01 PILAR COASTAL DEFENCE

PARAGUAY RIVER BANK REINFORCEMENT · FLAGSHIP PROJECT

PROJECT CASE · PARAGUAY



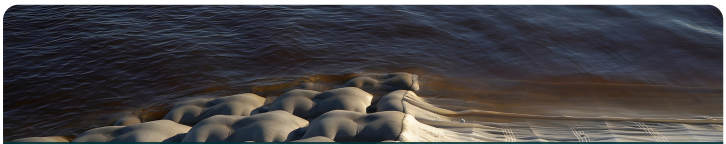
The finished defence: 150 mm AB600 mattress on the Paraguay River, at sunset

172,000	AB600	1,000	26,460
M² OF COVERAGE	ARTICULATED BLOCK · 150 MM (15 CM)	M² INSTALLED PER DAY	M³ OF CONCRETE — CAST IN SITU

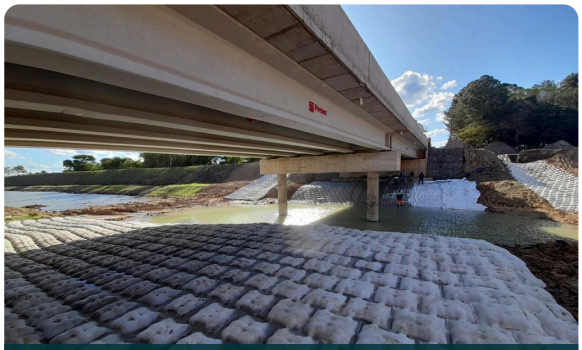
The challenge: the Pilar river defence runs along **15 km** on a navigable stretch of the Paraguay River. Its worst enemy is the **wake of passing vessels**, which hits the slope every day; and at every **flood** the river rises and runs harder against the embankment. A continuous, durable and fast-to-build lining was needed over 172,000 m².

The solution: mattress **HYDROTEX® AB600 Articulated Block, 150 mm (15 cm)** with internal cables in one direction. The panels were made to measure from the hydraulic information, the survey data and the expected climatic conditions. With technical training on site, the installer reached an output of **≈1,000 m² a day** of formwork filled with concrete. At a rate of 1 m³ of fine aggregate concrete per 6.5 m² of mattress, the project consumed **≈26,460 m³ of concrete** — and once finished, the lining forms **a single, fully interconnected piece** by the cables.

> "We covered 15 km of bank with a single continuous piece, at a rate of 1,000 m² per day. The slope withstands the daily wave action and protects the shore during every flood." — **Ece**



The filled mattress enters the river; on the right, a panel not yet filled



Bridge pier protection on the same project

PROJECT FILE

Project	Pilar Coastal Defence
Location	Pilar, Ñeembucú — Paraguay river
Product	HYDROTEX® AB600 Articulated Block · 150 mm
Area	172,000 m²
Concrete	≈26,460 m³ (1 m³ per 6.5 m²)
Performance	≈1,000 m²/day filled