

Cool and Cobb Engineering Company

Date: 5/19/2022

Job: Blake Lunde

Location: 934 Lake Desoto Dr
Lake City, FL 32056

PUSH PIER DESIGN ANALYSIS

The load requirements for the pilings designed to assist in supporting the identified areas of the subject residence were determined. The selected piling locations and the specific piling are identified on the Pier Identification and Location Plan attached. The calculated total loads on the piles in the specific location, including both dead and live loads are documented in the attached table which is designated as Attachment "A". Based on the total load requirements for each of these piles, the push pier driver is to be employed. The push pier driver should be employed with a calculated load of 16,630 lbs., which will provide pile capacity, including the 2 to 1 safety factor of 33,260 lbs. which is greater than the maximum calculated total load of 16,630 lbs. which occurs on the pile identified as no. 4. Based on this analysis, the use of the push pier driver for the ECP piles with a specific load of 33,260 lbs. and a minimum depth of 15' is approved and certified as meeting all the requirements of the Florida Building Code 2020 7th Edition, and good engineering practice. This is not to be the primary support structure, but a supplement support to assist in support of the weight of the structure, which will reduce the total pressure on the existing soils. After completion of installation, Cool and Cobb Engineering Company shall be supplied with a drilling log of the location and depths of each pile installed so they can evaluate the installation and prepare the "As Built" drawings.

General Notes:

1. A log of each pile to be kept by Contractor noting depth for each pile.
2. Piles installed less than 48" apart are to be battered 10° away from each other.
3. All pile calculations are based on a maximum spacing of 8'-0".
4. This design is based on the loads of the structure placed on the shallow soils under the structure.
5. No deep soils geotechnical testing information was provided for this design.
6. This design does not address any possible sink hole activity as defined in Florida Statute § 627.706.

5/19/2022

Kenneth F Wheeler, P.E.
State of Florida
Professional Engineer No. 60417

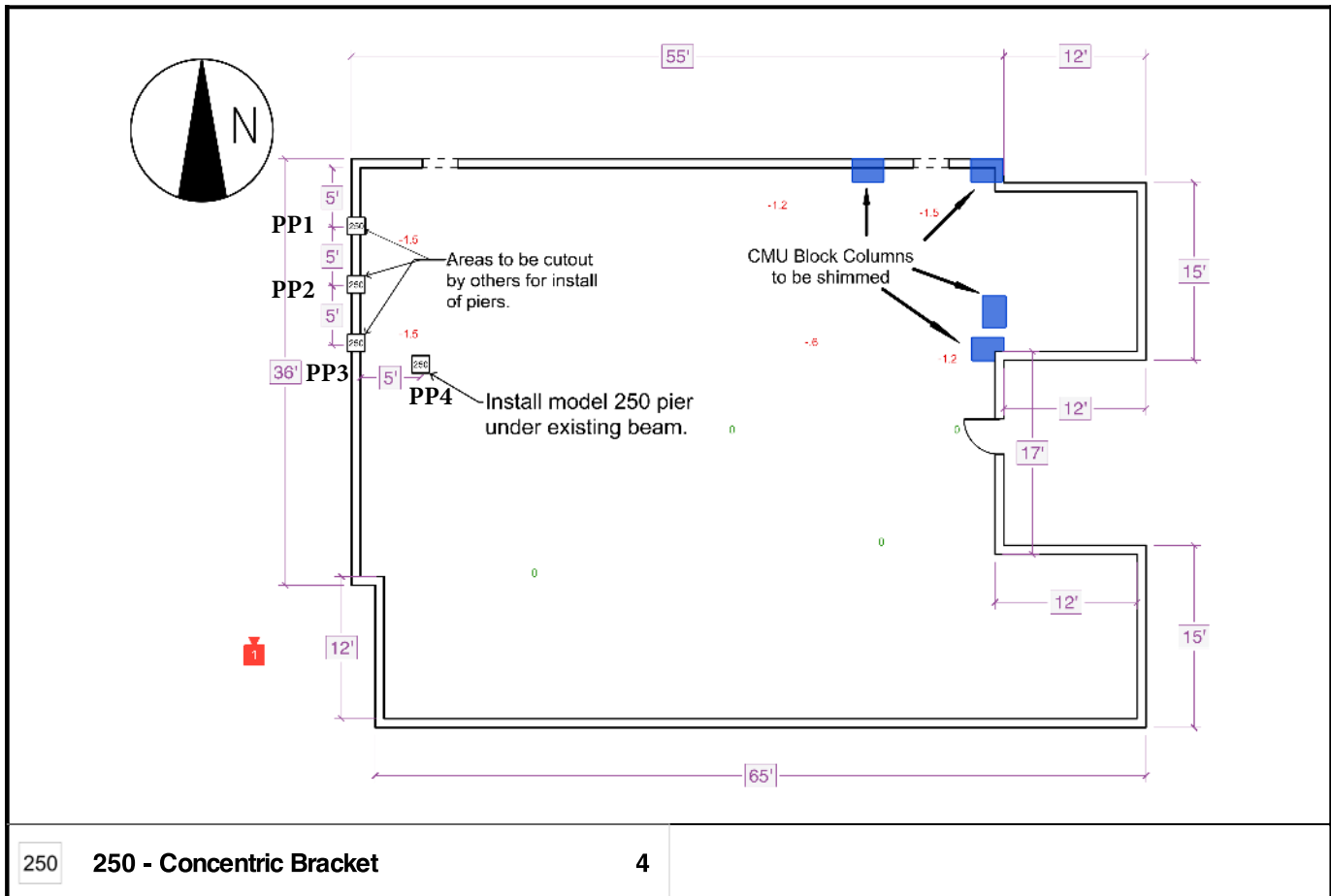


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203 W. Main St.
Avon Park, FL 33825
Office: (863) 657-2323
Fax: (863) 657-2324

Repair Plan



Veneer:
Vinyl Siding

Cool and Cobb Engineering Co.
203 W. Main St.
Avon Park, FL 33825

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Attachment "A"

Total Load on Pile

(Live Load + Dead Load)

PILE NO.

TOTAL CALCULATE LOAD

1

7,500 lbs

2

7,500 lbs

3

12,500 lbs

4

16,630 lbs

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Maximum Total Load on Pile: 16,630 lbs

5/19/2022

Kenneth F Wheeler, P.E.

PE# 60417



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by Kenneth F
Wheeler

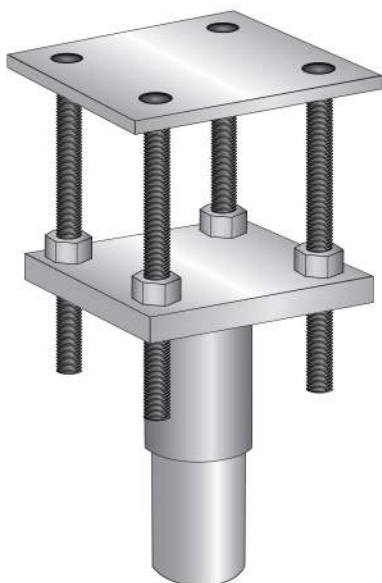
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Cool and Cobb Engineering Co.

203 W. Main St.

Avon Park, FL 33825

PPB-250--Concentric Bracket



Product Specifications

Anchor Style	Concentric Pier
Component	Pier Bracket
Capacity	54 Kip
Bearing Surface	100 square inches
Lift Capacity	Fully Adjustable for Unlimited Lift
Coating	Black
Standard Package	40
Standard Package Unit	Each Bracket w/ starter section
Weight	62 lbs.
Min Order Qty	1

Notes

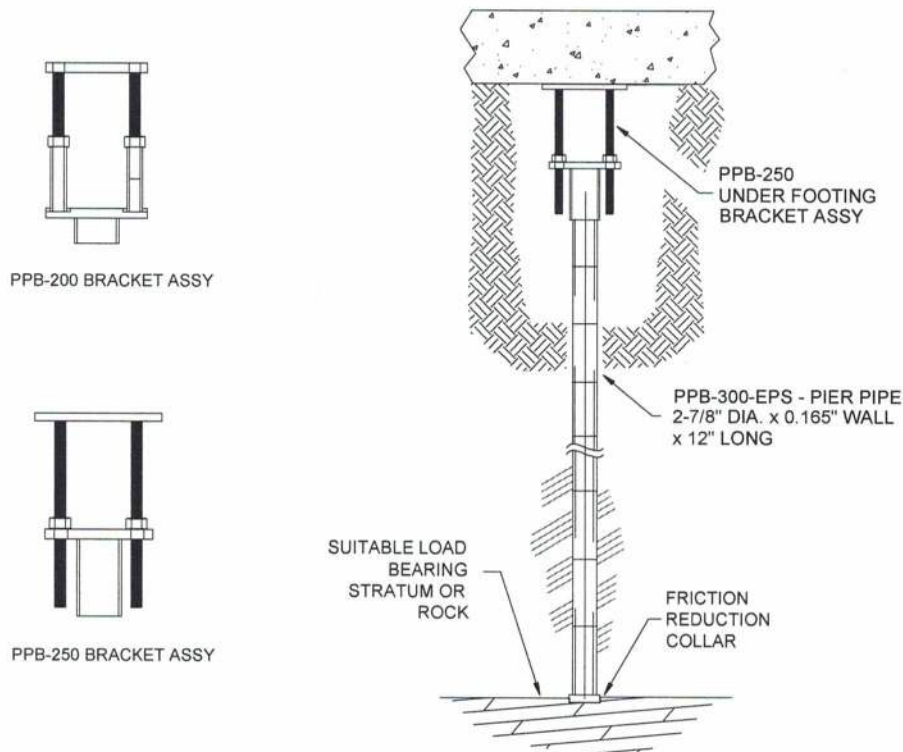
Concentric Bracket

5/19/2022
Kenneth F. Wheeler, P.E.
PE# 60417

Cool and Cobb Engineering Co.
203 W. Main St.
Avon Park, FL 33825

ECP Steel Pier™ -- PPB-200 & PPB-250 Under Footing Bracket Pier System

- | | |
|---|--|
| <ul style="list-style-type: none"> • PPB-200 Ultimate Capacity – 50,000 lb • Maximum Proof Load – 37,500 lb • 68 Square Inches Bearing Surface | <ul style="list-style-type: none"> • PPB-250 Ultimate Capacity – 54,000 lb • Maximum Proof Load – 40,500 lb • 100 Square Inches Bearing Surface |
|---|--|
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| <ul style="list-style-type: none"> • Standard Lift – 4" • Fully Adjustable Unlimited Lift Capability • Installs Under Footing • Friction Reduction Collar On Lead Pier Section • 2-7/8" Diameter High Strength, Galvanized Tubular Pier | <ul style="list-style-type: none"> • Installs With Portable Equipment • Installed With Little or No Vibration • Installs To Rock or Verified Load Bearing Stratum • 100% of Piers Proof Tested When Installed • Manufacturer's Warranty |
|--|--|



PPB-200 & PPB-250 Under Footing Bracket Details

PPB-250 Under Footing Pier System Application Details

The capacity of the PPB-200 and PPB-250 under foundation support system is a function of the capacity of pier pipe and soil surrounding the pipe, capacity of the load bearing stratum, capacity of the foundation bracket, foundation strength and strength of the bracket to foundation connection. Actual capacities could be lower than the bracket capacity.

Earth Contact Products, LLC reserves the right to change design features, specifications and products without notice, consistent with our efforts toward continuous product improvement. Please check with Earth Contact Products at 972 480-0007 or 913 393-0007 to verify that you are using the most recent specifications.