



# A STABILISING & DEFENSIVE BARRIER AGAINST COASTAL EROSION

## ELCOROCK® GEOTEXTILE SAND CONTAINER

### TECHNICAL DATA SHEET: TYPICAL VALUES

The Elcorock shoreline protection system consists of sand filled geotextile containers built to form a stabilising, defensive barrier against coastal erosion. The Elcorock Geotextile Sand Containers are made from Texcel, a unique staple fibre blend of polyester and polypropylene, providing flexibility and allowing the product to resist the natural forces of the marine environment. Each sand container is filled with sand or gravel mix to build breakwaters, sea walls, revetments, groynes and artificial reefs.

- Highly resistant to abrasion, hydrocarbon, impact damage and UV degradation with over 20 years of proven success in harsh coastal environments
- A more cost-effective alternative to traditional coastal erosion protection systems made from concrete, rock armour, steel or timber
- Natural look and soft feel - increasing public amenity of foreshore areas and enhancing the environment
- Applicable for the Coastal sector



### ELCOROCK - SYSTEM DETAILS

	40KG TO 100KG 0.3M <sup>3</sup> CONTAINERS			0.75M <sup>3</sup> CONTAINERS				1.2M <sup>3</sup> CONTAINERS			
Products Codes	SB40VELCRO	SB100	ER030	ER075NS	ER075VNS	ER075VFNS	ER075FNS	ER120NS	ER120VNS	ER120VFNS	ER120FNS
Product Description	<ul style="list-style-type: none"> <li>· Smaller sand containers in size</li> <li>· Used typically on inland protection works, stream protection and small on-shore structures in milder conditions</li> <li>· Easily filled with little mechanical equipment, suitable for community groups or landowners</li> </ul>			<ul style="list-style-type: none"> <li>· Medium-sized sand containers</li> <li>· Used typically in sea walls and groyne structures where sites experience mild conditions. Also used in emergency works and temporary structures</li> <li>· Highly recommended where there is a chance of impacting debris</li> <li>· Scour flap containers are also available in this size</li> </ul>				<ul style="list-style-type: none"> <li>· Ideal in emergency or temporary type structures as they are quicker to fill</li> <li>· Used in sites that experience moderate wave action, these containers can be suited to sea walls and groyne structures</li> </ul>			
Filled Weight	40kg sand bag	100kg sand bag	0.3m <sup>3</sup> container	1,400kg				1,800kg			
Filled Width (Approx.)	450mm	550mm	750mm	1.35m				1.5m			
Filled Length (Approx.)	525mm	900mm	1.35mm	1.8m				1.95m			
Filled Height (Approx.)	150mm	200mm	350mm	400mm				400mm			
Material	Marine grade			Marine & composite marine grades				Marine & composite marine grades			
Closing System	Pillow slip/velcro	On site sewn	On site sewn	On site sewn or laced closure				Laced close on site			
Fill	No	No	Yes	Yes				Yes			
Dry Sand Filled	Yes	Yes	Yes	Yes				Yes			
Pallet Quantity	200	180	72	32	20	16	20	24	15	10	16

## ELCOROCK - SYSTEM DETAILS

Products Codes	2.5m <sup>3</sup> Containers				5.0m <sup>3</sup> Containers		Mega Containers			
	ER250	ER250V	ER250VF	ER250F	ER500		C4V	C6V	C8V	C12V
Product Description	<ul style="list-style-type: none"> <li>Used in revetments and groynes, due to their large size and high stability, even under the harshest of conditions</li> <li>Filling and placement is achieved using specialised hydraulic filling apparatus and placement cradles provided by Geofabrics to ensure complete filling and a consistent finish</li> <li>Scour flap containers are available in this size</li> </ul>				<ul style="list-style-type: none"> <li>Heavy duty units for high energy coastal applications</li> <li>Groynes, sea walls, defense barriers</li> <li>Hydraulically filled used sand slurry</li> <li>Lifted by slings or filled in-situ where conditions permit</li> </ul>		<ul style="list-style-type: none"> <li>Engineered sand filled tubes that offer excellent durability, robustness and usability performance</li> <li>Withstands some of the harshest conditions</li> <li>A large range of standard and customised sizes are available</li> </ul>			
Filled Weight	4,500kg				9,000kg		Up to 1,000t			
Filled Width (Approx.)	1.8m				3.35m		1.2m – 4.5m			
Filled Length (Approx.)	2.3m				2.3m		Up to 20m			
Filled Height (Approx.)	600mm				800mm		Up to 2m			
Material	Marine & composite marine grades				Marine & composite marine grades		Marine & composite marine grades			
Closing System	Laced close on site				Laced close on site		Lid			
Fill	Yes				Yes		Dredge filled			
Dry Sand Filled	Yes - hydraulic compaction				Yes		No - hydraulically filled			
Pallet Quantity	18	12	89	13	10		N/A			

## TEXCEL® COASTAL GEOTEXTILE - TYPICAL VALUES TECHNICAL DATA

Test	Units	0.30m <sup>3</sup> Containers	0.75m <sup>3</sup> & 1.2M <sup>3</sup> Standard Containers	0.75m <sup>3</sup> & 1.2m <sup>3</sup> Containers	2.5m <sup>3</sup> & Mega Standard Containers	2.5m <sup>3</sup> , 5.0m <sup>3</sup> & Mega Containers
Fibre Type	-	Polyester	Polyester	Polyester/ Polypropylene	Polyester	Polyester/ Polypropylene
Mass (AS3706.1)	g/m <sup>2</sup>	800	800	1,600	1,200	2,200
CBR (AS3706.4)	N	6,500	6,500	10,000	10,300	12,000
Wide Strip Tensile Strength MD (AS3706.2)	kN/m	35	35	40	50	50
Wide Strip Tensile Strength XMD (AS3706.2)	kN/m	40	40	65	65	85
Abrasion Resistance MD/XMD (BAW Rotating Drum)	% Strength Retained	>50	>50	>70	>60	>75
Seam Strength MD (AS3706.6)	kN/m	30	30	35	46	50
Seam Strength XMD (AS3706.6)	kN/m	35	35	40	49	55
Abraded Seam Strength (BAW Rotating Drum)	% Strength Retained	80%	80%	90%	91%	100%
Hydrocarbon (Diesel) Resistance MD/XMD (AS3706.12)	% Strength Retained	N/A	N/A	N/A	>90	>90
UV Resistance 500 Hours (AS3706.11)	% Strength Retained	>50	>50	>80	>60	>80
Pore Size O <sub>95</sub> - Sieve Method (AS3706.7)	µm	<75	<75	<75	<75	<75
Flow Rate @ 100mm head (AS3706.9)	l/m <sup>2</sup> /s	40	40	20	26	15
Bond Strength of Geocomposite Ply Adhesion (ASTM D7005) <sup>1</sup>	kN/m	N/A	N/A	6	N/A	6

1. This parameter is indicative and only measured periodically due to the difficulty in separating layers.

Visit [geofabrics.co](https://www.geofabrics.co) or call 1300 60 60 20 (AU)  
or [geofabrics.co.nz](https://www.geofabrics.co.nz) or call 0800 60 60 20 (NZ)

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