

WCFT PILING TECHNICAL DATA



Property	Notation	UOM	Value							
			WGN-C1000	WGN-C7000	WGN-C6000	WGN-C3000	WGN-C4000	WGN-C5000	WGN-C8000 [^]	WGN-CX000 [^]
Nominal Profile Size			3.5x0.2in Circular Hollow Section	6x0.3in Circular Hollow Section	7x0.4in Circular Hollow Section	9x0.4in Circular Hollow Section	11.5x0.4in Circular Hollow Section	11.9x0.5in Circular Hollow Section	14x0.5in Circular Hollow Section	16x0.5in Circular Hollow Section
Outer Dimension	D _o	in	3 1/2	6	7	9	11 1/2	11 6/7	14	16
Wall Thickness	t	in	1/4	1/3	2/5	3/8	3/8	1/2	1/2	1/2
Cross Sectional Area	A	in ²	2.42	5.54	8.06	10.41	13.11	18.90	22.52	25.80
Surface Area	SA	ft ² /ft	0.92	1.57	1.84	2.37	3.02	3.10	3.67	4.18
Moment of Inertia	I	in ⁴	3.24	22.32	44.25	98.05	204.45	303.34	512.53	771.06
Weight	w	lb/ft	2.10	4.97	7.10	9.07	11.47	16.56	19.82	22.71
Characteristic Ultimate Bending Moment	M _u	kip.ft	12	36	68	68	98	185	227	299
Characteristic Shear Strength [^]	V _u	kips	7	17	25	33	41	60	71	81
Tensile Strength (L)	F _{lt}	ksi	58.0	92.1	92.1	92.1	92.1	92.1	92.1	92.1
Tensile Modulus (L)	E _{lt}	ksi	4715.2	5135.1	5135.1	5135.1	5135.1	5135.1	5135.1	5135.1
Compressive Strength (L)	F _{lc}	ksi	38.7	57.3	57.3	57.3	57.3	57.3	57.3	57.3
Compressive Modulus (L)	E _{lc}	ksi	5685.5	5972.4	5972.4	5972.4	5972.4	5972.4	5972.4	5972.4
In Plane Shear Stress (L)	F _{lv}	ksi	7.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5

* Experimental moment capacity obtained from full-scale four-point bend test as per ASTM D6109. Moment capacity includes ϕ factor but not λ and C factors.

[^] Theoretical value as per ASCE Pre-Standard Design for Pultruded FRP structures (2010), and/or correlated from relevant mechanical tests.

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