

## **PAG 12 Geocomposite**

consists of a geotextile filter, thermally bonded on one side of a cuspated HDPE (High Density Polyethylene) core.

### **Geotextile**

Type	Non woven continuous filament needle punched and heat treated	
Material	Polypropylene	
Mass/unit area (g/m <sup>2</sup> )	140	BSEN 965:1995
Thickness at 2kPa (mm)	1.2	BSEN 964-1:1995
U.V. resistance	Excellent	
Tensile strength long/cross (kN/m)	7/9	BSEN ISO 10319:1996
Elongation at break long/cross (%)	80/35	BSEN ISO 10319:1996
Pore size $O_{90}$ (micron)	100-150	BS 6906 (2)
Water flow at 100mm (l/m <sup>2</sup> /s)	150	BS 6906 (3)
Breakthrough head (mm)	0	BS 6906 (3)
Puncture resistance (N)	1400	BSEN ISO 12236:1996
Tear resistance (N)	200	ASTM D4533-8

### **Core**

Type	Single cuspated (dimpled)	
Material	Prime HDPE (High Density Polyethylene)	
Mass/unit area (g/m <sup>2</sup> )	800	BSEN 965:1995
U.V. resistance	Excellent	
Impact resistance	Excellent (even at low temperatures)	

### **Composite**

In plane Water Flow at 100kPa (l/m/sec) at 240kPa at 500kPa with soft foam	<u>HG1.0</u>	<u>HG0.1</u>	BS 6906(7)(MOD)
	3.50	0.90	
	2.50	0.65	
	0.44	0.10	
Flow reduction (%) after 1,000,000 hours	<6		DTp CI514
Thickness at 2kPa (mm)	11 (12 <i>double wrapped</i> )		BSEN 964-1:1995
Tensile strength long/cross (kN/m)	18/20		BSEN ISO 10319:1996
Elongation long/cross (%)	60/30		(25/30 <i>double wrapped</i> ) BSEN ISO 10319:1996
CBR puncture resistance (N)	3,500		(4,700 <i>double wrapped</i> ) EN ISO 12236:1996
Life expectancy (yrs)	120		
Working temperature (°C)	-20 to 80		
Chemical resistance	Excellent resistance to all common chemicals		
Bacteria/fungi	Does not support growth		
Compatibility with	Fully compatible. All components compatible with potable water waterproofing membranes		
Health, safety, environment	INERT. No known health hazard. No precautions necessary		

### **Note**

- (1) The geotextile is bonded to the core to prevent intrusion into and blockage of the drainage passage under the action of pressure of backfill material.
- (2) The core has a flat side in contact with the waterproofing to reduce contact stresses to a minimum.
- (3) The values given are indicative and correspond to nominal results obtained in our laboratories and testing institutes. The right is reserved to make changes without notice at any time.
- (4) Allowable tolerances are +/- 10% of the typical value.
- (5) Refer to separate sheets for fixing instructions and packing dimensions.