

# Top Marine

Floating Marina Installations



## HD Concrete Pontoon



# Heavy Duty Concrete Pontoon



**CHAIN ANCHORING SYSTEM**

- The strong and robust anchoring shafts are connected to reinforced concrete forming a strong and stable fixing system for the pontoon;
- Simple and user friendly chain locker plate.

**HD RUBBER CONNECTING SET 400KN**

- Silent flexible rubber bolted joints. Bolt M48, property class 8.8 bolts with lock nuts.

**HD CONCRETE PONTOON**

- Hydrotechnical fiber reinforced concrete C40/ 50, watertight W6, environment class XS2, frost resistance XF4 and KK4 according to EN 206-1;
- Reinforcement 6mm fully hot dip galvanized C4 according to ISO 1461 standard;
- Expanded polystyrene: density 19kg/m<sup>3</sup>, strength ≥100kPa, water absorption ≤3%.

**SAFETY EQUIPMENT**

- SOS Pedestal;
- Safety Ladder.

**SERVICE PEDESTAL**

- Electricity and water supply for boats;
- Lighting for the floating pontoon.

**GANGWAY**

- Metal gangway up to 12m;
- Timber gangway up to 6m.

**PILE ANCHORING SYSTEM 40KN**

- An alternative solution for chain mooring;
- Has been designed for piles Ø400-500 mm.

**TIMBER DECKING**

- Impregnated softwood decking 28x120mm.

**BOAT BOOM**

- Boat Booms with rubber or hinge connection;
- With or without timber decking.

**TIMBER FENDER**

- Planed timber fender 145× 145mm or 95× 95mm or 70x195mm;

**MOORING FINGER**

- Mooring Fingers with rubber connection.

**MOORING BOLLARD**

- The in-moulded T-bollard geometrical construction ensures better distribution of the internal forces.

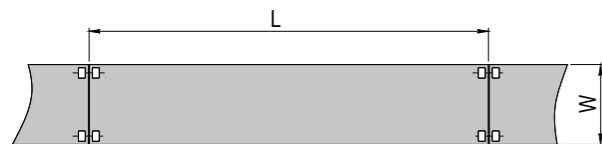
**FINGER CONNECTING RAIL**

- Insures flexible and strong connection between concrete pontoon and mooring fingers;
- Finger position are horizontally adjustable.

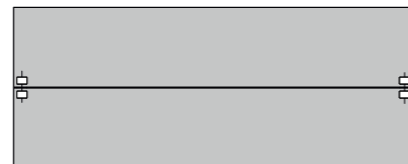
**SERVICE DUCTS**

- Inside concrete, not visible;
- Can be installed on both sides or in the middle;
- Duct diameter 110 mm or 160 mm.

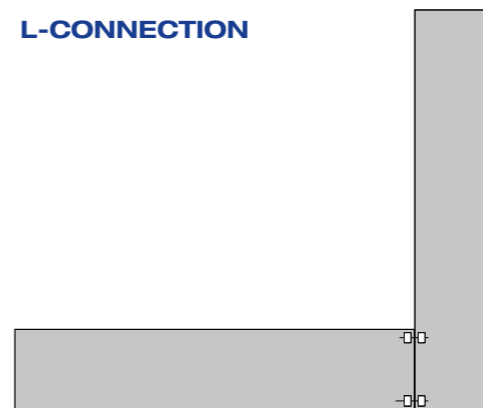
**END CONNECTION**



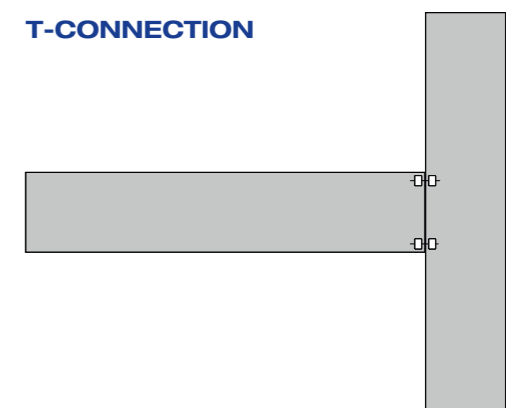
**SIDE CONNECTION**



**L-CONNECTION**



**T-CONNECTION**



# Heavy Duty Concrete Pontoon

<b>HD Pontoon</b>	High-stability, strong, maintenance free, for year-round use, long service life.
<b>Intended use</b>	As landing stages, breakwaters, for floating houses and for other marina structures.
<b>Connection options</b>	End connection, side connection, L- connection, T-connection.
<b>Structural design</b>	Hydrotechnical fiber reinforced concrete with EPS inside, heavy-duty rubber joints.
<b>Anchoring system</b>	Anchoring by chain or elastic rope. Anchoring by piles.
<b>Accessories</b>	Wood or plastic decking, fenders, finger connection rails, mooring fingers, boat booms, mooring bollards, service ducts, safety equipment.

## Technical Data of Heavy Duty Concrete Pontoon

Item code		04 10 00	04 12 00	04 14 00	04 20 00	04 22 00	04 24 00	04 30 00	04 32 00	04 34 00
<b>Dimensions (m)</b>	<b>Length</b>	9.0	9.0	9.0	12.0	12.0	12.0	15.0	15.0	15.0
	<b>Concrete width</b>	2.4	3.16	4.16	2.4	3.16	4.16	2.40	3.16	4.16
	<b>Width with fenders</b>	2.7	3.5	4.5	2.7	3.5	4.5	2.7	3.5	4.5
	<b>Height</b>	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
<b>Freeboard (m)</b>		0.49	0.54	0.58	0.54	0.58	0.62	0.56	0.61	0.64
<b>Designed load capacities (kN/m<sup>2</sup>)</b>		4.7	5.1	5.4	5.1	5.5	5.9	5.4	5.8	6.1
<b>Designed load capacities (tons)</b>		10,1	14,6	20,4	15,0	21,3	29,7	19,7	27,9	38,8
<b>Weight (t)</b>		11.9	14.3	17.4	14.9	17.9	21.8	17.9	21.4	26.1
<b>Allowed max. wave height</b>		0.5 m								
<b>Allowed current speed</b>		1 m/sec								
<b>Allowed ice condition</b>		Allowed static ice load, ice moving is not allowed								
<b>Anchoring systems</b>	<b>Chain</b>	Ø20 mm								
	<b>Concrete anchors</b>	2000 kg								
	<b>Pile</b>	Ø400-600 mm, 40kN								
<b>Boat mooring</b>		Mooring buoys, Boat Booms, Mooring fingers, Mooring bollards								
<b>Boat sizes</b>		Boat size up to 15.2 m (50 feet)								

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Top Marine is a continuously developing firm and may at its sole discretion revise or amend this product catalogue without further notice.



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