Cool and Cobb Engineering Company

Date: Project: <u>25-1140</u> 4/10/2025

Job: Traci Murray

2960 SE County Rd 252, Lake City, FL 32025 Location:

CRAWL SPACE JACK DESIGN ANALYSIS

The load requirements for the Crawl Space Jacks designed to assist in supporting the identified areas of the subject residence were determined. The selected Crawl Space Jack locations and the specific Crawl Space Jacks are identified on the Jack Identification and Location Plan attached. The calculated total loads on the Crawl Space Jacks in the specific location, including both dead and live loads are documented in the attached table which is designated as Attachment "A". This Crawl Space Jack design is approved and certified as meeting all the requirements of the Florida Building Code 2023 8th 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 and reduce deflection in beams. After completion of installation, Cool and Cobb Engineering Company shall be supplied with a log of the location of each Crawl Space Jack installed so they can evaluate the installation and prepare the "As Built" drawings.

General Notes:

- 1. The Crawl Space Bracket attached in this design is approved as minimum size required for the loads.
- 2. Top plate to be secured to beam by one of the below methods:

Steel Beam – Field spot weld, min. 2 locations each jack.

Wood Beam – (2) Min. 2 ½" length deck screw

- 3. Assumed allowable soil loading of 2,000 psf.
- 4. A log of each Crawl Space Jack to be kept by Contractor.

4/10/2025

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



Digitally signed by Kenneth F Wheeler Date: 2025.04.10

15:50:28 -04'00'

This item has been digitally signed and sealed by Kenneth F. Wheeler, P.E. on the date adjacent to the seal.

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

Fax: (863) 657-2324

Legend

Foundation



New W4x13 Steel Beam



Existing Relocated Piers w/ shims where needed



New Crawlspace Jacks 1 - 13





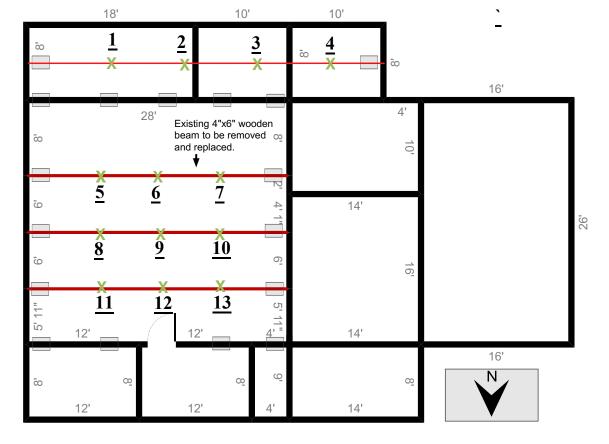
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4/10/2025

Kenneth F. Wheeler, PE #60417 Cool and Cobb Engineering Co. 203 W. Main Street, Avon Park, FL 33825

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Concrete block structure

Built : 1940

Foundation: Pier and beam Crawlspace height: 18" Siding: Stucco

Roof: Metal

FPI proposes to install 124 LN ft of

Galvanized Steel I-Beam

13 PPB 107 Crawlspace Screwjacks

Murray- Crawlspace Repair



Foundation Professionals of Florida

3309 SW State Road 247 Lake City, FL 32024 www.foundationprosfl.com (386) 755-3002

Project Address

Traci Murray 2960 SE County Rd 252 Lake City, FL 32025 (386) 623-6637 | atzb1234@yahoo.com

Created By

Admin Office (386) 755-3002 estimates@foundationprosfl.com Created 3/4/2025

Cool and Cobb Engineering Company

Date:	4/10/2025	Project #	25-1140
Job:	Traci Murray		
Location:	2960 SE County Rd 252, Lake City, FL 32025		

Attachment "A"

Total Load on Support (Live Load + Dead Load)

1 1,150 lbs 2 1,150 lbs 3 1,150 lbs 4 1,150 lbs 5 2,510 lbs 6 2,510 lbs 7 2,510 lbs 8 2,150 lbs 9 2,150 lbs 10 2,150 lbs 11 2,140 lbs 12 2,140 lbs 13 2,140 lbs	SUPPORT NO.	TOTAL CALCULATE LOAD		
3 1,150 lbs 4 1,150 lbs 5 2,510 lbs 6 2,510 lbs 7 2,510 lbs 8 2,150 lbs 9 2,150 lbs 10 2,150 lbs 11 2,140 lbs 12 2,140 lbs	1	1,150 lbs		
4 1,150 lbs 5 2,510 lbs 6 2,510 lbs 7 2,510 lbs 8 2,150 lbs 9 2,150 lbs 10 2,150 lbs 11 2,140 lbs 12 2,140 lbs	2	1,150 lbs		
5 2,510 lbs 6 2,510 lbs 7 2,510 lbs 8 2,150 lbs 9 2,150 lbs 10 2,150 lbs 11 2,140 lbs 12 2,140 lbs	3	1,150 lbs		
6 2,510 lbs 7 2,510 lbs 8 2,150 lbs 9 2,150 lbs 10 2,150 lbs 11 2,140 lbs 12 2,140 lbs	4	1,150 lbs		
7 2,510 lbs 8 2,150 lbs 9 2,150 lbs 10 2,150 lbs 11 2,140 lbs 12 2,140 lbs	5	2,510 lbs		
8 2,150 lbs 9 2,150 lbs 10 2,150 lbs 11 2,140 lbs 12 2,140 lbs	6	2,510 lbs		
9 2,150 lbs 10 2,150 lbs 11 2,140 lbs 12 2,140 lbs	7	2,510 lbs		
10 2,150 lbs 11 2,140 lbs 12 2,140 lbs	8	2,150 lbs		
11 2,140 lbs 12 2,140 lbs	9	2,150 lbs		
12 2,140 lbs	10	2,150 lbs		
•	11	2,140 lbs		
13 2.140 lbs	12	2,140 lbs		
2,2.10	13	2,140 lbs		

Maximum Total Load on Pile: 2,510 lbs



Digitally signed by Kenneth F Wheeler Date: 2025.04.10

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EARTH CONTACT PRODUCTS, LL

PPB-103 & PPB-107--Crawl Space Jack

4/10/2025 Kenneth F. Wheeler, P.E. PE #60417 Cool and Cobb Engineering Co. 203 W. Main St. Avon Park, FL 33825







PPB-107

Product Specifications

Anchor Style Component **Ultimate Capacity Shaft Material Bearing Plate Size** PPB-103 Baseplate PPB-107 Baseplate

Threaded Rod

Coating

Standard Package

Resistance

Crawl Space Jack

60,000 lbs.

3-1/2" O.D. x .165" Wall

5" x 6"

3-1/2" x 3-1/2"

7" x 7"

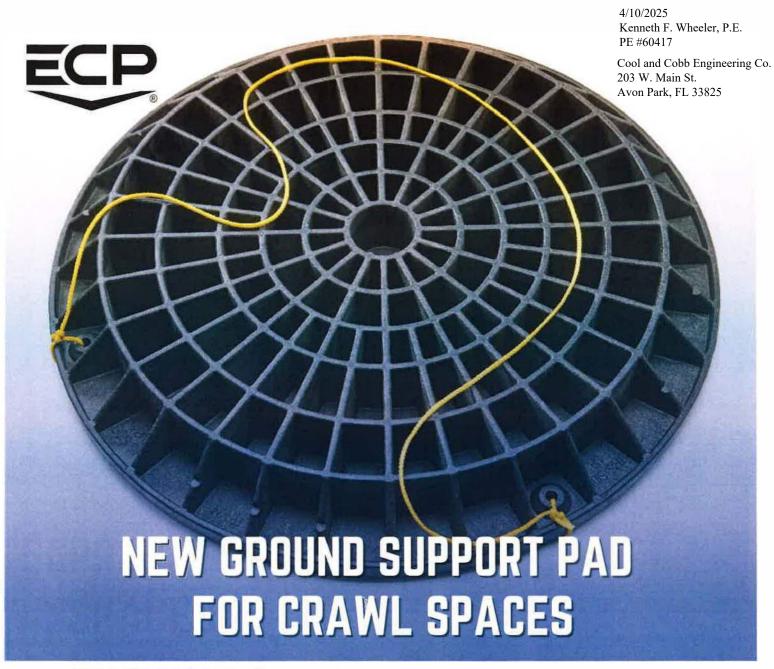
1-1/4" x 10"

Galvanized

Each

Notes

Pre-cast or poured footing provided by contractor.



TAKE YOUR SUPPORT TO THE NEXT LEVEL

ECP's new Footing Pad for supplemental support replaces the need to handle concrete or crushed gravel in confined crawl space areas. The 24" round composite Footing Pad has a capacity of 9,327 lbs. with a 3:1 Factor of Safety when used on 3,000 psi soil. This load is backed up by the ICC and ESR-2147.

ECP is offering the Footing Pad at two different price points. Full skid quantity is 68 pieces, and full skids will be priced at per Footing Pad. For quantities less than 68, the Footing Pad will be each. Please contact ECP to order your Footing Pad and Crawl Space Supports today.

Part #	Description	Qty	Price	Bulk	Price
PPB -107- FP24	24" Footing Pad for use with PPB -107	1 - 67		68 Per Skid	