

# CONDUCTIVE LEAK DETECTION CUSHION FOR GEOMEMBRANES

## BIDIM® C CONDUCTIVE NON-WOVEN GEOTEXTILE

### TECHNICAL DATA SHEET

Bidim® C is the world's first commercial conductive non-woven geotextile designed to enable precise leak detection surveys through Arc testing, identifying holes and defects as small as 0.2mm. It provides an effective and economical solution for designers and installers of geomembrane lining systems and potable water storage facilities.

- Strong three-dimensional structure with high elongation, providing excellent filtration and acting as a cushion to the subgrade
- Easy installation with no heavy machinery, equipment, or special skills required
- Durability with a high melting point and high UV resistance due to Bidim polyester properties
- Applicable for Waste, Mining and Water sectors



### BIDIM C - TECHNICAL DATA

	STANDARD	UNITS	DIRECTION	A19C	A34C	A64C	TEST FREQUENCY
<b>Index Tests</b>							
Wide Strip Tensile Strength	AS 3706.2	kN/m	MD	14.0	21.5	42.0	Every 17,600 m <sup>2</sup>
			XMD	14.0	21.0	42.0	
Wide Strip Toughness	AS 3706.2	kJ/m <sup>2</sup>	MD	3.2	5.2	12.3	
			XMD	3.7	5.7	12.6	
Grab Tensile Strength	AS 3706.2	N	MD	920	1,430	3,010	
			XMD	920	1,430	3,010	
Trapezoidal Tear Strength	AS 3706.3	N	MD	370	540	1,030	
			XMD	370	540	1,030	
CBR Burst Strength	AS 3706.4	N	-	2,400	3,700	6,950	
Pore Size (O <sub>95</sub> )	AS 3706.7	µm	-	<75	<75	<75	
Flow Rate @ 100mm Head	AS 3706.9	l/m <sup>2</sup> /s	-	175	155	80	
<b>Performance Tests</b>							
Interface Friction Angle (δ) <sup>†</sup>	ASTM D5321	o	Smooth HDPE	13 - 15			As required
			Textured HDPE	27 - 29			
Surface Resistivity ‡	ASTM D4496	Ω/sq	-	<15,000			Every 1,000 m <sup>2</sup> †

#### Notes:

\*: Interface friction analysis was carried out in a large-scale direct shear box with both interfaces completely submerged and loaded for 15 minutes prior to shearing. A load between 10-500kPa was used at a test speed of 1mm/min. The reported friction angles were determined from a best-fit linear regression line drawn through the test data across the noted load. Caution should be exercised in using these values for applications involving normal stresses outside the of the stresses covered by the test series or in isolation of site specific conditions and geotechnical investigations. Results may vary across different loads, geosynthetic material types and testing facilities. These values should always be verified by actual interface friction analysis using project-specific materials/conditions.

†: Initial testing will be every 1,000 m<sup>2</sup>, however this testing frequency may decrease or may be replaced by continuous testing.

‡: A lower surface resistivity value indicates higher conductivity

The data and specifications contained in this table are obtained from the manufacturer's laboratory testing. To ensure this information is current please contact your local branch of Geofabrics Australasia.

Please note: The Grab Tensile Strength test standard AS 3706.2 is equivalent to AS 2001.2.3b. All index testing has been carried out by a NATA accredited laboratory and copies of test certificates are available on request. The product properties listed in the above table are typical values.

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