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Permavoid 85s (PV85s) is a high strength, sustainable water management solution purpose-built for athletic fields, blue→green roofs, podium decks and landscape applications. Interconnected units, drain, store and convey stormwater in a shallow profile where it can be converted from a waste product into a precious resource. To do so, Permavoid systems utilize patented capillary cylinders which draw stormwater upward to vegetation without the need for sprinklers, pumps or energy. This can dramatically enhances landscape resilience during wet or dry extremes and forms the foundation for sustainable green infrastructure solutions.



PHYSICAL PROPERTIES		
Material	Polypropylene	
Weight per unit	6.49 lbs	2.94 kg
Length	27.95 in	710 mm
Width	27.95 in	710 mm
Depth	3.35 in	85 mm
Area per unit	5.426 ft <sup>2</sup>	0.504 m²
Occupied volume per unit	1.513 ft <sup>3</sup>	0.0428 m³
STRUCTURAL PROPERTIES		
Vertical compressive yield	103.7 psi	715 kPa
Lateral compressive yield	22.6 psi	156 kPa
Vertical deflection strength	464 psi / in	126 kPa/mm
Lateral deflection strength	55.3 psi / in	15 kPa/mm
Vertical creep limit (100 year)	24 psi	165 kPa
HYDRAULIC PROPERTIES		
Average perforated surface area	65 %	
Volumetric void ratio	95 %	
Void volume per unit	1.438 ft <sup>3</sup>	0.0407 m³
Conveyance at 0.0% Slope	37 GPM / ft <sup>2</sup>	24.9 LPS / m <sup>2</sup>
Conveyance at 1.0% Slope	78 GPM / ft <sup>2</sup>	53.2 LPS / m <sup>2</sup>
Conveyance at 2.0% Slope	109 GPM / ft <sup>2</sup>	74.1 LPS / m <sup>2</sup>
Conveyance at 3.0% Slope	134 GPM / ft <sup>2</sup>	91.0 LPS / m <sup>2</sup>
OTHER PROPERTIES		
Recycled content	100 %	
Recyclability	100 %	
Country of origin	United States of America	

## ACCESSORIES



**Tie Connector (PVTIE)** 1x required per tie slot

Accessory Anchor (PVAA) Quantity and location per mechanical plans

Capillary Irrigation Cone (PVWC-30/88) 4x required per unit

**Capillary Geotextile (Permatex CAP HP)** Required for capillary irrigation applications All sides wrapped with 12" [300mm] lap joints min.

## GEOTEXTILES

The following are for guidance only. Refer to design documents for site specific requirements.

- 1. Non-woven fabric for separation and/or infiltration: - Tencate - Mirafi 1100N (or approved equal)
- Woven fabric for separation and/or infiltration:
  Tencate Mirafi HP270 (or approved equal)
- Waterproof Membrane Liner for retention and/or detention:
  40 mil HDPE or LLDPE (or approved equal)

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