

Cool and Cobb Engineering Company

Job: Martha Rine
Location: 243 SE Vet Loop, Lake City, FL 32025

Date: 7/23/2026
Project: 26-1264

CRAWL SPACE JACK DESIGN ANALYSIS

Design Scope Notes:

1. This design is developed per field assessment and layout provided by licensed foundation contractor. Cool and Cobb Engineering Co. has not performed an on-site assessment of the structure.
2. Location and amount of supplemental crawl space jacks has been determined by owner/contractor agreement.
3. This design provides stabilization to the area receiving supplemental support only. Structure may require additional stabilization to other affected areas not addressed in the contractor/owner agreement.
4. No deep soils geotechnical testing information was provided for this design.
5. Cool and Cobb is not responsible for on-site engineering evaluations or inspections. If on-site inspection is required, contractor to obtain an approved 3rd party to inspect and provide Cool and Cobb Engineering inspection certification details and report.
6. This design does not address any possible sink hole activity as defined in Florida Statute § 627.706.

General Notes:

1. The Crawl Space Jack and base size noted in this design is approved as minimum size required for the calculated loads, unless noted otherwise.
2. Top plate of jack to be secured to beam by either: Steel Beam – (1) 3/8" Grade 8 bolt and nut, or manufacturer designed bracket.
(See Detail Below) Wood Beam – (2 or 4) #9 2 1/2" galv. deck screws.
3. This design is based on assumed allowable soil loading of 2,000 psf.
4. All supplemental jacks to be installed in accordance with ICC ES AC 358.
5. At completion of the installation, Cool and Cobb shall be supplied with a signed and dated certified design plan to include final location, along with any design changes, for Engineer approval and completion of the "As Built Certification".

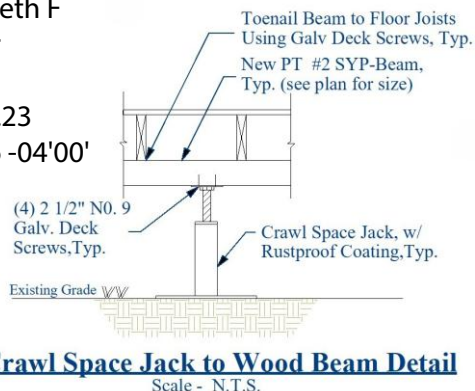
LOADING ANALYSIS

The loadings were determined for each supplemental jack specifically. The support locations are provided in the attached plan. Calculated total loadings, including both dead and live loads are provided in Attachment "A". This design is certified as meeting the requirements of the Florida Building Code 2023, 8th Edition, and good standard 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 piers and reduce deflection in existing floor joists

7/23/2026
Kenneth F. Wheeler, P.E.
State of Florida
Professional Engineer No. 60417



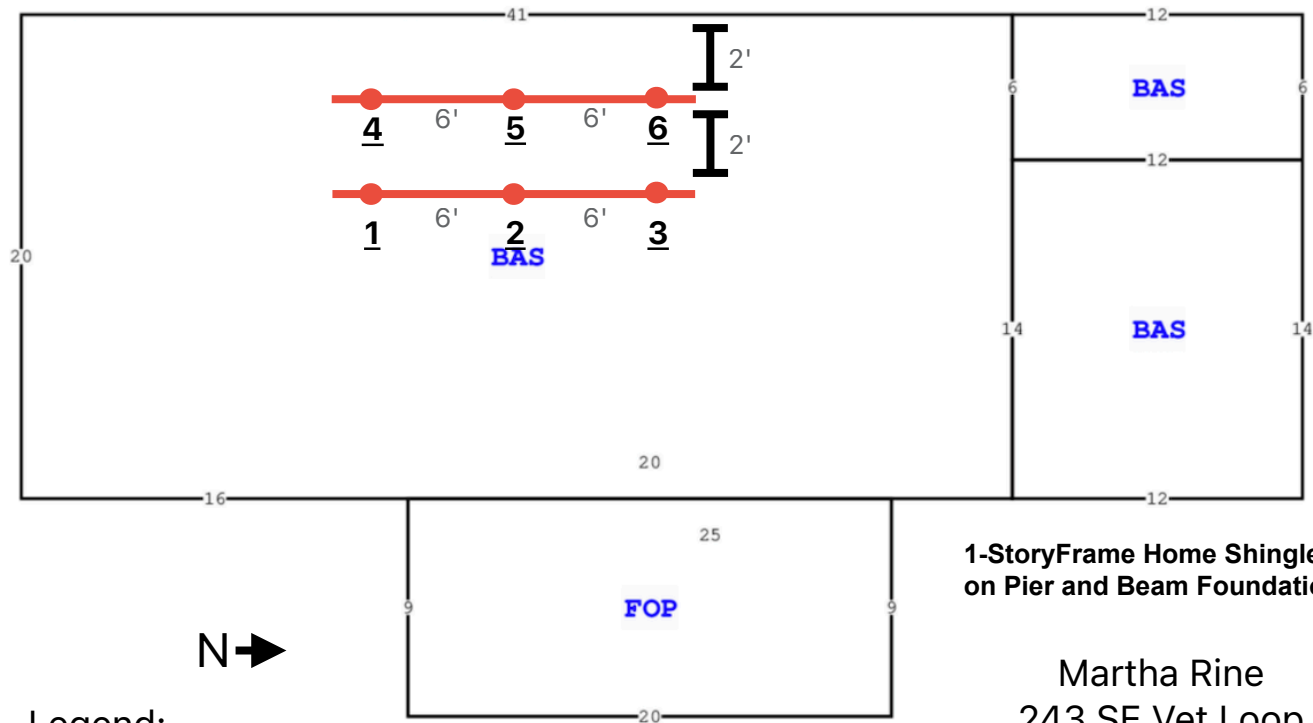
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by Kenneth F
Wheeler
Date:
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Contractor: Affordable Foundation Repair



Legend:

● New Smartjack

— New PT 4"x6" WD Support Beam

**1-Story Frame Home Shingle Roof
on Pier and Beam Foundation.**

Martha Rine
243 SE Vet Loop
Lake City, FL 32025



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7/23/2026
Kenneth F. Wheeler, PE #60417
Cool and Cobb Engineering Co.
203 W. Main St.,
Avon Park, FL 33825

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Attachment "A"

Total Load on Support (Live Load + Dead Load)

SUPPORT NO.	TOTAL CALCULATE LOAD	
1	1,100	lbs
2	1,320	lbs
3	1,100	lbs
4	550	lbs
5	660	lbs
6	550	lbs

Maximum Total Load on Pile: 1,320 lbs



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Wheeler
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7/23/2026

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

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Avon Park, FL 33825
Office: (863) 657-2323

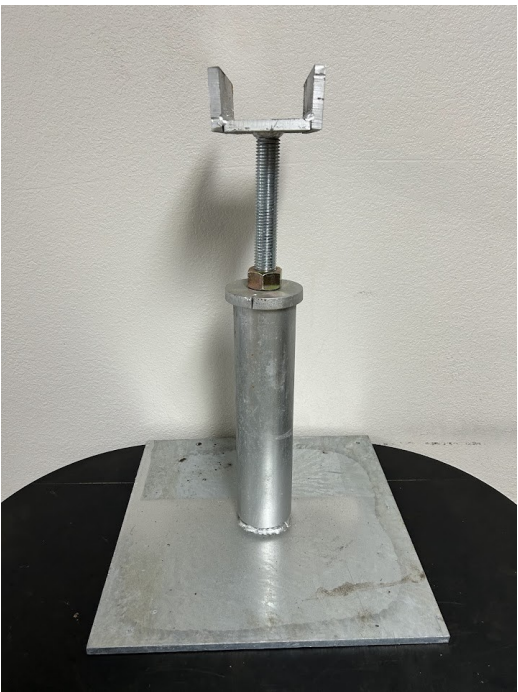
NOTES:
MAX TOTAL LOAD ON PILE: 3,100 LBS.

Engineer only certifies that this product was the basis for the building foundation stabilization design.

7/23/2026
Kenneth F. Wheeler, P.E.
PE #60417
Cool and Cobb Engineering Co.
203 W. Main St.
Avon Park, FL 33825

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	CS-15-1_Top Plate	4" x 6" x 3/8" Plate ASTM A36 STEEL	1
2	CS-15-2_Bottom Plate	15" x 15" x 3/8" Plate ASTM A36 STEEL	1
3	CS-15-3_Tube	6" 2.375" OD, sch 40 ASTM A53 B	1
4	CS-15-4_Extension Tube	12" 2.5" OD, sch 40 ASTM A53 B	1
5	CS-15-5_Threaded Rod	12"L- 1" Zinc Coated Threaded Rod	1
6	FSS-2875-1032-1000_Pipe Cap	3" OD 1/2" Plate ASTM A36 STEEL	1
7	NUT 1-8	1-8 HEX NUT GR-8 Zinc Coated	2

Optional Top Plate for I-Beam – 4 1/4" x 6" x 3/8" Plate with (2) Side Plates 2" x 6" x 3/8" Plate ASTM A36 STEEL



Hot Dipped Galvanized in accordance with ASTM A123

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/16 ANGULAR: MACH ± .5 TWO PLACE DECIMAL ± .01 THREE PLACE DECIMAL ± .005 INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5 MATERIAL		NAME	DATE	 TITLE: CRAWL SPACE BRACKET-GAL SIZE B PART NO. CS-15-2-GAL REV - SCALE: 1:12 WEIGHT: SHEET 1 OF 1
	DRAWN	JEO	5/4/25	
	CHECKED			
	ENG APPR.			
	MFG APPR.			
	Q.A.			
	COMMENTS: HOT-DIPPED GALVANIZED			