



A STABILISING & DEFENSIVE BARRIER AGAINST COASTAL EROSION

ELCOROCK® GEOSYNTHETIC SAND CONTAINER

TECHNICAL DATA SHEET: TYPICAL VALUES

The Elcorock shoreline protection system consists of sand filled geosynthetic containers built to form a stabilising, defensive barrier against coastal erosion. The Elcorock geosynthetic 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 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 25 years of proven success in harsh coastal environments
- A 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

ELCOROCK - TECHNICAL DETAILS

	40KG TO 100KG 0.3M³ CONTAINERS			1.2M³ CONTAINERS			
Products Codes	SB40VELCRO	SB100	ER030	ER120NS	ER120VNS	ER120VFNS	ER120FNS
Product Description	• Typically used for inland protection works, stream protection and small on-shore structures • Easily filled with minimal equipment, suitable for community groups or landowners			• Ideal for use in semi-permanent, temporary and emergency structures • These geosynthetic sand containers (GSC) can be suited to sea walls and groyne structures			
Filled Weight	40kg sand bag	100kg sand bag	0.3m³ container	1,800kg			
Filled Width (Approx.)	450mm	550mm	750mm	1.5m			
Filled Length (Approx.)	525mm	900mm	1350mm	1.95m			
Filled Height (Approx.)	150mm	200mm	350mm	400mm			
Material	Marine grade			Marine & composite marine grades			
Closing System	Pillow slip/velcro	On site sewn	On site sewn	Laced close on site			
Fill	No	No	Yes	Yes			
Dry Sand Filled	Yes	Yes	Yes	Yes			
Pallet Quantity	150	180	72	13	13	10	10

ELCOROCK - TECHNICAL DETAILS

	2.5m³ Containers				5.0m³ Containers	Mega Containers			
Products Codes	ER250	ER250V	ER250VF	ER250F	ER500V	C4V	C6V	C8V	C12V
Product Description	- Used in revetments and groynes due to their large size and high stability, even under the harshest of conditions - Filling and placement is achieved using specialised hydraulic filling apparatus and placement cradles provided by Geofabrics to ensure complete filling and a consistent finish - Scour flap containers are available in this size				- Heavy duty units for high energy coastal applications - Groynes, sea walls, defence barriers - Hydraulically filled used sand slurry - Lifted by slings or filled in-situ where conditions permit	- Engineered sand filled tubes that offer excellent durability, robustness and performance - Withstands some of the harshest conditions			
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				Screwed and glued lid	Screwed and glued lid			
Fill	Yes				Yes	Dredge filled			
Dry Sand Filled	Yes - hydraulic compaction				Yes	No - hydraulically filled			
Pallet Quantity	18	12	9	13	10	1			

TEXCEL® COASTAL GEOTEXTILE - TYPICAL VALUES TECHNICAL DATA

Test	Units	0.30m³ Containers	1.2m³ Standard Containers	1.2m³ Containers	2.5m³ & Mega Standard Containers	2.5m³, 5.0m³ & Mega Containers
Fibre Type	-	Polyester	Polyester	Polyester/ Polypropylene	Polyester	Polyester/ Polypropylene
Mass (AS3706.1)	g/m²	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 ₉₅ - Sieve Method (AS3706.7)	µm	<75	<75	<75	<75	<75
Flow Rate @ 100mm head (AS3706.9)	l/m²/s	40	40	20	26	15
Bond Strength of Geocomposite Ply Adhesion (ASTM D7005) ¹	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.com.au** or call 1300 60 60 20 (AU)
or **geofabrics.co.nz** or call 0800 60 60 20 (NZ)

