

# WAGNERS

Composite Fibre Technologies (CFT)

# Trident Marine Pile



Waterfront moorings are set to be revolutionised with the new Trident Marine Pile designed to perform for 50-years and reduce impact on berthing vessels.

Manufactured in Australia from Fibre Reinforced Polymer (FRP) with an integrated HDPE sleeve the dynamic properties of the Trident Marine Pile allows it to yield before returning to its original state which significantly reduces the risk of impact damage to berthing craft.

Twice as strong as steel, Trident Marine Piles are also inert and will not rot, rust or corrode. And with no-electrolysis, boat and marina hardware is safe from damage.

Acid sulfate soils, UV rays and marine borers are no match for the Trident Marine Pile which is non-toxic and non-leaching so safe for marine ecosystems. Plus, with less embodied carbon than traditional materials Trident Marine Piles are contributing to cooling the planet.

## PERFORMANCE ADVANTAGES

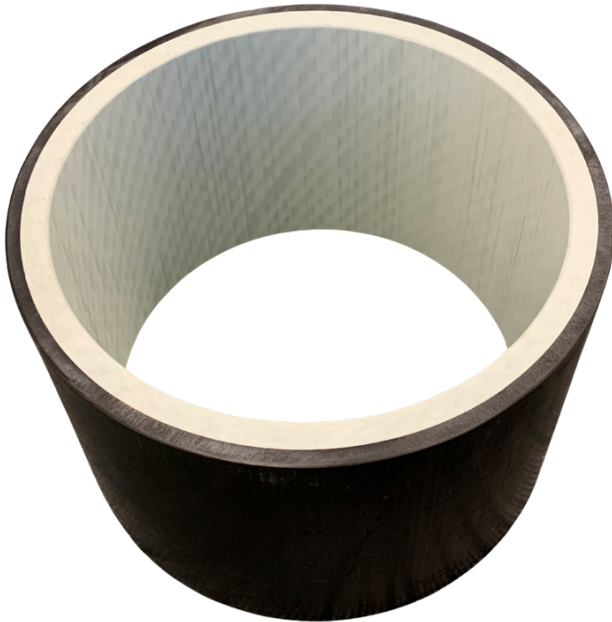
- **Durable** - 50 year design life
- **Strong** - twice as tough as steel
- **Inert** - will not rot, rust or corrode
- **No electrolysis** - no damage boat & marine hardware
- **Resistant** to acid sulfate soils, UV rays & marine borers
- **Yield technology** - reduced risk of impact damage
- **Non-leaching & non-toxic** - safe for marine ecosystems
- **Reduced embodied carbon** - fight global warming
- **Low maintenance** - reduced inspection / replacement
- **Australian** manufactured
- **Integrated HDPE sleeve** - one installation
- **Easy installation** - hammer or vibro-driven

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Property	Notation	UOM	WGN - C500	WGN - C8000
Outer Dimension	$D_o$	mm	301	356
Wall Thickness	t	mm	13.5	13.5
Cross Sectional Areas	A	mm <sup>2</sup>	12193	14526
Surface Area	SA	m <sup>2</sup> /m	0.95	1.12
Moment of Inertia	I	mm <sup>4</sup>	$126.26 \times 10^6$	$213.33 \times 10^6$
Weight	W	kg/m	24.64	29.49
Moment Capacity	$M_u$	kN.m	250#	384#
Tensile Strength (L)	$F_{Lt}$	MPa	635	635
Tensile Modulus (L)	$E_{Lt}$	MPa	35405	35405
Compressive Strength (L)	$F_{Lc}$	MPa	395	395
Compressive Modulus (L)	$E_{Lc}$	MPa	41178	41178
In Plane Shear Stress (L)	$F_{Lv}$	MPa	93	93



Quality  
ISO 9001  
SAI GLOBAL



Environment  
ISO 14001  
SAI GLOBAL



OHS  
ISO 45001  
SAI GLOBAL

## CONTACT US

Desk-based Sales Consultant

**Elmar Zielke**

Office: +61 (7) 4637 7777

Mobile: +61 455 221 360

Email: [elmar.zielke@wagner.com.au](mailto:elmar.zielke@wagner.com.au)



[wagnerscft.com.au](http://wagnerscft.com.au)

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