

Library No.
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Project: Sovereign Harbour, Eastbourne, Sussex

**Client:** Tarmac Construction Limited

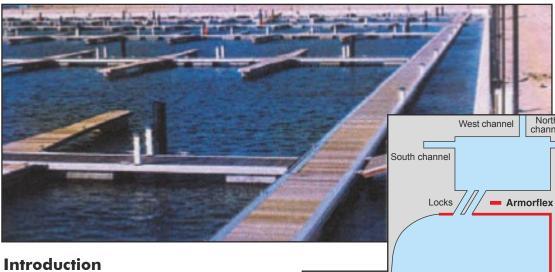
**Consultant:** Ove Arup & Partners

**Consultants:** Kier Construction Limited (Design & Build contract)

**Products:** Almost 10,000m<sup>2</sup> of Armorflex 140

Flexible Concrete Revetment System

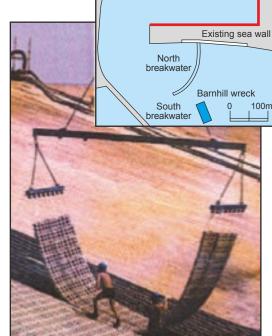
Date: Summer 1992



Sovereign Harbour is a £40m development transforming 14ha. of old gravel pits into an outer tidal harbour with locks into a constant depth inner harbour. The complete facility provides berths for 650 craft, a hotel, various leisure and retail outlets, together with a prestigious housing development.

## Construction

Excavation for the outer harbour involved the removal of 400,000m³ of material. The west facing gradients of the outer harbour were constructed with an artificial beach slope of 10% to dissipate wave energy entering in through the breakwater. The other three sides, which provide berthing facilities for various kinds of leisure boats, have a steeper 33% slope. These slopes which are within the basin are protected using a geotextile filter over which Armorflex precast concrete revetment blocks have been laid.





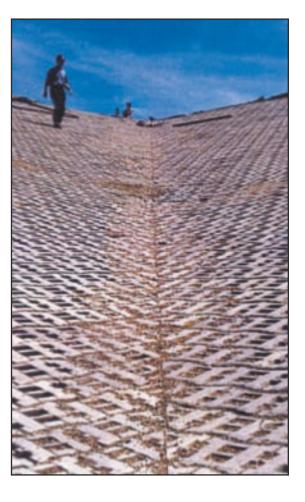
## Installation

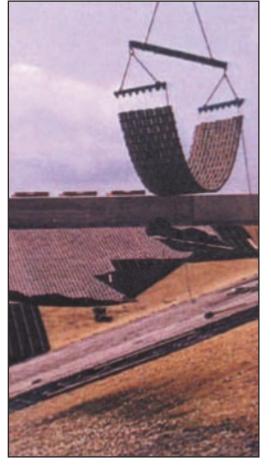
Over 700 mats were delivered to site keeping pace with daily installation targets. Kier Construction anticipated a single team to lay the revetment at a rate of about 3,000m² (210 mats) a week. Once the mats were installed the interstices between the blocks were filled with 5-20mm of angular aggregate to interlock the blocks. At the top of each slope is a reinforced concrete wall to contain the water.

# **Conclusion**

This major phase of the operation was completed in the Autumn of 1992 and was opened the following Spring. A new phase of development is planned.









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