

LEAKDRAIN S5U Std leakage detection layer comprises a single cusped HDPE (High Density Polyethylene) high performance core. The core has the necessary compressive strength and in-plane flow capacity required to conduct leachate and other particle laden liquids without clogging. The core design has flat surfaces to provide protection and minimal stresses on the surrounding surfaces. Its main application is as a leak detection layer between two geomembranes at the base of containment systems.

Leakdrain Properties and Performance

Colour	Black				
Type and material	Single cusped (dimpled) HDPE (high density polyethylene)				
Dimple centres	(mm)	8	nominal		
Surface contact – top	(%)	6.5	nominal		
Surface contact - bottom	(%)	70	nominal		
Drainage void volume	(l/m ²)	3.3	nominal		
Mass per unit area	(g/m ²)	500	±10%	EN ISO 9864	
Overall thickness at 2kPa	(mm)	5.1	±10%	EN ISO 9863-1	
Tensile strength MD / CMD	(kN/m)	4.5 / 3.5	-10%	EN ISO 10319	
Elongation at peak MD / CMD	(%)	60 / 40	nominal	EN ISO 10319	
CBR puncture resistance	(N)	700	-20%	EN ISO 12236	
High Pressure OIT	(minutes)	> 600	ASTM D5885		
In-plane water flow MD and CMD		HG = 1.0	HG = 0.1	Hydraulic gradient	
at 20kPa confining pressure	(l/m·s)	1.92	±0.50	0.55	±0.15
at 100kPa confining pressure	(l/m·s)	1.75	±0.50	0.5	±0.15
at 200kPa confining pressure	(l/m·s)	1.64	±0.50	0.46	±0.15
with hard platen boundary conditions to simulate installation between geomembranes					
Resistance to weathering (UV)	Excellent			EN 12224	
Resistance to chemicals	Excellent			EN 14030	
Design life	120 years (manufacturer's declaration)				

Product Dimensions

Standard roll dimensions	2.2 x 150 m. Overlap allowance 2%.
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Notes

- The values given are indicative and correspond to results obtained in our laboratories and testing institutes. In line with our policy of continuous improvement the right is reserved to make changes without notice at any time.
- The tolerance on roll length is ±1.5% and on roll width is ±1.0%.
- Guidance on interface shear strength, creep and certain other parameters is available. Site specific tests are strongly recommended.
- Final determination of the suitability of any information is the sole responsibility of the user. ABG will be pleased to discuss the use of this or any other product but responsibility for selection of a material and its application in any specific project remains with the user.