

The PowerPost[®] is an extremely high strength, adjustable steel column designed specifically to stabilize or raise sinking and unlevel floors. These common problems can be caused by:

- Existing piers that have settled due to inadequate footing
- Weakened floor system due to wood rot
- Floor systems that are underdesigned for their current load
- Length of span greater than capability of existing piers

The PowerPost[®] may also be used as a supplemental column support where an existing column and pier foundation has settled.

Technical Specifications

Top Plate:

3/8" x 5" x 6" and 1 1/2" OD mechanical tube centering ring. Plate specification is ASTM A-36. Centering ring specification is ASTM A513. Zinc plated.

Threaded Rod:

1 ¹/₄" diameter x 7" long with forged parallel flats for open ended wrench. Zinc plated. The screw assembly has been tested and exceeded 50,000 lbs. before there was a yield in the product.

Threaded Nut:

3" OD x ¾" long. Machined and threaded. Zinc Plated.

Tube:

3"OD x .120 wall x 3', 5', or 7' to be field cut to length. Tube specification is ASTM-A500-B. Galvanized. The tubing will support loads up to 20,000 lbs. This factor exceeds normal residential loads.

Base Plate for Precast Concrete Footing:

3/8" x 3 1/2" x 3 1/2" and 3 1/2" OD x .216 wall centering ring. Plate specification is ASTM-A-36. Centering ring specification is ASTM A53. Zinc plated.

Base Plate for Poured Concrete Footing:

3/8" x 3 1/2" x 6" and 3 1/2"OD x .216 wall centering ring. Plate specification is ASTM A-36. Centering ring specification is ASTM A53. Zinc plated.

Top Strap Plate for Steel Beams: (used in addition to the standard Top Plate)

1/8" x 3 1/2" x 10" with centering hole for mechanical tube centering ring on cap plate. Zinc Plated.





Allowable Capacity

The allowable system capacity of the assembled PowerPost® steel components is 30 kips (30,000 lbs.) Axial compression tests completed at an independent laboratory on the assembled PowerPost® system, with and without a precast concrete footing, resulted in **ultimate** values between 56 kips and 90 kips.

While the rigidity and strength of the PowerPost[®] components benefit installation and overall product stability, the allowable load applied to the PowerPost[®] system will nearly always be limited by the bearing capacity of the existing soil. The well-compacted crushed stone or recycled concrete base is a proven method to increase support for the higher bearing pressure conditions immediately below the concrete footing, and then to absorb and distribute lower pressures to the existing soils. Should settlement of the PowerPost[®] system occur, adjustments are made easily by extending the all-thread rod.

The PowerPost® is designed to support axial compression loads only. The PowerPost® should not be used in applications where the system is intended to resist lateral loads.

Corrosion Protection

The tube steel used for the PowerPost[®] is manufactured with a triple-layer, in-line galvanized coating. This coating process consists of: (1) a uniform hot-dip zinc galvanizing layer; (2) an intermediate conversion coating to inhibit the formation of white rust and enhance corrosion resistance; and (3) a clear organic top coating to further enhance appearance and durability. The inside of the pier tube also has a zinc-rich coating.

The remaining steel components of the PowerPost[®] come standard as zinc-plated in accordance with ASTM B633, "Standard Specification for Electrodeposited Coating of Zinc on Iron and Steel".