



Certificate No. 01-016370/0112895

TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

FLOATING PONTOON - BREAKWATER TYPE SF 500, FOR BERTHS IN MARINAS

MANUFACTURER:

SF MARINA

SF MARINA SYSTEM AB
Propellergängen 4
SE-417 64 GÖTEBORG
SWEDEN

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

Rules for the classification of ships; CRS Technical Circular QC-T-191.

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2028-03-04**

Place and date: Split, 2024-03-04 Seal

Marinko Popović, dipl. ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

DETAILED PRODUCT DESCRIPTION:

Floating pontoon – breakwater type SF 500 is made of concrete: K50, Air 6%, $W_c < 0.4$. Pontoon core is expanded Styrofoam min. 65 kPa covered with thin layer of reinforced concrete. Reinforcement is fully hot galvanized steel. Wooden fender is made of pressure-treated pine 95x145 mm.

Pontoon dimensions:

length 20.0 m	breadth (concrete) 5.0 m
breath (overall) 5.25 m	height 1.5 m
freeboard 0.8 m	joint strength 2x900 kN

APPLICATION / LIMITATIONS:

- **Significant wave height up to 2.5 m**
- **Mooring of crafts length up to 30 m**

TYPE APPROVAL DOCUMENTATION:

Floating pontoon stability calculation
Floating pontoon static strength calculation
Tree-dimensional tests of floating breakwater in order to analyse their hydrodynamic response to wave transmission, December 1996, INHA Barcelona.

MARKING OF PRODUCT:

The product shall be marked with name of manufacturer, type of pontoon and serial number.

CONDITIONS FOR CERTIFICATION:

None.