CASE STUDY:

STABILISED PILING PLATFORM

EI8HT Apartments

GLENELG FORESHORE, SA
DECEMBER 2017
CLIENT: **ALL ACCESS CIVIL**

TENSAR SS GEOGRIDS

Tensar SS biaxial geogrids are used in the stabilisation of soils and aggregates in construction of structures such as temporary roads, haul roads, working platforms and foundations. Tensar SS biaxial geogrids can solve ground stabilisation problems because they interlock very efficiently with granular materials. When granular particles are compacted over these grids, they partially penetrate and project through the apertures to create a rigid and positive interlock.

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GEOFABRICS®
Smarter Infrastructure

The new 11 storey Ei8ht Apartment building on South Esplanade on the Glenelg Foreshore created a unique engineering problem for the project team.

The building, which includes a two-level basement car park, had to be constructed on extremely soft ground comprising loose dune sand of assumed CBR 2%. To be able to undertake piling for the project, a working platform suitable for the maximum proposed piling loads of 340kPa was required.

By utilising Tensar SS geogrids the platform depth could be reduced without compromising on performance and strength.

The final design included a 400 mm deep pavement over Tensar SS40 geogrid on top of existing dune sand. The Tensar SS40 layer provides stabilisation of the platform that would otherwise have only been achieved with a deeper pavement, providing the project team with significant cost savings.