



Engineering Specifications

Our pilings have been developed using an innovative, three dimensional fiberglass fabric that has exceptional shear, stiffness and strength properties as well as outstanding damage tolerance. This highly advanced fabric is produced at our own manufacturing facility to the specific requirements of each piling diameter and thickness to optimize properties and minimize cost.

For a protective outer layer, Pearson Pilings incorporate a natural brown colored engineering thermoplastic finish known as “PPT”. The PPT resists UV radiation and provides a smooth, attractive and highly durable surface. A modified vinylester resin matrix is used to create long-term hydrolytic stability. Pearson Pilings are strong enough to be driven to the highest level of resistance, ensuring a solid, lasting installation.

The following mechanical properties are results from testing at Brown University and The University of Rhode Island. Project engineers are responsible for individual project requirements. No factors of safety have been applied.

<u>Mechanical Properties (Minimum)</u>	<u>8" Piling</u>	<u>10" Piling</u>	<u>12" Piling</u>	<u>14" Piling</u>	<u>16" Pilings</u>
Axial Tensile Strength - psi	27,000	29,000	40,000	40,000	40,000
Axial Flexural Strength - psi	25,000	27,000	70,000	70,000	70,000
Axial Flexural Modulus - psi	2,100,000	2,500,000	4,000,000	4,000,000	4,000,000
Axial Compressive Strength - psi	27,000	29,000	40,000	40,000	40,000
Fiberglass to Resin Ratio by weight	50:50	50:50	60:40	60:40	60:40
Thermal Expansion	<.000014	<.000012	<.000006	<.000006	<.000006
Water Absorption	<.25%	<.25%	<.25%	<.25%	<.25%
Approximate Wall Thickness - inches	0.175	0.26	0.35	0.35	0.5
Allowable Bending Moment FS=>2 (Kip Ft)	7	20	60	120	150

Piling OD and ID can vary due to manufacturing process.

For more information contact:

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July-09