PLASTIC MARINE SOLUTIONS

SeaPile®
SeaTimber®
SeaCamel®

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SeaPile and SeaTimber are advanced composite plastics with superior properties to timber, steel and concrete for many marine structures and applications.

They can withstand heavy impacts by absorption of energy through recoverable deflection. SeaPile and SeaTimber never rot, corrode or decay. They are impervious to marine borers, yet are totally non-polluting.

Manufactured from a recycled plastic matrix with unique glass fibre reinforcement bars, the stiffness of SeaPile and SeaTimber can be varied and controlled to suit each project. This makes the material the ideal choice for fenders, to build marine structures, and for coastal protection without damaging the environment.

FEATURES
› Low life cycle cost
› Will not rot, corrode or decay
› Unaffected by marine borers
› Choice of modulus to suit different applications
› Can be pile driven, sawn and drilled
› Low friction coefficient
› Ultra low maintenance
› Custom colors available
› Unlimited lengths*

APPLICATIONS
› Fender piles and systems
› Structural piles
› Bridge protection
› Guidewalls and locks
› Corner fenders
› Dolphins
› Navigation markers
› Walings and bullrails
*subject to transport restrictions
Dolphins, or groups of piles, are placed near piers and wharves to guide vessels into their moorings, to fend them away from structures, or to serve as mooring points. Compared with timber, considerably fewer SeaPiles are needed to absorb the same impact energy.

**Applications**

The SeaPile can generally be used in the same applications as traditional timber piling. Examples include:

**Dolphins**

![Dolphins Diagram]

Dolphins are used extensively as vertical fenders set out in front of a marine structure. During the berthing of a ship, fender piles act as a buffer to absorb and dissipate the impact energy of the ship. They also provide a barrier to prevent vessels from going underneath the pier.

**Fender piling**

![Fender piling Diagram]

Piles are used to support the loads of light-duty piers and wharves. Structural piling generally uses bracing between piles to increase the strength and stiffness of the foundation for the structure.

**Light structural piling**

![Light structural piling Diagram]

**Navigational aids**

![Navigational aids Diagram]

Single piles are dolphins used to support lights, day beacons, fog signals, and radar beacons.

**Bridge pier protection**

Piles and dolphins are widely used to create protective structures for bridge piers, and to guide vessels into the channel and away from bridge supports. 3-pile clusters are used in impact zones, single piles in less vulnerable areas.
Installation

Various connecting methods are available to increase pile length. SeaPile and SeaTimber lengths can also be attached to steel pile extensions.

Pile driving data

Soil profile

- Very loose sand and silt
- Dense to very dense layered clayey sand and sandy clay
- Bottom of test boring

Tip elevation = 9.7 metres
Tip elevation = 14.9 metres

Depth (metres)

Hammer blows per metre
Proven in Practice
### SeaPile Performance Data

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<th>SeaPile Section</th>
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<th>Rebar Qty</th>
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<th>Modulus of Elasticity*</th>
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*Typical Performance +/- 10%