

# MAGNUM® MP434U Push Pier

## Up to 92 Tons Allowable Capacity in Compression

High-Strength 4.50" Diameter, 0.337" Wall, Round-Shaft Push Piers with Male-Female Slip Connectors

**Description:** MAGNUM® Push Pier sections couple together with male-female slip connectors. High strength steel offers increased buckling resistance compared to others. A friction reduction collar can be added to the pile to increase penetration depth. Structural capacities are developed according to AISC 360 and ICC-AC517 considering buckling of 5 ft unbraced length after 75 years of corrosion in moderate to high aggressive soils for various material coatings. Custom lengths are available upon request. See MAGNUM® Technical Manual for additional information.



Steel Specifications			
Shaft	HSS 4.50" x 0.337" Wall ASTM A252, Fy = 80 ksi, or Equivalent		
Coating	Hot-Dip Galvanized (G) or Bare Steel (NG)		
Section Properties	New	Galvanized (G)	Bare Steel (NG)
I	9.61	9.43	8.18
A <sub>g</sub>	4.41	4.33	3.76
S	4.27	4.2	3.67
Structural Capacity In Compression*			
Ultimate Capacity	156 Tons	153 Tons	133 Tons
Allowable Capacity		92 Tons	79 Tons
Capacity From Load Test**			
Maximum Test Load	140 Tons		
Allowable Capacity	94 Tons		
Standard Ram	8.30 sq. in Piston Area, 7,500 Maximum P.S.I.		

\* Push piers shall be installed to appropriate depth into suitable bearing stratum as determined by geotechnical engineer or local practice. For tension capacity, push pier sections must be welded together or a reinforcing steel bar and grout must be placed in the pile.

\*\* Push pier geotechnical capacity is determined by load test using MAGNUM® Installation Rams or Lifting Kit. All push piers shall be load tested to 1.5 times the desired working load. Test load is limited by maximum safe operating ram pressure or buckling capacity of shaft, whichever is less.

U.S. Patents 5,234,287, 4,708,528, 5,123,209



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