



KAYTECH
ENGINEERED FABRICS

Durban Harbour Quay Wall

CASE STUDY

PROJECT:	New Quay Wall – D – G Sheds, T Jetty, Durban Harbour	DATE:	2003
CLIENT:	National Ports Authority	QUANTITY:	100 000 m ²
CONSULTANT:	Portnet	PRODUCT:	Bidim A6 & A7
CONTRACTOR:	Grinaker / Interbeton JV		

Durban is South Africa's main freight and container port and each year 30-million tons of cargo – worth more than R100-billion – pass through it. This is equal to 65 percent of the revenue earned by all African ports. More facilities were necessary to be able to continue to cope with this huge volume of cargo traffic, the first involving a 1 200m long R270-million new quay wall in the D-G sheds area south of T Jetty.

52 x 19m high x 17m wide caissons, pre-fabricated in the Bayhead area, were then floated individually into position, filled with water and lowered onto a prepared base. Bidim A7 was laced on to a specially built 20m x 25m floating platform made from steel pipes into which air was pumped. The platform was towed to the site, water pumped into the pipes and the unit sunk into position in front of the caisson. A 400mm stone bed was placed over the bidim A8 to protect the wall from turbulence generated by ships' propellers and the vessel manoeuvring during berthing or departure.



A Bidim A6 sock barrier was used between the caissons to prevent leakage of the sand fill behind the caissons from leaching out of the reclaimed area and into the harbour. Bidim A6 was also used as an inner lining on the fill side of the caissons as a further measure to prevent the sand fill from filtering out from behind the quay wall.