



CHANCE 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)					
Model SS125	1.25 in - 31.8 mm ASTM A29; Modified AISI 1530, Yield Strength = 90 ksi (min)	Comp = 40 kips -178 kN Ten = 40 kips - 178 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm	(1) 0.63 in - 15.9 mm ASTM A325 Bolt	none
Model SS5	1.50 in - 38.1 mm ASTM A29, Modified AISI 1044 Yield Strength = 70 ksi (min)	Comp = 57 kips - 254 kN Ten = 57 kips - 254 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm	(1) 0.75 in - 19.1 mm ASTM A325 Type 1 Bolt	ICC-ES ESR-2794 LA RR 25984
Model SS150	1.50 in - 38.1 mm ASTM A29; Modified AISI 1530, Yield Strength = 90 ksi (min)	Comp = 70 kips - 311 kN Ten = 70 kips - 311 kN	ASTM A656 Grade 80 0.375 in - 9.5 mm	(1) 0.75 in - 19.1 mm ASTM A325 Type 1 Bolt	none
Model SS175	1.75 in - 44.5 mm ASTM A29; Modified AISI 1530, Yield Strength = 90 ksi (min)	Comp = 105 kips - 467 kN Ten = 100 kips - 445 kN	ASTM A656 Grade 80 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt	(1) 0.875 in - 22.2 mm ASTM A193 Grade B7 Bolts	ICC-ES ESR-2794 LA RR 25984 CCMC-13193-R
Model SS200	2.00 in - 50.8 mm ASTM A29; Modified AISI 1530, Yield Strength = 90 ksi (min)	Comp = 160 kips - 712 kN Ten = 150 kips - 667 kN	ASTM A656 or A1018 Grade 80 0.50 in - 12.7 mm	(1) 1.25 in - 28.58 mm ASTM A193 Grade B7 Bolts	none
Model SS225	2.25 in - 57.2 mm ASTM A29; Modified AISI 1530, Yield Strength = 90 ksi (min)	Comp = 210 kips - 934 kN Ten = 200 kips - 890 kN	ASTM A656 or A1018 Grade 80 0.50 in - 12.7 mm	(1) 1.25 in - 28.6 mm ASTM A193 Grade B7 Bolts	none
Round Shaft					
Model RS2875.203	O.D. = 2.88 in - 73.0 mm Wall = 0.20 in - 5.2 mm ASTM A500 Grade B or C Yield Strength = 50 ksi (min)	Comp = 49.5 kips - 220 kN Ten = 49.5 kips - 220 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm	(2) 0.75 in - 19.1 mm SAE J429 Grd 5 Bolts	none
Model RS2875.276	O.D. = 2.88 in - 73.0 mm Wall = 0.28 in - 7.0 mm ASTM A500 Grade B or C Yield Strength = 50 ksi (min)	Comp = 72 kips - 320 kN Ten = 72 kips - 320 kN	ASTM A656 Grade 80 0.375 in - 9.5 mm	(2) 0.75 in - 19.1 mm SAE J429 Grd 5 Bolts	none
Model RS3500.300	O.D. = 3.50 in - 88.9 mm Wall = 0.30 in - 7.6 mm ASTM A500 Grade B or C Yield Strength = 50 ksi (min)	Comp = 91 kips - 405 kN Ten = 91 kips - 405 kN	ASTM A572 Grade 50 0.50 in - 12.7 mm	(3) 0.75 in - 19.1 mm SAE J429 Grd 5 Bolts	none
Model RS4500.337	O.D. = 4.50 in - 114.3 mm Wall = 0.34 in - 8.6 mm ASTM A500 Grade B or C Yield Strength = 50 ksi (min)	Comp = 138 kips - 614 kN Ten = 138 kips - 614 kN	ASTM A572 Grade 80 0.50 in - 12.7 mm	(4) 1.00 in - 25.4 mm SAE J429 Grd 8 Bolts	none
Model RS6625.280	O.D. = 6.63 in - 168.3 mm Wall = 0.28 in - 7.1 mm ASTM A500 Grade B or C Yield Strength = 50 ksi (min)	Comp = 200 kips - 890 kN Ten = 200 kips - 890 kN	ASTM A572 Grade 80 0.50 in - 12.7 mm	(4) 1.0 in - 25.4 mm Grd 2 Studs	none





Model RS8625.250

O.D. = 8.625 in - 219.1 mm Wall = 0.250 in - 6.4 mm ASTM A500 Grade B or C Yield Strength = 50 ksi (min)

Comp = 300 kips - 1335 kN Ten = 300 kips - 1335 kN ASTM A572 Grade 80 0.50 in - 12.7 mm, or 0.75 in - 18.4 mm

(4) 1.25 in - 25.4 mm Grd 2 Studs

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.