

ATLANTIS® 52mm (2.05") DRAINAGE CELL SPECIFICATION SHEET

Atlantis® 52mm (2.05") Drainage Cell



	Standard Used	Metric	Imperial
Width		260mm	10.24"
Length		480mm	18.9"
Height		52mm	2.05"
Surface Area		90 to 95% void	
Material		85% recycled polypropylene + 15% Atlantis proprietary selected materials	
Biological & Chemical Resistance		Unaffected by moulds and algae, soil-borne chemicals, bacteria and bitumen	
UV Protection		UV Stabilised component added to product	
Service Temperature		-30°C to 120°C	-22°F to 248°F
Compressive Strength/ Ultimate Load	ASTM D1621	148 t/m2	210.51 psi
Flow Rate per unit width	ASTM D4716	>20l/s/m ² (0.01% gradient).	

Long-Term Unconfined Creep Test:

42 Day Dead Load Creep Test in accordance with ISO 13431

	Metric	Imperial					
Load Applied	750 kN/m2	108.74 psi					
Total Strain After 42 Days	No Further displacement	No Further displacement					
Creep Sustained After 42 Days	No further creep	No further creep					
Displacement (42 Days) in accordance with ASTM D1621							
Water Temp (°C)	Water Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Mean % deformation
20	68	5.2%	4.8%	4.1%	5.6%	5.2%	5.0%
30	86	6.1%	5.3%	5.8%	5.4%	6.4%	5.8%
40	104	6.4%	6.2%	6.8%	7.1%	6.2%	6.5%
50	122	7.5%	7.6%	7.1%	7.8%	8.3%	7.7%

Products must have a maximum deformation of <25%.

Compressive strength test - filled with sand

Filled with sand	Area (mm2)	Area (Inches2)	Load (Kg)	Load (LBS)	Compressive strength (t/m2)	Compressive Strength (PSI)
	54554.73	84.56	231332.1	510,000	4239.51	6,030

Note: Atlantis® products are manufactured from high quality recycled materials, the strength could vary slightly due to raw material, country of manufacture, manufacturing process and external conditions.

Safety Factors: Engineers, designers and geotechnical engineers should design and calculate safety factors to a serviceable limited state to suit specific project. In case of doubt, consult your nearest distributor or Atlantis representative.

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