



<b>Ram Jack</b> Helical Piles, Tiebacks & Anchors		<b>Ultimate Capacity Based Upon Torque</b> ( kips - kN ) (1) (2)	<b>Helix Bearing Plate Grade &amp; Thickness</b> ( in - mm )	<b>Section Coupling Method</b>	<b>Building Code Certifications</b>
<b>Round Corner Square Bar (RCS)</b>		<b>Special Request Only</b>			
<b>Round Shaft</b>					
<b>Model 45 Series</b>	O.D. = 1.63 in - 41.3 mm Wall = 0.23 in - 5.9 mm ASTM 1516 / A500 Yield Strength = 65 ksi (min)	Comp = 25 kips - 111 kN Ten = 25 kips - 111 kN	ASTM A36 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt 0.625 in - 15.9 mm opt	Threaded	none
<b>Model 431 Series</b>	O.D. = 2.38 in - 60.3 mm Wall = 0.19 in - 4.8 mm ASTM 1516 / A500 Yield Strength = 65 ksi (min)	Comp = 40 kips - 178 kN Ten = 40 kips - 178 kN	ASTM A36 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt 0.625 in - 15.9 mm opt	Threaded, or (2) 0.75 in - 19.1 mm Grd 8 Bolts	none
<b>Model 438 Series</b>	O.D. = 2.88 in - 73.0 mm Wall = 0.22 in - 5.5 mm ASTM 1516 / A500 Yield Strength = 65 ksi (min)	Comp = 72 kips - 320 kN Ten = 72 kips - 320 kN	ASTM A36 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt 0.625 in - 15.9 mm opt	Threaded, or (2) 0.75 in - 19.1 mm Grd 8 Bolts	ICC-ES ESR-1854 LA RR 25909 Florida 2010 BC
<b>Model 46 Series</b>	O.D. = 3.50 in - 88.9 mm Wall = 0.25 in - 6.5 mm ASTM 1516 / A500 Yield Strength = 65 ksi (min)	Comp = 98 kips - 436 kN Ten = 90 kips - 400 kN	ASTM A36 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt 0.625 in - 15.9 mm opt	Threaded, or (3) 0.75 in - 19.1 mm Grd 8 Bolts	ICC-ES ESR-1854 LA RR 25909 Florida 2010 BC
<b>Model 63 Series</b>	O.D. = 4.50 in - 114.3 mm Wall = 0.44 in - 11.1 mm ASTM 1530 / A500 Yield Strength = 65 ksi (min)	Comp = 150 kips - 667 kN Ten = 140 kips - 623 kN	ASTM A36 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt 0.625 in - 15.9 mm opt	(3) 0.875 in - 22.2 mm Grd 8 Bolts	none

(1) The values shown only address torque correlated soil capacity. Other mechanical limit states of the pile/anchor, its couplers, and its connections to the structure (brackets) may also govern the design capacity. Refer to the manufacturer's technical manual for further information."

(2) Large diameter helical piles develop capacity by a combination of both end-bearing and skin friction. The ultimate pile capacity is calculated based on the site-specific soil profile on a case-by-case basis. Load tests are often recommended for larger shaft sizes to identify a site-specific torque correlation factor (Kt), to determine the pile displacement versus load, and to verify the helical pile configuration.