



Perforated V-Series Geoweb® System Performance & Material Specification Summary
GW30V6 Wall Sections

	Property	Value			Test Method	
Base Material	Material Composition	Polymer – Polyethylene with density of 0.935 – 0.965 g/cm ³ (58.4 - 60.2 lb/ft ³)			ASTM D 1505	
	Color	Black - from Carbon Black	Tan, Green, Other Colors with no heavy metal content		N/A	
	Stabilizer	Carbon black content 1.5% - 2% by weight	Hindered amine light stabilizer (HALS) 1.0% by weight of carrier		N/A	
	Minimum ESCR	3000 hr			ASTM D 1693	
Strip Properties	Sheet Thickness	1.27 mm -5% +10% (50 mil -5% +10%)			ASTM D 5199	
	Surface Treatment	Performance: The polyethylene strips shall be textured and interior strips shall be perforated such that the peak friction angle between the surface of the textured / perforated plastic and a #40 silica sand at 100% relative density shall be no less than 85% of the peak friction angle of the silica sand in isolation when tested by the direct shear method per ASTM D 5321. The quantity of perforations in the interior cells shall remove 17.2% ± 0.5% of the cell wall area.		Material: The polyethylene strips shall be textured with a multitude of rhomboidal (diamond shape) indentations. The rhomboidal indentations shall have a surface density of 22 – 31 per cm ² (140 – 200 per in ²). In addition, interior strips shall be perforated with horizontal rows of 10 mm (0.4 in) diameter holes. Perforations within each row shall be 19 mm (0.75 in) on-center. Horizontal rows shall be staggered and separated 12 mm (0.50 in) relative to the hole centers. The edge of strip to the nearest edge of perforation shall be 8 mm (0.3 in) minimum and the centerline of the weld to the nearest edge of perforation shall be 18 mm (0.7 in) minimum.		
Cell & Seam Properties	Cell Details	Depth	Dimensions		Density per m² (yd²)	Area
			Length	Width		
	GW30V	150 mm (6 in)	267 mm (10.5 in)	330 mm (13.0 in)	22.7 (16.5)	440 cm ² (68.3 in ²)
	Short-term Seam Peel Strength	Cell Depth		Minimum Certified Cell Seam Strength		
	150 mm (6 in)		2130 N (480 lbf)			
	Long-term Seam Peel Strength	Long-term seam peel-strength test shall be performed on all resin or pre-manufactured sheet or strips. A 100 mm (4.0 in) wide seam sample shall support a 72.5 kg (160 lb) load for a period of 168 hours (7 days) minimum in a temperature-controlled environment undergoing a temperature change on a 1-hour cycle from ambient room to 54°C (130°F). Ambient room temperature is per ASTM E 41.				
Section Properties	Section Dimension	Section Width	Section Lengths (Cells Long: 3, 4, 5, 6, 7)			
		Fixed	In direction of section expansion			
	GW30V	2.64 m (8.67 ft)	From 0.800 m (2.63 ft) to 1.867 m (6.13 ft) in increments of 267 mm (10.5 in)			
Certifications & Warranties	Geoweb® Material	Geoweb® sections are manufactured under a quality management system that is ISO-9001:2000 certified. For additional certification and warranty information, refer to the Geoweb® Cellular Confinement System V Series Material Specification .				