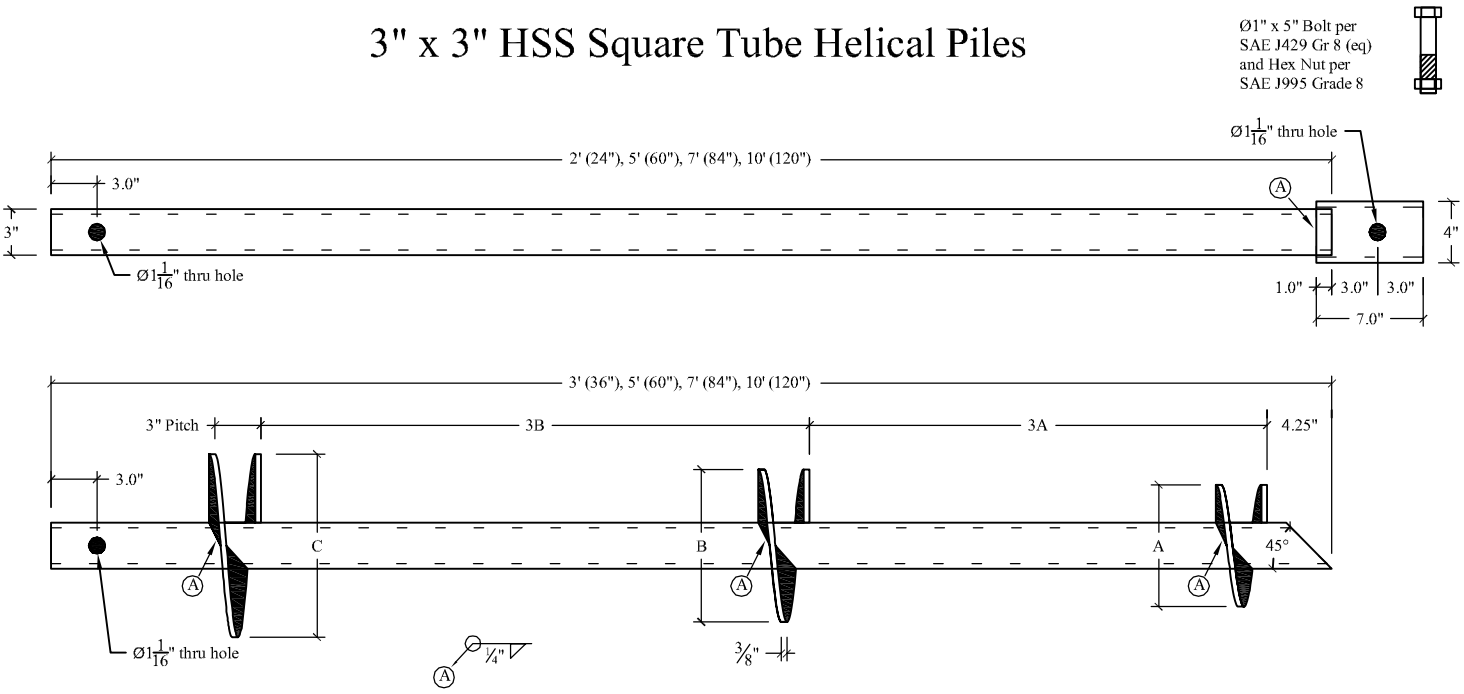
3" x 3" HSS Square Tube Helical Piles



Shaft and Coupler Material:

Shaft: HSS 3 x 3 x 5/16" (0.291") wall
Coupler: HSS 4 x 4 x 3/8" (0.349") wall
Square Shaft HSS Tubing per
ASTM A500-07 Grade B
Min Yield Stress: Fy = 42 ksi
Min Ult Tensile Stress: Fu = 58 ksi

Helix Material:

3/8" Plate Steel per ASTM A36-08
Min Yield Stress: Fy = 36 ksi
Min Ult Tensile Stress: Fu = 58 ksi

Recommended Maximum Allowable Capacities

	Black	Galvanized	
Compression:	55	60	kips
Tension:	30	35	kips
Shear	20	25	kips
Bending	4	5	ft-kips

Based on a minimum 50 year design life as per ICC-ES AC358

Recommended Maximum Torque = 12,000 ft-lbs
Recommended Maximum Capacity-to-Torque Ratio, Kt = 10 ft^{-1}

Connecting Bolts:

Ø1"-8 UNC x 5" Standard Hex Bolt per
SAE J429 Grade 8, and Hex Nuts
per SAE J995 Grade 8
Min Yield Stress: Fy = 130 ksi
Min Ult Tensile Stress: Fu = 150 ksi
Zinc coated per ASTM B633-07

Optional Connecting Bolts:

Structural Bolt per ASTM A490-08b
Type 1 and Heavy Hex Nut per ASTM A563, Grade
DH, Zinc Coated per ASTM F1136, Grade 3

Weld:

ER70S per AWS D1.1-2010
Min Ult Tensile Stress: Fu = 70 ksi
All welds to be 1/4" fillet welds, UNO

Corrosion Protection

Completed Product Hot-Dip Galvanized
per ASTM A123-02

GTSQ3x3 - XLSXXX: 3', 5', 7', or 10' long utilizing Ø8", Ø10", Ø12" and Ø14" Helices
GTSQ3x3 - XE: 2', 5', 7', or 10' long

Grip-Tite® MANUFACTURING CO., INC.
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DIMENSIONS IN INCHES, UNO
* NOT TO SCALE *

GTSQ3x3 - XLSXXX
GTSQ3x3 - XE

Date: 9/10/2014

Revision: 1