

CASE STUDY

Erosion Mats

Project: Waitangi Golf Club Bunker Stabilisation
Date: October 2011
Client: Waitangi Golf Club
Location: Waitangi, Northland



BunkerMat®

An area that once was bush covered is now a very playable green. This is the first step of a renovation programme for Waitangi Golf Club.

Kura Golf Course Design chose **Megaflo®** panel drain as the drainage of the new 11th green which is just 2.5 metres from the sea. Before any reconstruction took place, rock from an old quarry on the site had to be cleared. This was used for retaining and aesthetics throughout the course. Strippings from the quarry form the base for the **Megaflo®** rigid panel drain which was laid flat over the subgrade.

This was covered with a 100mm of base metal and 300mm of sand. Known as the “trenchless drainage” system, **Megaflo®** was easily installed and less expensive than other methods when trenching, backfilling and labour were factored into the costs. The 11th green has now changed from Par 4 to Par 5. The changes have impacted on the 12th which has become a Par 4.

Alan Smithyten, Waitangi Course Superintendent, commented “I couldn’t believe how easy **Megaflo®** was to install, with 3 staff it was laid in a morning. Our committee and players are very happy with the result.”

To complete the dynamics of this new green, an interesting Bunker was constructed to the west of the fairway formed on free draining rock base, with **BunkerMat®** pinned around the top of the lip on the bunker face. This 36m x 5m bunker is termed a “saviour” bunker as the hole runs along the edge of the sea.

BunkerMat® is a three dimensional sand retention and drainage matting. As sand is trapped within the open structure of the fibres, this allows sand to be held on a steeper bunker slope.

BunkerMat® has the following benefits:

- › Minimises sand contamination
- › Minimises bunker face erosion
- › Reduces sand thickness required
- › Reduces maintenance required

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Before construction



Construction



Completed green

QUALITY - SUPPORT - EXPERTISE

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Completed bunker

The bulk of the work was carried out by an enthusiastic group of members, volunteers and contractors. The result shows what can happen with good design and a group that pulls together.

How BunkerMat® technology works.

The **BunkerMat®** system for golf courses was designed to retain sand on steep bunker faces.

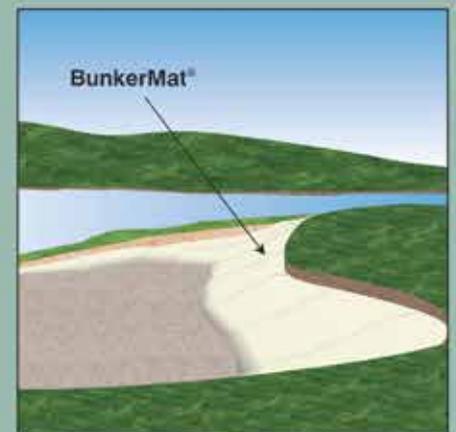
BunkerMat® solves the challenging problems faced by golf course architects who wish to create bunkers with a more dramatic shape and structure, but keep maintenance to a minimum.

The system works by trapping the bunker sand in the fibres and preventing downward movement. Only a 20mm covering of sand is required, which effectively creates a maintenance-free bunker face.

The high tensile strength of the product means the bunker liner can withstand the weight of wet sand without tearing or slumping, and the fibres are UV resistant to prevent deterioration when exposed to sunlight.

Because of the product's flexibility and strength, costs associated with installation are greatly reduced.

BunkerMat® has been so successful it is now installed on numerous championship and public golf courses around the world.



BunkerMat® Installation