

Gabions

Double Twist Wire Mesh Gabions and Mattresses



Description

Gabions and Reno® mattresses are manufactured using high quality double twist mesh. The double twist ensures the integrity of the mesh should it be damaged. The mesh is made by twisting pairs of wires through 540 degrees and then connected to adjacent wires to form hexagonal apertures. The wire used in the manufacture of the mesh is mild steel wire with either an advanced technical Galmac coating (95% Zn + 5% Al or Mischmetal) or a heavy duty Class A zinc coating which is applied by hot-dip galvanising to the requirement of AS4680. Additional protection is achieved through the use of a PVC coating. This increases the life span of **Gabions and Reno® Mattresses** when used in water, polluted or corrosive environments.

Gabions and Reno® mattresses have a proven history of successful installations throughout Australia. They form permanent, engineered solutions to the problems of erosion, stability and the forces of nature.

Gabions and Reno® mattresses are

- Robust
- Durable
- Versatile
- Natural rock appeal
- Permeable
- Flexible



Applications

There are a wide variety of uses of **Gabions and Reno® mattresses**:

- Retaining walls
 - Mass Gravity Walls
 - **Tensar®** Geogrid Reinforced Walls
- Channel erosion protection
- Weirs – stepped, sloped or vertical
- Culvert head walls and outlet scour protection
- Low level creek crossing
- Architectural features
- Sound barriers

When used in conjunction with Geofabrics extensive range of geosynthetic products, the possibilities are almost endless.

Engineered Structural Strength and Beauty

The construction of large scale retaining walls and bridge abutments become feasible through the use of **Tensar**[®] uniaxial geogrids. The **Tensar**[®] reinforcement restrains the lateral pressures from the retained earth and traffic loadings. The reinforcement is attached to the **Gabions** by the use of a high strength connection and then laid into the backfill. The resulting structure is both robust and aesthetically pleasing.



Architectural Features

Gabions and Reno[®] **mattresses** are not only robust and durable, but when filled with a locally available rock, a natural rock wall finish can be achieved.

Impressive entrances and feature walls are easily achieved by discerning rock selection. Varying rock sizes and types in a project can achieve spectacular results. The gabions and mattresses can be shaped on site to produce tapered or varying shapes. The options are endless with **Gabions and Reno**[®] **mattresses**.



Environmentally Friendly

Gabions and Reno[®] **mattresses** are environmentally friendly products. The blending of the gabions and mattresses into the environment is rapid. The voids in the rockfill become progressively filled with silt promoting vegetation growth which is essential to the preservation and maintenance of the ecological balance of the surrounding environment.

Installation

Installation requires no specialised equipment or personnel. A detailed installation guide is available to help your installers achieve the perfect finish. Geofabrics staff can train your installers on-site or can offer a list of experienced installers in your area.



For the ultimate installation tool, a pneumatic hog ring gun will speed up the lacing of the wire baskets. Hand lacing time for the assembly and installation can be reduced by half with the use of hog rings which are available in either stainless steel or heavily galvanised.

Pneumatic hog ring guns are available for hire through your local Geofabrics office.

Gabions and Reno[®] mattresses for permanent, engineering solutions to the problems of erosion, stability and maintaining the equilibrium between land and water.

Properties	Gabions	Reno [®] Mattresses
Wire Diameter (mm)	2.7 (min)	2.0 (min)*
Nominal Mesh Size (mm)	80 x 100	60 x 80
Selvedge Wire Diameter (mm)	3.4 (min)	2.4 (min)
Binding Wire Diameter (mm)	2.2 (min)	2.2 (min)
Galmac Coating (gsm)	245 (min)	220 (min)
PVC Coating (mm)	0.40 (min) Grey	0.40 (min) Grey
Rock Fill Material (Recommended Only)	120mm (min) 200mm (max) (min 80% greater than 150mm)	90mm (min) 150 mm (max) (min 80% greater than 100mm)
Dimensions (length x width x height)	1 x 1 x 1 2 x 1 x 1 4 x 1 x 1 2 x 0.5 x 0.5 2 x 1 x 0.5 4 x 1 x 0.5	6 x 2 x 0.17 6 x 2 x 0.23 6 x 2 x 0.30 6 x 2 x 0.50*

*6 x 2 x 0.50 mattress has 2.7mm wire diameter

IMPORTANT NOTICE

The information contained in this brochure is general in nature. In particular the content of this brochure does not take account of specific conditions that may be present at your site. Site conditions may alter the performance and longevity of the product and in extreme cases may make the product wholly unsuitable. Any data or specifications contained in this brochure are average values obtained in our laboratory. Actual dimensions and performance may vary. If your project requires accuracy to a certain specified tolerance level you must advise us before ordering the product from us. We can then advise whether the product will meet the required tolerances. Where provided, installation instructions cover installation of product in site conditions that are conducive to its use and optimum performance. If you have any doubts as to the installation instructions or their application to your site, please contact us for clarification before commencing installation. In all cases we recommend that advice be obtained from a qualified consulting engineer before proceeding with installation. © Copyright held by Geofabrics Australasia Pty Ltd. All rights are reserved and no part of this publication may be copied without prior permission.

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MELBOURNE (03) 8586 9111 Fax: (03) 8586 9186	SYDNEY (02) 9821 3277 Fax: (02) 9821 3670	NEWCASTLE (02) 4950 5845 Fax: (02) 4950 5895	PERTH (08) 9309 4388 Fax: (08) 9309 4389	ADELAIDE (08) 8177 2055 Fax: (08) 8177 2044	HOBART (03) 6273 0511 Fax: (03) 6273 0686
BRISBANE (07) 3279 1588 Fax: (07) 3279 1589	TOWNSVILLE (07) 4774 8222 Fax: (07) 4774 8655	BUNDABERG (07) 4155 9968 Fax: (07) 4155 9968	GOLD COAST (07) 5563 2131 Fax: (07) 5563 3727	DARWIN (08) 8984 1600 Fax: (08) 8984 1614	