

# HA150B Bracket Specifications and Capacities

## when used with the HA150 Helical Pile System

### Bracket:

Weldment manufactured from 1/4", 3/8", and 1/2" ASTM A36 plate.

### External Sleeve:

Ø2.500" x 0.250" wall x 30" long  
with welded steel seat plates at one end.

ASTM A500 Grade B or C

Yield strength = 50 ksi (min)

Tensile strength = 62 ksi (min)

### Cap Plate:

1" x 4.00" x 9.00" ASTM A572 Grade 50  
with confining ring welded to one side.

### Bracket Hardware<sup>(3)</sup>:

(2) - Ø3/4" x 20" long all-thread rod

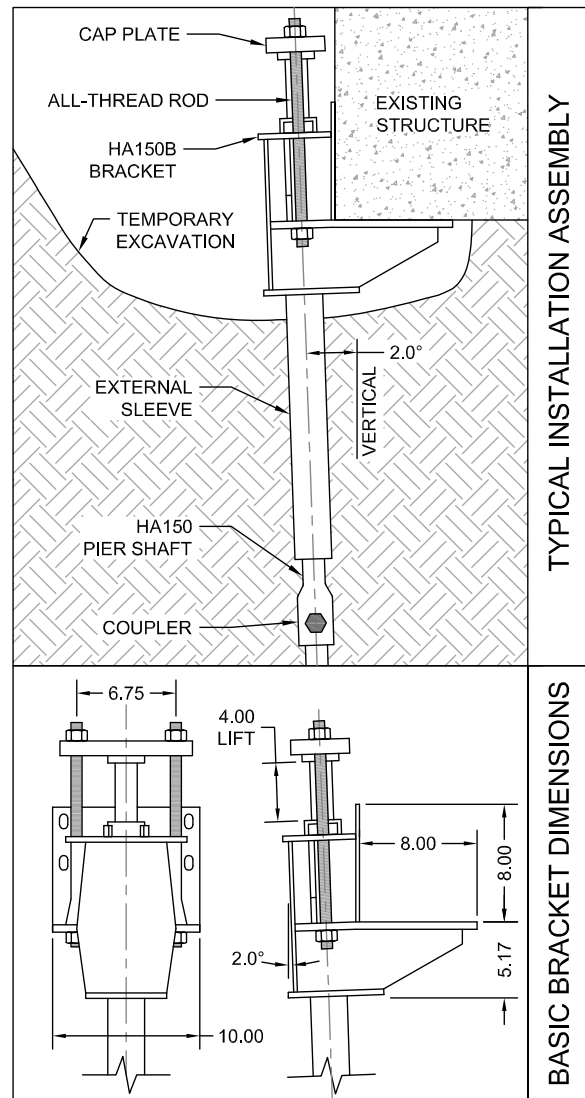
Grade B7, tensile strength = 125 ksi (min)

Electrozinc plated per ASTM B633

### Bracket Finish:

Available plain or hot-dip galvanized<sup>(2)</sup>

Allowable Bracket Capacity <sup>(4,5,6,7)</sup>	
$R/\Omega_n$	
	(kips)
Plain	14.7
Plain Corroded <sup>(1)</sup>	13.6
Galvanized Corroded <sup>(1,2)</sup>	14.4



- (1) Corroded capacities include a 50-year scheduled sacrificial loss in thickness per ICC-ES AC358.
- (2) Hot-dip galvanized coating in accordance with ASTM A123.
- (3) Optional hardware utilizes similar sized contour (coil) thread made from AISI 1045, tensile strength = 120 ksi. Slightly lower tensile strength material does not govern the listed capacities.
- (4) Brackets shall be used for support of structures that are considered to be fixed from translation. Structures that are not fixed from translation shall be braced in some manner prior to installing retrofit brackets systems.
- (5) Allowable capacities consider continuous lateral soil confinement in soils with SPT blow counts  $\geq 10$ . Piles with exposed unbraced lengths or piles placed in weaker or fluid soils should be evaluated on a case by case basis by the project engineer.
- (6) Concrete bearing assumes a minimum compressive strength ( $f_c$ ) of 2,500 psi. Local concrete bending and other local design checks should be evaluated on a case by case basis by the project engineer.
- (7) Listed allowable capacities are for the specific shaft/bracket combination shown. System capacity should also not exceed the installed torque-correlated soil capacity (See Shaft Specifications and Capacities).