



BUILD
TECHNOLOGIES
PTY. LTD.



JETTY SYSTEMS



Floating Jetty Construction

Custom pontoons

The marina pen berthing system created by Build Technologies Pty Ltd consists of large polystyrene blocks with cast concrete reinforced decks together with timber whalers bolted to the outside edges of the decks. The blocks connect to each other with purpose-built urethane hinges and are held in position in the marina by a series of steel piles.

Our completed units are generally described as “pontoons” and can be varied in size to suit the particular marina configuration.

We recommend that for ease of production, installation and handling, it is preferable to keep individual pontoons to a maximum length of six metres.

The design and engineering considerations will vary for each individual marina site so the following notes and comments are of a general nature only and should not be taken as the specification for any specific project or marina.





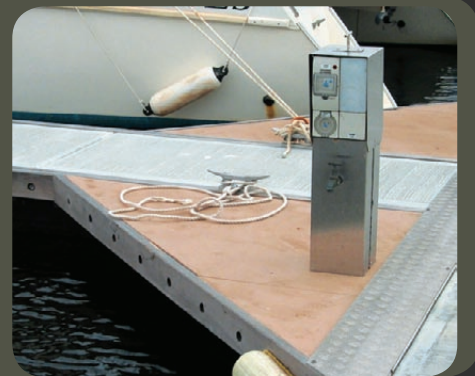
Main walkway at Port Geographe Marina



Polystyrene flotation block



Walkway pontoons ready for timber whalers



Connection between walkway and finger

Jetty Fixtures & Installation

Flotation Blocks

The polystyrene blocks can be cut to specific shapes and sprayed with a polyurethane coating of a minimum 3mm thickness. The polyurethane coating provides a hard-wearing and weather resistant surface.

Concrete Decks

The pontoon decks are constructed in reinforced concrete with a general thickness of 85mm with a 135mm thick perimeter edging. The width of the perimeter edging varies subject to the pontoon deck width. The pontoon deck is reinforced with galvanized mesh plus galvanized perimeter reinforcing bars to the engineer's design and specifications.

Timber Whalers

The concrete pontoon decks have two hardwood timber whalers (150mm x 35mm) located on each side and end of the pontoon, which are held in place with 16mm galvanized bolts. The nuts and washers are recessed into the outside surface of the whalers.

Hinges

The pontoon decks are connected to each other using specially designed urethane hinges which are bolted on with 20mm galvanized bolts cast into the ends of the concrete decks as required.

Walkways and Fingers

The pontoon sections of the jetty walkways are connected to each other or the pen finger pontoon using the urethane hinges and supported by engineer-designed corner brackets to ensure a structurally robust system capable of handling all reasonable weather conditions and normal boat traffic – inexperienced skippers bumping into them!

Services

Both the electrical and water services should be installed through the central service ducts. Where required, a service access pit can be provided in both the polystyrene floats and the concrete pontoon decks.



Service Bollards

Electrical and water services to individual boat pens would be supplied by service bollards of a type suitable to the marina style and design.

The service bollards may be securely mounted onto the connection between the marina walkways and boat pen fingers. Standard power-point outlets and water taps may be fitted within the bollards for the convenience of boat owners.



Pontoon Location

The marina walkways and pen fingers are held securely in position by precast concrete or steel pylons.

Where steel pylons are to be employed, we recommend using a polyethylene outer liner in order to minimize pylon rusting and prevent damage to the pylon from the constant movement of the floating pontoon deck.



Marina Design

Every marina presents a unique set of variables. Factors such as climate, local sea and wind conditions, the types of vessels being catered for and the facilities available on shore will all need to be taken into account during the design, installation and fitting of the pontoon walkway system.

To discover how a floating jetty system can be custom-designed to suit the unique requirements of your marina, contact Build Technologies. We will consult with you to determine the engineering specifications of your marina construction project.

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