

AMC Data Sheet # 10-06-30

## Styrobar 22 Geological Fill Material

Styrobar Geological Fill material is a rigid closed cell product manufactured from molded Expanded Polystyrene (EPS) Bead stock. Traditional earth fill materials are heavier than Styrobar Geological Fill material and can cause settlement or instability of underlying soils. Styrobar Geological Fill material, is available in either block or board form, is used in ground fill applications where a lightweight fill material is required to reduce stresses on underlying or adjoining soils/structures.

Typical uses include applications for highway and railroad bed construction, landscaping, ramps and berms. The Physical Property Table below provides information on material property values for a range of Styrobar Geological Fill products. AMC Foam Technologies Inc. can also provide design assistance in selecting the fill material for specific applications.

The material property values below are intended to provide general guidance in selecting Styrobar Geological Fill material. Consult the manufacturer for other specific applications. The Product Type and Physical Properties coincide with types and material properties in ASTM D6817-06, Standard specification for Rigid Cellular Polystyrene Geofoam.

Physical Properties	ASTM Test	Units	Styrobar 22 Geological Fill Material Nominal Product Densities			
	Method		19	22	24	29
Density	C303	kg/m <sup>3</sup>	18.4	21.6	24	28.8
Minimum		(pcf)	(1.15)	(1.35)	(1.5)	(1.8)
Compressive Resistance	D1621	kPa	40	50	65	75
Minimum @1% Deformation		(psi)	(5.8)	(7.3)	(9.4)	(10.9)
Compressive Resistance Minimum @5% Deformation	D1621	kPa	90	115	140	170
		(psi)	(13.1)	(16.7)	(20)	(25)
Compressive Resistance Minimum @10% Deformation	D1621	kPa	110	135	155	200
		(psi)	(16)	(19.6)	(22.5)	(29)
Flexural Strength Minimum	C203	kPa	207	276	276	345
		(psi)	(30)	(40)	(40)	(50)
Limiting Oxygen Index Minimum	D2863	Percent %	24	24	24	24