



PILING STOCK PHYSICAL PROPERTIES

<u>Material Properties</u>	<u>Units</u>	<u>Nominal Diameter</u>		
		<u>8 Inch</u>	<u>10 Inch</u>	<u>12 Inch</u>
Outside Diameter (OD)	inches	8.4	10.5	12.5
Inside Diameter (ID)	inches	7.92	9.9	11.78
Wall Thickness (MIN)	inches	0.24	0.30	0.36
Weight	lb/ft	4.1	6.3	9.0
Specific Gravity	g/cc	1.43	1.43	1.43
Hardness (Durometer D)		78 ₊₃	78 ₊₃	78 ₊₃
Heat Distortion @ 264 psi	degrees F	~160	~160	~160
Resistance to Heat Continuous	degrees F	~140	~140	~140
Burning Rate (ASTM D635)		Self Extinguishing		
Coefficient of Expansion	in/in/F	3.0 x 10 ⁻⁵	3.0 x 10 ⁻⁵	3.0 x 10 ⁻⁵
Poisson's Ratio (V)		0.35 - 0.38	0.35 - 0.38	0.35 - 0.38
Tensile Strength (73 F)	psi	7,000	7,000	7,000
Flexure Strength (73 F)	psi	14,000	14,000	14,000
Compression Strength (73 F)	psi	9,600	9,600	9,600
Stiffness @ 5% (Min)	# in-in	46	46	46
Modulus of Elasticity (unfilled)	psi	400,000	400,000	400,000
Concrete Filled*	psi	2,750,000	2,750,000	2,750,000
Moment of Inertia (I) (unfilled)	in ^ 4	51.27	125.2	250.0
Concrete Filled*	in ^ 4	244.50	596.8	1198.0
Section Modulus (Z) (unfilled)	in ^ 4/in	12.21	23.84	40.00
Concrete Filled*	in ^ 4/in	58.21	113.7	191.7

Production Lot Test Requirements ASTM D3034

Impact Resistance D2444 Falling Weight - Passed

Crush Resistance D2412 Parallel Plate Loading @ 0.5"/min. - Exceeds**

*Nominal 2500 PSI concrete (no reinforcement bars)

** Parallel Plate Crush Test run to 100% crush (ID to ID) without splitting.

Note: ASTM D2412 requires only 60% crush without splitting for acceptance.

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