



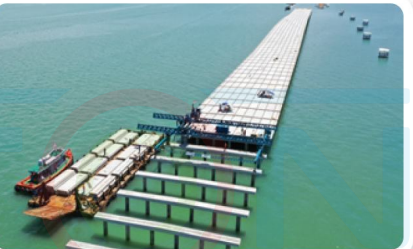
# MARINE STRUCTURE CP

## DESCRIPTION

Concrete products for marine structures are essential in the construction of jetties, port bridges, and breakwaters. WIKA Beton offers a variety of breakwater products such as A-Jacks and Tetrapods, as well as precast components for wharf and jetty/trestle structures, including Piles, Pile Caps, Beams, and Slabs.

For breakwater types like A-Jacks and Tetrapods, component weights range from 1.2 tons to 10 tons. Tetrapod products are made in two components to facilitate distribution, which are then assembled into a complete tetrapod unit. In the construction of wharves and jetties, the use of precast concrete products offers many advantages, such as faster construction, easier construction work, and guaranteed structural quality compared to on-site casting methods. The use of high-quality concrete incorporating cementitious materials like fly ash, silica fume, and others results in denser concrete that can withstand marine environments, providing high durability and longevity for the structures. In addition to the products mentioned above, WIKA Beton can also produce custom products according to customer needs.

## Types of Marine Product

<ul style="list-style-type: none"> <li>● <b>Breakwater</b> <ul style="list-style-type: none"> <li>• A-Jack</li> <li>• Tetrapod</li> </ul> </li> </ul> 	<ul style="list-style-type: none"> <li>● <b>Precast Harbour</b> <p>Precast Component : Pile Cap, Fender, Half Slab/Slab, U-Beam</p>  </li> </ul>	<ul style="list-style-type: none"> <li>● <b>Trestle/Jetty</b> <p>Precast Component : Pile, Pile Cap, Beam, Slab</p>  </li> </ul>
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## DESIGN REFERENCE

### Design

SNI 6880 : 2016  
SNI 2847 : 2019

Structural Concrete Specification  
Indonesian Standar Code for Concrete

## PRODUCT SHAPE & SPECIFICATION

### ▶ Breakwater

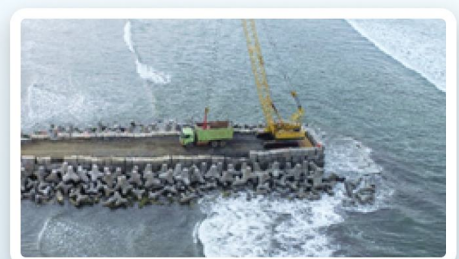
#### ▶ A-Jack (1,3t, 4t, &10t)



#### ▶ Tetrapod (0,5t, 1t ,2t, 4t, 4,5t, 6t & 7t)



## PROJECT REFERENCE



Ijo Logending Breakwater - Middle Java

## PRECAST HARBOUR | PROJECT REFERENCE

### ► Port of Malahayati



PRECAST PILE CAP



PRECAST FENDER



PRECAST HALF SLAB

A new 10,000 DWT Malahayati Harbour Project is a part of government project for rehabilitate and reconstruction facilities in Nanggroe Aceh Darussalam Province after tsunami disaster in 2004. The harbour uses a precast components for pile cap, beam and half slab to ensure the quality of material and fast construction method. Precision of precast concrete is the main for success of this project.

### ► Port of Sabang



PRECAST PILE CAP



PRECAST U-BEAM



PRECAST SLAB

A new Sabang Bay Harbour which located in Nanggroe Aceh Darussalam province, is design to be a CT3 transit harbour that can also accommodate 10,000 DWT boat. The purpose of this harbour is to support development around Sabang area in coming year as a business and tourism hub. The harbour is designed with precast component for pile cap, U-shell beams and half slab to ensure the quality of material and fast construction method.

## TRESTLE/JETTY | PROJECT REFERENCE

### ► Trestle at Cirebon Coal Electric Power Plant 1x660MW



The 2-kilometer trestle at the Cirebon Coal Electrical Power Plant Area is use to distribute the coal consumed to drive the 660 MW power plant. The Trestle uses a 20-meter long of precast PC-I girder with high concrete compression strength rods for its upper structure.

### ► Gorgon Project - Barrow Island Lng Jetty And Marine Structures



Saipem Leighton Consortium Chevron Australia Pty Ltd