATIONS

### Physical Property Specifications of Cellofoam® Expanded Polystyrene (EPS) Geofoam Spec. Reference: ASTM D6817

Cellofoam® Geofoam is a rigid, foamed plastic with resilient closed cells molded in a range of densities and block sizes to meet your application and specification requirements. Our Geofoam EPS is produced with modified bead containing fire retardant and manufactured to the same high standards as our Cellofoam® brand Insulation to provide the highest quality and long-term performance for your project. Contains No CFC, HCFC or HFC.

Cellofoam® Geofoam EPS is an inert, stable product that can provide a low cost, lightweight fill solution, when compared to earthen fill material, making it an excellent choice for: soil / slope stabilization, reducing overburden or lateral earth pressures behind retaining structures, stadium seating, landscaping areas. Formulations with insect/termite resistance are also available. Our EPS does not support mold or fungal growth.

Cellofoam® GEOFOAM EPS Properties <sup>1,2,3,4</sup>							
Physical Property	Units	EPS TYPE - ASTM D6817					
		EPS15	EPS19	EPS22	EPS29	EPS39	EPS46
Density, min.	lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	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% deformation, min.	psi (kPa)	3.6 (25)	5.8 (40)	7.3 (50)	10.9 (75)	15.0 (103)	18.6 (128)
Compressive Resistance @ 10% deformation, min. <sup>3</sup>	psi (kPa)	10.2 (70)	16.0 (110)	19.6 (135)	29.0 (200)	40.0 (276)	50.0 (345)
Flexural Strength, min.	psi (kPa)	25 (172)	30 (207)	35 (240)	50 (345)	60 (414)	75 (517)
Elastic Modulus, min.	psi (kPa)	360 (2500)	580 (4000)	730 (5000)	1090 (7500)	1500 (10300)	1860 (12800)
Oxygen Index, min.	volume %	24.0	24.0	24.0	24.0	24.0	24.0
Water Absorption by total immersion, max.	volume %	4.0	3.0	3.0	2.0	2.0	2.0
<small>1. When tested in accordance with ASTM D6817 Standard Test Methods 2. All Geofoam EPS manufactured by Cellofoam North America Inc. meet ASTM D6817 standard specifications 3. Design load stresses should not exceed the compressive resistance @ 1% strain 4. UL Certified - See UL ER7260-01</small>							

**WARNING:** This product is combustible and if exposed to a fire of sufficient heat and intensity may burn rapidly. It should not be left exposed or inadequately protected. Consult specific instructions and applicable building codes for use of this product.

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The performance data herein reflects Cellofoam North America Inc.'s expectation based on tests conducted in accordance with recognized standard methods. Cellofoam North America Inc. is an expanded polystyrene foam manufacturer and not an engineering consulting firm. Thus, it is beyond our scope to provide design services on the specific use for our products. Users of our EPS products, including Geofoam, should consult with appropriate engineering experts to determine the exact type and specifications of EPS required for their project to meet structural and other design requirements. The sale of these products shall be subject to Terms and Conditions of Sale, including those limiting warranties as set forth in Cellofoam's invoices. No agent, employee, or representative of Cellofoam North America Inc. or its subsidiary or affiliated companies is authorized to modify this disclaimer.