

Breakwaters have a solid construction of waterproof reinforced concrete with a core of expanded polystyrene. The sections are 15 or 20 meters long, giving them excellent wave breaking capacity and making them very suitable for protection of bays and harbours. The width can vary from 3 to 6 meters with a height of 1.4 and 1.8 meters.

Breakwaters are available in the following dimensions::

### Breakwater type BW14 (height 1,4 meter)

**BW14-3015**: 15 x 3 x 1,4 meter - 30 ton, **BW14-3020**: 20 x 3 x 1,4 meter - 37 ton **BW14-4015**: 15 x 4 x 1,4 meter - 35 ton, **BW14-4020**: 20 x 4 x 1,4 meter - 44 ton **BW14-5015**: 15 x 5 x 1,4 meter - 44 ton, **BW14-5020**: 20 x 5 x 1,4 meter - 55 ton **BW14-6015**: 15 x 6 x 1,4 meter - 50 ton, **BW14-6020**: 20 x 6 x 1,4 meter - 62 ton

## Breakwater type BW18 (height 1,8 meter)

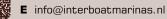
**BW18-3015**: 15 x 3 x 1,8 meter - 35 ton, **BW18-3020**: 20 x 3 x 1,8 meter - 45 ton **BW18-4015**: 15 x 4 x 1,8 meter - 41 ton, **BW18-4020**: 20 x 4 x 1,8 meter - 51 ton **BW18-5015**: 15 x 5 x 1,8 meter - 51 ton, **BW18-5020**: 20 x 5 x 1,8 meter - 64 ton **BW18-6015**: 15 x 6 x 1,8 meter - 57 ton, **BW18-6020**: 20 x 6 x 1,8 meter - 71 ton



INTER BOAT MARINAS Sikkel 3 NL-3274 KK Heinenoord - The Netherlands T +31 (0)78 67 77 000



www.interboatmarinas.nl









# **Technical information**

# Load capacity

The standard uniformly distributed load of our breakwaters is: 500 kg/m<sup>2</sup>.

# Freeboard

The unloaded freeboard of the breakwaters is at least 40 cm to a maximum of 120 cm, depending on the type of element.

#### Construction

The breakwaters are made of waterproof concrete with a density of 45N/mm<sup>2</sup> and reinforced with galvanized steel. The core consists of expanded polystyrene with a density of 15 kg/m<sup>3</sup> (EPS60). Specifications can be customized according to customer requirements.

#### **Cable ducts**

Plastic cable ducts can be poured in during the manufacturing of the breakwaters.

## **Fenders**

Standard wooden fender frames made of impregnated pine are fitted to both longitudinal sides of the breakwaters. If disered, the fender frames can be made of rubber D-fenders or polyethylene.

#### Interconnection

The breakwaters type BW14 are interconnected with heavy-duty semi-flexible connectors of at least 4x672 kN. For the breakwaters type BW18, the connectors are at least 4x1218 kN.

#### Anchoring

With chains, piles or elastic mooring.

#### Options

Dock dekking with, for example, hardwood or composite, mooring cleats, concrete pigmentation.



