

Secutex® Soft Rock

Coastal Protection

Project name
Protection shore Bang Muang, Takua Pa District,
Phang Nga, Thailand

Owner
Department of public works and town & country planning

Contractor
Prayongsinkarnyota Limited Partnership

Products
Secutex® Soft Rock R 601
Secutex® H 501





Fig. 1: Eroded coastline endangers stability of the embankment.



Fig. 2: Installation of Secutex® Soft Rock sand containers as natural erosion control measure.

The Bangsak Beach, which is located at Bang Muang, Takua Pa district, Phang Nga province of Thailand, has been frequently visited by both tourists and locals due to its beautiful beachfront. The existence of the beach is important to the local economy and especially to tourism in the region.

Challenge

Situated at the Andaman coastline, Bangsak Beach is subject to strong winds and currents during the southwest monsoon every year. This led to continuous coastal erosion, as shown in Fig. 1. The beach became narrower with time, and the stability of the coastline was at risk.

Solution

For a natural and effective coastal protection, Naue and the local distributor proposed the use of Secutex® Soft Rock. The flexible sand containers provide the following advantages:

- They adapt very well to local site conditions and settlements or deformations.
- They provide a complete erosion protection system by providing a homogeneous filter function and the required ballast which withstands the hydraulic loads.
- They provide a natural appearance compared to conventional hard structures.

At the 340m long coastline, Secutex® Soft Rock has been installed with a slope gradient of 1V:3H (Fig. 2). The bags are covered with sand (1V:5H) to protect them from UV radiation and to form the beachfront.

Additional benefit

The sand container solution blends perfectly with the natural environment. It allows the growth of plants (Fig. 3). The roots help to keep the sand cover layer in place. Secutex® Soft Rock at Bangsak Beach Thailand is coastal protection in perfection!



Fig. 3: Plant growth on the covered Secutex® Soft Rock sand containers