



Ram Jack Helical Piles, Tiebacks & Anchors		Ultimate Capacity Based Upon Torque (kips - kN) (1) (2)	Helix Bearing Plate Grade & Thickness (in - mm)	Section Coupling Method	Building Code Certifications
Round Corner Square Bar (RCS)		Special Request Only			
Round Shaft					
Model 45 Series	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 A656 Grade 50 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt 0.625 in - 15.9 mm opt	Threaded	none
Model 431 Series	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 A656 Grade 50 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
Model 438 Series	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 A656 Grade 50 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-4331 ICC-ES ESR-1854 CCMC 14039-R 2017 LARC & LABC Florida 2017 BC
Model 46 Series	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 A656 Grade 50 0.50 in - 12.7 mm opt 0.625 in - 15.9 mm opt	Threaded, or (3) 0.875 in - 19.1 mm Grd 8 Bolts	ICC-ES-4331 ICC-ES ESR-1854 CCMC 14039-R 2017 LARC & LABC Florida 2017 BC
Model 63 Series	O.D. = 4.50 in - 114.3 mm Wall = 0.237 in - 6.0 mm ASTM 1530 / A500 Yield Strength = 65 ksi (min)	Comp = 120 kips - 534 kN Ten = 60 kips - 267 kN	ASTM A656 Grade 50 0.50 in - 12.7 mm opt 0.625 in - 15.9 mm opt	(3) 1.25 in - 31.8 mm Grd 8 Bolts	ICC-ES ESR-1854 2017 LARC & LABC Florida 2017 BC

(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.