

| Supportworks 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 HA150 | 1.50 in - 38.1 mm ASTM A29 Yield Strength = 90 ksi (min) | Comp = 65 kips - 289 kN Ten = 65 kips - 289 kN | ASTM A572 Grade 50 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt | (1) 0.75 in - 19.1 mm Grd 8 Bolt | none |
| Model HA175 | 1.75 in - 44.5 mm ASTM A29 Yield Strength = 90 ksi (min) | Comp = 100 kips - 444 kN Ten = 100 kips - 444 kN | ASTM A572 Grade 50 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt | (2) 0.75 in - 19.1 mm Grd 8 Bolts | none |
| Round Shaft | | | | | |
| Model HP237 | O.D. = 2.375 in - 60.3 mm Wall = 0.15 in - 3.9 mm ASTM A500 Grade B or C Yield Strength = 60 ksi (min) | Comp = 25 kips - 111 kN Ten = 25 kips - 111 kN | ASTM A572 Grade 50 0.313 in - 7.9 mm std | (2) 0.625 in - 15.9 mm A325 Bolts | none |
| Model HP287 | O.D. = 2.88 in - 73.0 mm Wall = 0.20 in - 5.2 mm ASTM A500 Grade B or C Yield Strength = 60 ksi (min) | Comp = 50 kips - 222 kN Ten = 50 kips - 222 kN | ASTM A572 Grade 50 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt | (2) 0.75 in - 19.1 mm Grd 8 Bolts | none |
| Model HP288 | O.D. = 2.88 in - 73.0 mm Wall = 0.28 in - 7.0 mm ASTM A500 Grade B or C Yield Strength = 60 ksi (min) | Comp = 71 kips - 316 kN Ten = 71 kips - 316 kN | ASTM A572 Grade 50 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt | (2) 0.75 in - 19.1 mm Grd 8 Bolts | ICC ESR-3074 LA RR 25990 CCMC 13556-R |
| Model HP350 | O.D. = 3.50 in - 88.9 mm Wall = 0.34 in - 8.6 mm ASTM A500 Grade B or C Yield Strength = 65 ksi (min) | Comp = 122 kips - 542 kN Ten = 122 kips - 542 kN | ASTM A572 Grade 50 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt | (4) 1.00 in - 25.4 mm Grd 5 Bolts | ICC ESR-3074 LA RR 25990 |
| Model HP450 | 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 = 121 kips - 538 kN Ten = 121 kips - 538 kN | ASTM A572 Grade 50 0.375 in - 9.5 mm std 0.50 in - 12.7 mm opt | (4) 1.125 in - 28.6 mm Grd 5 Bolts | none |
| Model HP662 | O.D. = 6.63 in - 168.3 mm Wall = 0.28 in - 7.1 mm ASTM A500 Grade B or C Yield Strength = 60 ksi (min) | (2) | ASTM A572 Grade 50 0.50 in - 12.7 mm std | (4) 1.75 in - 44.5 mm A307 Bolts | none |
| Model HP700 | O.D. = 7.00 in - 177.8 mm Wall = 0.36 in - 9.2 mm ASTM A252 Grade 3 Yield Strength = 60 ksi (min) | (2) | ASTM A572 Grade 50 0.50 in - 12.7 mm std | (4) 2.00 in - 50.8 mm A307 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.