



Mobile Home Permit Worksheet

Permit Number: _____ Date: _____

Installer: Brent Strickland License # TH1104218

Address of home _____
being installed _____

Manufacturer _____ Length x width 28 x 52

NOTE: *If home is a single wide fill out one half of the blocking plan
If home is a triple or quad wide sketch in remainder of home
where the sidewall ties exceed 5 ft 4 in.*

Typical pier spacing 5'
Installer's initials B3S

2'
lateral
longitudinal
Show locations of Longitudinal and Lateral Systems
(use dark lines to show these locations)

Load bearing capacity	Footer size (sq in)	16" x 16" (256)	18 1/2" x 18 1/2" (342)	20" x 20" (400)	22" x 22" (484)*	24" x 24" (576)*	26" x 26" (676)
1000 psf	3'	4'	5'	6'	7'	8'	8'
1500 psf	4 1/2'	6'	7'	8'	8'	8'	8'
2000 psf	6'	8'	8'	8'	8'	8'	8'
2500 psf	7 1/2'	8'	8'	8'	8'	8'	8'
3000 psf	8'	8'	8'	8'	8'	8'	8'
3500 psf	8'	8'	8'	8'	8'	8'	8'

*interpolated from Rule 15C-1 pier spacing table.

PIER PAD SIZES

12x25

16x16

I-beam pier pad size
Perimeter pier pad size
Other pier pad sizes
(required by the mfg.)

Draw the approximate locations of marriage
wall openings 4 foot or greater. Use this
symbol to show the piers.

List all marriage wall openings greater than 4 foot
and their pier pad sizes below.

Opening

Pier pad size

6' 12x25
8' 12x25

4 ft 5 ft

POPULAR PAD SIZES

Pad Size	Sq in
16 x 16	256
16 x 18	288
18.5 x 18.5	342
16 x 22.5	360
17 x 22	374
13 1/2 x 26 1/4	348
20 x 20	400
17 3/16 x 25 3/16	441
24 x 24	576
26 x 26	676

within 2' of end of home -
spaced at 5' 4" oc -

TIEDOWN COMPONENTS

Longitudinal Stabilizing Device (LSD)

Manufacturer _____

Longitudinal Stabilizing Device w/ Lateral Arms

Manufacturer _____

Oliver Tech

ANCHORS

FRAME TIES

Number	Sidewall	Longitudinal	Marriage Wall	Shear Wall
23	4	4	4	4



Mobile Home Permit Worksheet

Permit Number: _____

Date: _____

The pocket penetrometer tests are rounded down to _____ psf or check here to declare 1000 lb. soil without testing.

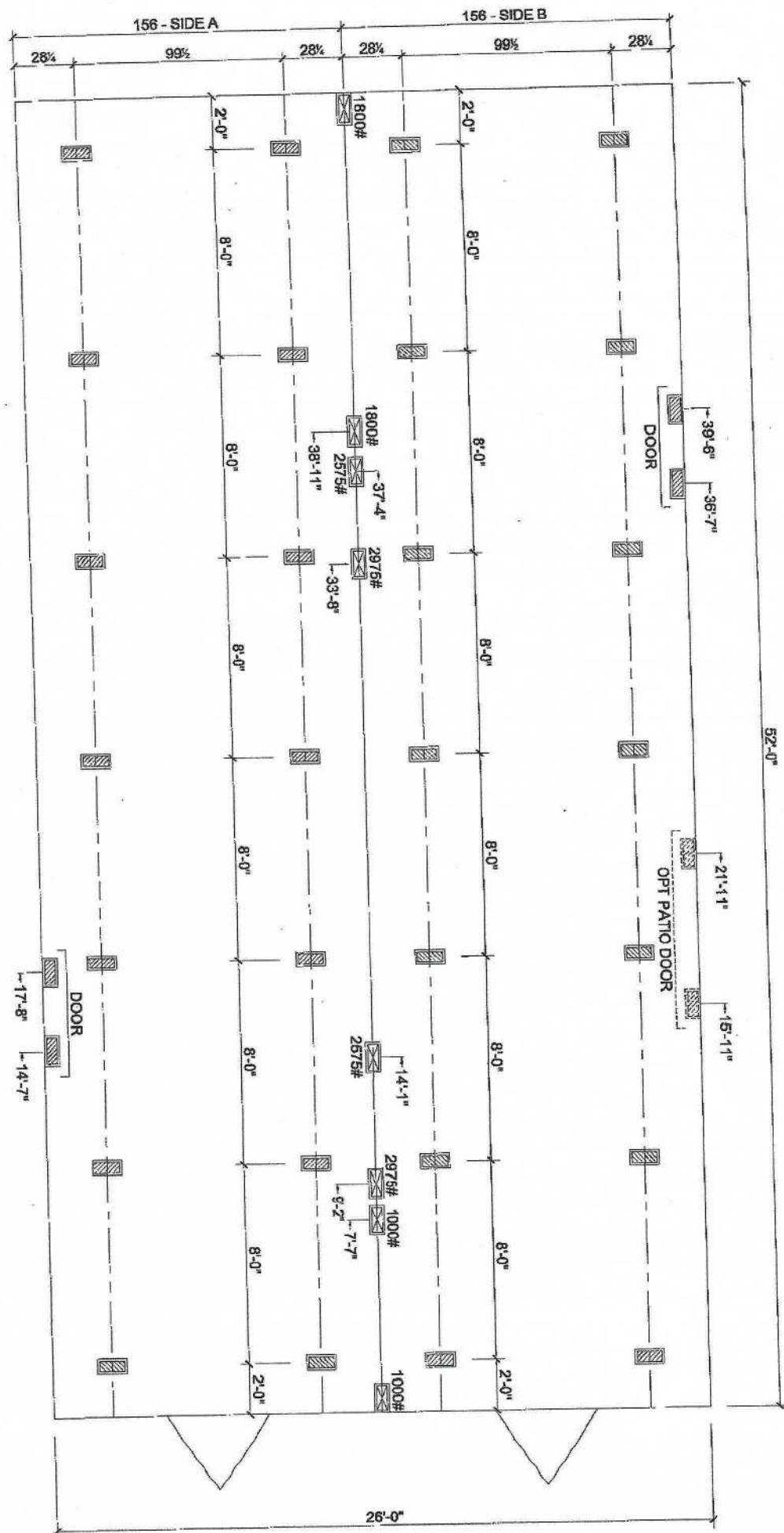
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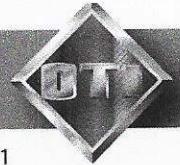
**Live Oak Homes
MODEL: D-2523H - 28' X 52' (BOX)
3-BEDROOM / 2-BATH**

REV: 10/20/23

MARRIAGE LINE OPENING SUPPORT PIER/TYP
 SUPPORT PIER/TYP

FOUNDATION NOTES:
- THIS DRAWING IS DESIGNED FOR THE STANDARD WIND ZONE AND IS "TO BE USED IN CONJUNCTION WITH THE INSTALLATION MANUAL AND IT'S SUPPLEMENTS."
- FOOTINGS ARE SHOWN FOR EXAMPLE ONLY. QUANTITY AND SPACING MAY VARY BASED ON PAD TYPE, SOIL CONDITION, ETC.
- FOOTINGS ARE REQUIRED AT SUPPORT POSTS. SEE INSTALLATION MANUAL FOR REQUIREMENTS.





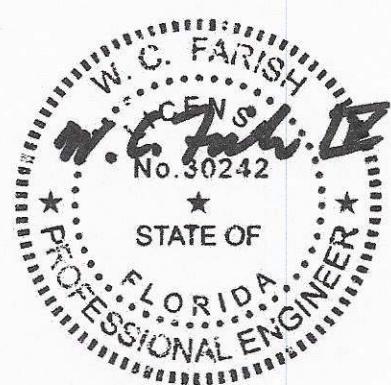
467 Swan Ave • Hohenwald, TN 38462 • (800) 284-7437 • www.olivertechnologies.com • Fax (931) 796-8811

OLIVER TECHNOLOGIES, INC.

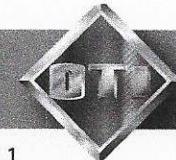
INSTALLATION INSTRUCTIONS FOR FLORIDA

MODEL 1101 "V" SERIES ALL STEEL FOUNDATION SYSTEM PAN & CONCRETE (revision 5/18)

PATENT# 6634150 & OTHER PATENT PENDING



Aug 24, 2018



OLIVER TECHNOLOGIES, INC.

FLORIDA INSTALLATION INSTRUCTIONS FOR THE
MODEL 1101 "V" SERIES ALL STEEL FOUNDATION SYSTEM

MODEL 1101 "V" (Steps 1-14)

LONGITUDINAL ONLY: Follow Steps 1-9

LATERAL ONLY: Follow Steps 1-3 and Steps 10-14

FOR CONCRETE APPLICATIONS: Follow Steps 15-18

ENGINEERS STAMP

ENGINEERS STAMP

1. SPECIAL CIRCUMSTANCES: If the following conditions occur - **STOP! Contact Oliver Technologies at 1-800-284-7437:**

- a) Pier height exceeds 48"
- c) Roof eaves exceed 16"
- e) Location is within 1500 feet of coast
- b) length of home exceeds 76'
- d) Sidewall height exceed 96"

INSTALLATION OF GROUND PAN

2. Remove weeds and debris in an approximate two foot square to expose firm soil for each ground pan (C).

3. Place ground pan (C) directly below chassis I-beam. Press or drive pan firmly into soil until flush or below soil then install pier per manufacturer's instructions or per Florida Regs.

SPECIAL NOTE: The longitudinal "V" brace system may also serve as a pier under the home and should be loaded as any other pier. It is recommended that after leveling piers, and one-third inch (1/3") before home is lowered completely on to piers, complete steps 4 through 9 below then remove jacks.

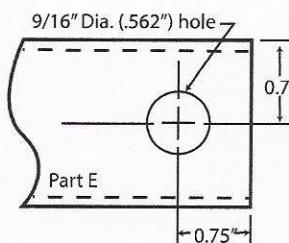
INSTALLATION OF LONGITUDINAL "V" BRACE SYSTEM (Model 1101 L "V")

NOTE: WHEN INSTALLING THE LONGITUDINAL SYSTEM ONLY, A MINIMUM OF 2 SYSTEMS PER FLOOR SECTION IS REQUIRED. SOIL TEST PROBE SHOULD BE USED TO DETERMINE CORRECT TYPE OF ANCHOR PER SOIL CLASSIFICATION. IF PROBE TEST READINGS ARE BETWEEN 175 & 275 A 5 FOOT ANCHOR MUST BE USED. IF PROBE TEST READINGS ARE BETWEEN 276 & 350 A 4 FOOT ANCHOR MAY BE USED. USE GROUND ANCHORS WITH DIAGONAL TIES AND STABILIZER PLATES EVERY 5'4". VERTICAL TIES ARE ALSO REQUIRED ON HOMES SUPPLIED WITH VERTICAL TIE CONNECTION POINTS (PER FLORIDA REG.).

4. Choose one of the approved longitudinal tube installations; either Diagram A or B. Then select the correct square tube (E) length from the diagram for appropriate pier height at support location or cut and drill 1.5" square tube to achieve appropriate length.

PIER HEIGHT (40° Min. - 45° Max.)	1.25" Tube Length	1.50" Tube Length
7 3/4" to 25"	22"	18"
24 3/4" to 32 1/4"	32"	18"
33" to 41"	44"	18"
40" to 48"	54"	18"

Diagram A



PIER HEIGHT (40° Min. - 60° Max.)	1.50" Tube Length
14" to 18"	20"
18" to 25"	28"
24" to 35"	39"
30" to 40"	44"
36" to 48"	54"

Diagram B

5. Install (2) of the 1.50" square tubes (E) into the "U" bracket (J), insert carriage bolt and leave nut loose for final adjustment.

6. Place I-beam connector (F) loosely on the bottom flange of the I-beam.

7. (For Diagram A installation) Slide the selected 1.25" tube (E) into a 1.50" tube (E) and attach to I-beam connectors (F) and fasten loosely with bolt and nut. (For Diagram B installation) Attach the selected 1.5" tubes (E) to the I-beam connectors (F) and fasten loosely with bolts and nuts.

8. Repeat steps 6 through 7 to create the "V" pattern of the square tubes loosely in place.

9. Using standard hand tools tighten all nuts and bolts. (For Diagram A installation only, secure 1.25" and 1.50" tubes using four(4) 1 1/4"-14 x 3/4" self-tapping screws in pre-drilled holes.)

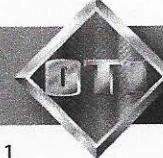
INSTALLATION OF LATERAL TELESCOPING TRANSVERSE ARM SYSTEM (Model 1101 T "V")

THE MODEL 1101 "V" (LONGITUDINAL & LATERAL PROTECTION) ELIMINATES THE NEED FOR STABILIZER PLATES & FRAME TIES.

NOTE: THE USE OF THIS SYSTEM REQUIRES VERTICAL TIES SPACED AT 5'4".

FOUR FOOT (4') GROUND ANCHOR MAY BE USED EXCEPT WHERE THE HOME MANUFACTURER SPECIFIES DIFFERENT.

10. Install remaining vertical tie-down straps and 4' ground anchors per home manufacturer's instructions. NOTE: Centerline anchors to be sized according to soil torque condition. Any manufacturer's specifications for sidewall anchor loads in excess of 4,000 lbs. require a 5' anchor per Florida Code.
11. Select the correct square tube brace (H) length for set-up lateral transverse at support location. The lengths come in either 60" or 72" lengths. (With the 1.50" tube as the bottom tube, and the 1.25" tube as the inserted tube.)
12. Install the 1.50 transverse brace (H) to the ground pan connector (D) with bolt and nut.
13. Slide 1.25" transverse brace into the 1.50" brace and attach to adjacent I-beam connector (I) with bolt and nut.
14. Secure 1.50" transverse arm to 1.25" transverse arm using four (4) 1 1/4"-14 x 3/4" self-tapping screws in pre-drilled holes.



INSTALLATION USING CONCRETE RUNNER/ FOOTER

15. A concrete runner, footer or slab may be used in place of the steel ground pan.
- The concrete shall be minimum 2500 psi mix
 - A concrete runner may be either longitudinal or transverse, and must be a minimum of 8" deep with a minimum width of 16 inches longitudinally or 18 inches transverse to allow proper distance between the concrete bolt and the edge of the concrete (see below).
 - Footers must have minimum surface area of 441 sq. in. (i.e. 21" square), and must be a minimum of 8" deep.
 - If a full slab is used, the depth must be a 4" minimum . Special inspection of the system bracket installation is not required. Footers must allow for at least 4" from the concrete bolt to the edge of the concrete.

NOTE: The bottom of all footings, pads, slabs and runners must be per local jurisdiction.

LONGITUDINAL: (Model 1101 LC "V")

16. When using Part# 1101-W-CPCA (wetset) simply install the bracket in runner/footer **OR** When installing in cured concrete use Part# 101-D-CPCA (dryset). The 1101 (dryset) CA bracket is attached to the concrete using (2) 5/8"x3" concrete wedge bolts (Simpson part # S162300H 5/8" X 3" or Powers equivalent). Place the CA bracket in desired location. Mark bolt hole locations, then using a 5/8" diameter masonry bit, drill a hole to a minimum depth of 3". Make sure all dust and concrete is blown out of the holes. Place wedge bolts into drilled holes, then place 1101 (dry set) CA bracket onto wedge bolts and start wedge bolt nuts. Take a hammer and lightly drive the wedge bolt down by hitting the nut (making sure not to hit the top of threads on bolt). The sleeve of concrete wedge bolt needs to be at or below the top of concrete. Complete by tightening nuts.

LATERAL: (Model 1101 TC "V")

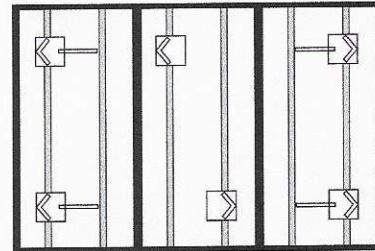
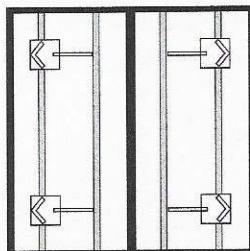
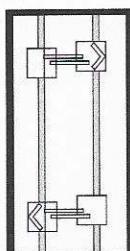
17. For wet set (part # 1101-W-TACA) installation simply install the anchor bolt into runner/footer. For dry set installation (part # 1101-D-TACA) mark bolt hole locations, then using a 5/8" diam. masonry bit. drill a hole to a minimum depth of 3". Make sure all dust and concrete is blown out of the hole. Place wedge bolts (Simpson part #S162300H 5/8" X 3" or Powers equivalent) into (D) concrete dry transverse connector and into drilled hole. If needed, take a hammer and lightly drive the wedge bolts down by hitting the nut (making sure not to hit the top of threads on bolt), then remove the nut. The sleeve of concrete wedge bolt needs to be at or below the top of concrete.

18. When using part# 1101 CVW (wetset) or 1101 CVD (dryset), install per steps 17 & 18.

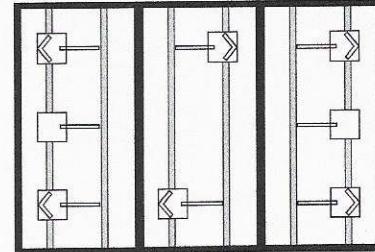
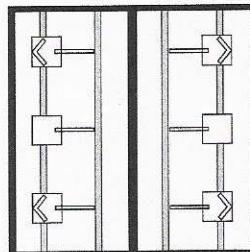
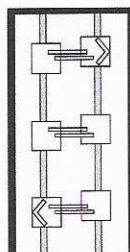
Notes:

1. LENGTH OF HOUSE IS THE ACTUAL BOX SIZE
2. = LOCATION OF TRANSVERSE BRACING ONLY
3. = LOCATION OF LONGITUDINAL BRACING ONLY
4. = TRANSVERSE AND LONGITUDINAL LOCATIONS

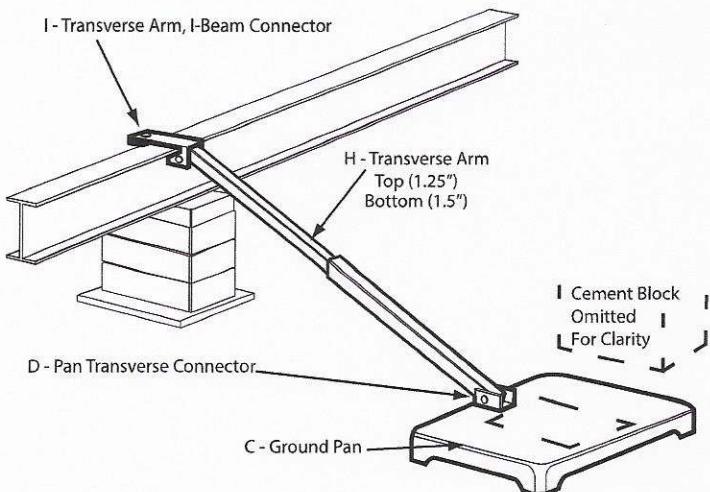
ALL WIDTHS AND LENGTHS UP TO 52'



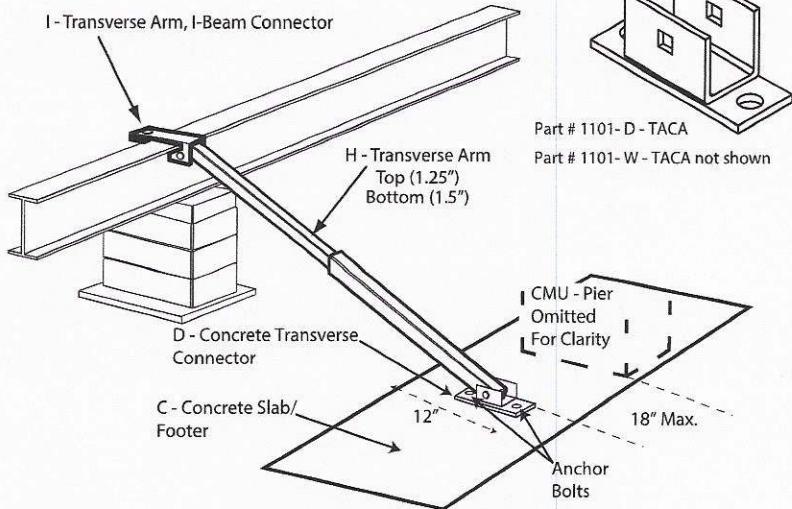
ALL WIDTHS AND LENGTHS OVER 52' TO 80"



HOMES WITH 5/12 ROOF PITCH REQUIRE: PER FLORIDA REGULATIONS
6 systems for home lengths up to 52' and 8 systems for homes over 52' and up 80'.



Model # 1101 T "V"



Model # 1101 TC "V"

Florida approved 4' ground anchors may be used in all locations except where home manufacturers specifications for sidewall straps are in excess of 4,000 lbs. These locations require a 5' anchor. Per Florida code.

C = GROUND PAN / CONCRETE FOOTER OR RUNNER

D = GROUND PAN / CONCRETE U BRACKETS TRANSVERSE CONNECTOR (connects with grade 5 - 1/2" x 2" 1/2" carriage bolt and nut)

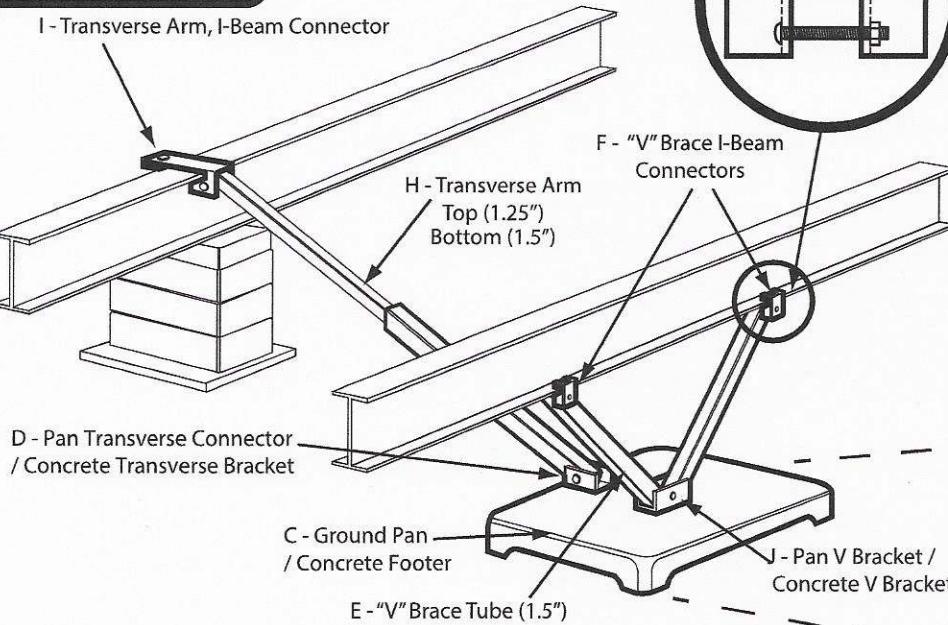
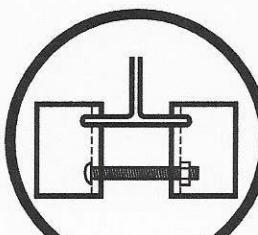
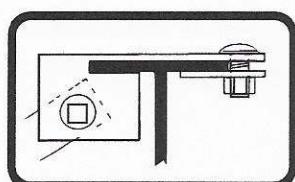
E = TELESCOPING V BRACE TUBE ASSEMBLY (1.5" TUBE BOTTOM AND 1.25" TUBE INSERT) OR 1.5" TUBE

F = "V" BRACE I-BEAM CONNECTOR ASSEMBLY

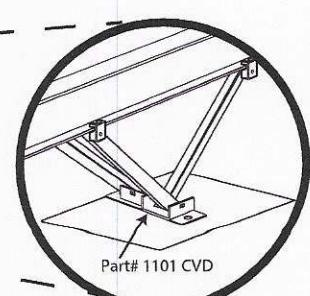
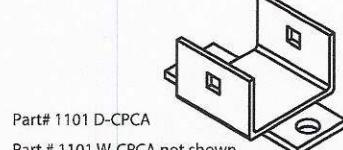
H = TELESCOPING TRANSVERSE ARM ASSEMBLY

I = TRANSVERSE ARM I-BEAM CONNECTOR (connects with grade 5 - 1/2" x 2" 1/2" carriage bolt and nut)

J = V PAN BRACKET (connects with grade 5 - 1/2" x 2" 1/2" carriage bolt and nut)



Model # 1101 "V"



Model # 1101 C "V"

**State of Florida
DEPARTMENT OF
HIGHWAY SAFETY AND MOTOR VEHICLES**
TALLAHASSEE, FLORIDA 32399-0500

FRED O. DICKINSON, III
Executive Director

June 17, 2002

Mr. Lon Larson, General Manager
Manufactured Housing Foundation Systems, Inc.
A Division of Oliver Technologies
Post Office Box 9
Hohenwald, Tennessee 38462

Dear Mr. Larson:

We wish to acknowledge receipt of your specifications and test results certifying that your 1055-20 Flex Free ABS Plastic Pad listed below complies with the specifications and regulations set by the Department of Highway Safety and Motor Vehicles, Rules 15C-1.0105, 15C-1.0107 and 15C-1.0108, Florida Administrative Code.

Based on the information submitted to this bureau, the following product is listed for sale and use in Florida when the installation instructions showing the way the pads were tested, are provided.

<u>MODEL #</u>	<u>IDENTIFICATION</u>	<u>DESCRIPTION</u>	<u>AREA</u>
1055-20	Flex Free ABS Plastic Pad	23.25" x 31.25"	4.698 sq. ft.

MAXIMUM PIER LOADS IN POUNDS BASED ON SOIL VALUES

PAD CONFIGURATION	PAD AREA	LOAD
Pad 1	4.698 sq. ft.	1000 lb. soil - 4,698 2000 lb. soil - 9,396

NOTES: 1) INSTALLER IS RESPONSIBLE FOR DETERMINING SOIL BEARING CAPACITY.
2) THE PAD WAS TESTED FOR SINGLE AND DOUBLE BLOCK CONFIGURATION.
3) 8,000 LB. LOAD AND ABOVE REQUIRE DOUBLE BLOCK CONFIGURATION.

If you have any questions, please advise at (407) 623-1340.

Sincerely,

Phil Bergelt

Phil Bergelt, Program Manager
Bureau of Motor Home and
Recreational Vehicle Construction
Division of Motor Vehicles

PRB:srb



State of Florida
DEPARTMENT OF
HIGHWAY SAFETY AND MOTOR VEHICLES
TALLAHASSEE, FLORIDA 32399-0500

FRED O. DICKINSON, III
Executive Director

October 27, 1999

Mr. Lon Larson, General Manager
Manufactured Housing Foundation Systems
A Division of Oliver Technologies
562 Gleulheather Drive
San Marcos, California 92069

Dear Mr. Larson:

We wish to acknowledge receipt of your print specifications and test results certifying your Adjustable Outrigger listed below complies with the Federal Manufactured Construction and Safety Standards, § 3280.305 and § 3280.401 and with the rules and regulations set forth by the Department of Highway Safety and Motor Vehicles, Florida Administrative Rule Code 1SC-1.01105.

Based on the information submitted to the bureau, the following product is listed for use in Florida when the installation instructions showing the way the outrigger was tested, are provided.

MODEL #	IDENTIFICATION	DESCRIPTION
1055-11	Adjustable Outrigger	Bracket, Pipe, & Screw Adjustment

NOTE: The outrigger was tested on September 19, 1999, for an allowable load of 1700 pounds.

If you have any questions, please advise at (850) 413-7600.

Sincerely,

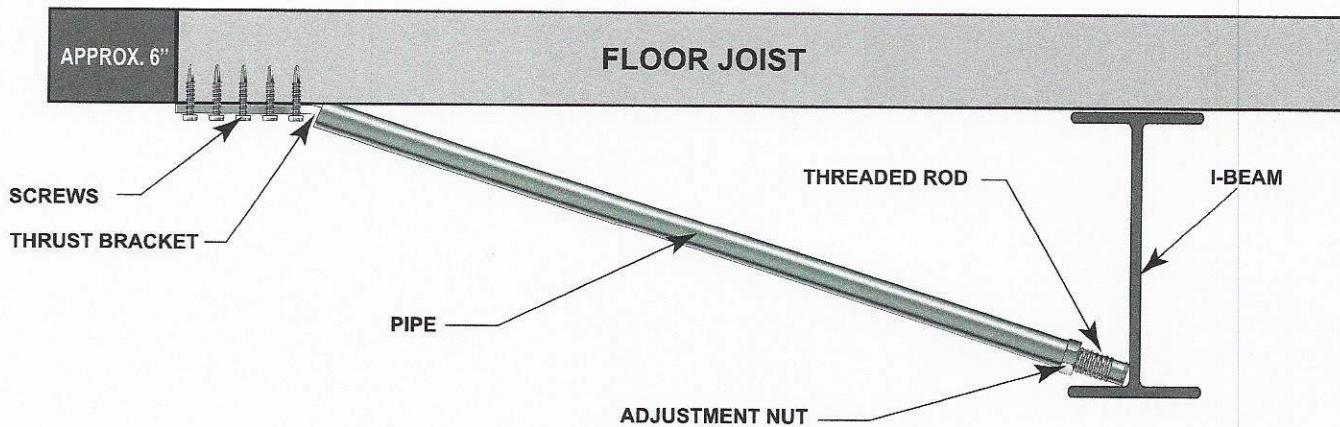
Phil Bergelt, Program Manager
Bureau of Mobile Home and
Recreational Vehicle Construction
Division of Motor Vehicles

PB:bsc



OLIVER TECHNOLOGIES, INC.
Adjustable Outrigger Installation Instructions
MODEL # 1055-11

1. Locate the floor joist that requires support.
2. Mark the I-Beam directly under the floor joist to align the outrigger.
3. Adjust the nut on the threaded rod so it clears the frame flange for easy adjustment.
4. Set the threaded rod in the pipe and against the frame.
5. Set the notched end of the thrust bracket into the end of the pipe and secure it with 5 # 12 x 2" screws to the floor joist. The thrust bracket should be approximately 6" from the outside rim joist.
6. Bottom board and insulation should be between the bracket and the joist.
7. For minor adjustments align the door and window openings by tightening or loosening the adjustment nut. For all other adjustments use a hydraulic jack to raise the floor joist before installation of the outrigger.

**NOTES:**

***REMOVE OUTRIGGER WHEN HOME IS BEING TRANSPORTED**

***SPECIFY WIDTH OF HOME WHEN ORDERING OUTRIGGER. PIPE MAY BE CUT TO FIT**

***THE ADJUSTABLE OUTRIGGERS SHALL ONLY BE USED ON HOMES FOR OPENINGS UP TO:**

6' ON 20 LB ROOF LOAD

4' ON 30 LB ROOF LOAD

3' ON 40 LB ROOF LOAD

***WHEN ADJUSTABLE OUTRIGGERS ARE USED FOR DOOR AND WINDOW SUPPORTS, THEY MUST BE INSTALLED ON THE CLOSEST FLOOR JOIST UP TO 16" FROM THE OUTSIDE EDGE OF THE OPENING**

***DO NOT INSTALL ADJUSTABLE OUTRIGGER AT LOCATIONS WHERE THE HOME MANUFACTURER INDICATES A LOAD IN EXCESS OF 1,700 LBS.**

***THE ADJUSTABLE OUTRIGGER MUST BE USED ON A MINIMUM 10" I-BEAM AND BE PLACED WITHIN 4' OF A MAIN FRAME SUPPORT PIER OR FRAME CROSMEMBER.**

Listing # 1055-11

Patent # 6.334.279

(SY V

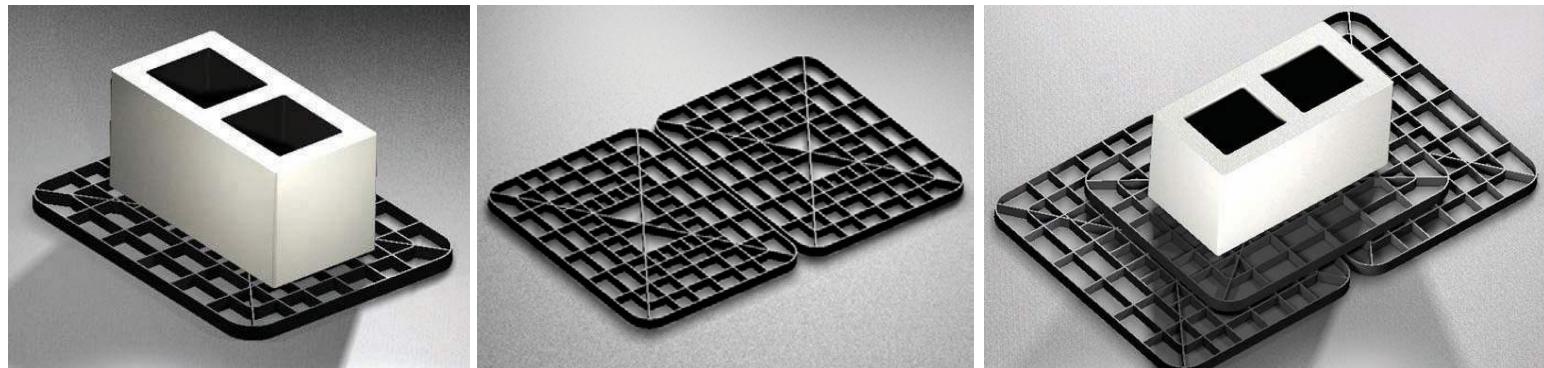
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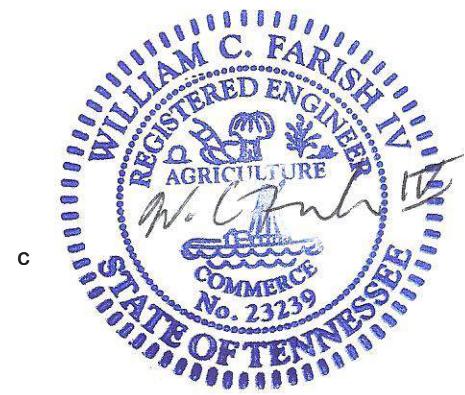
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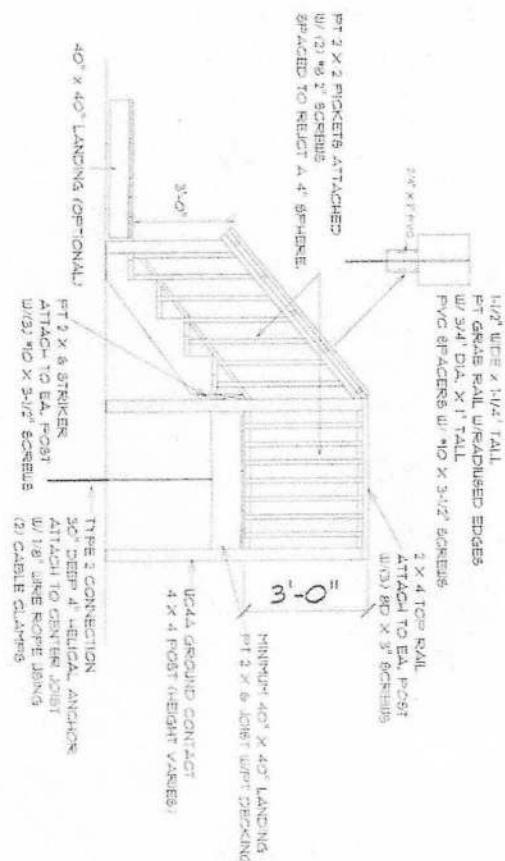
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/ cID#1055-26 may not be used in conjunction with metal piers.

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NOTES:

1. STEPS HAVE A MIN. 40" X 40" LANDING
 2. STEPS HAVE A RISER HEIGHT OF BETWEEN 6.75" TO 7.15"
 3. HANDRAIL HEIGHT 36"
 4. STEPS TO HAVE MIN. 10" TREAD DEPTH.
 5. PICKETS TO BE SPACED TO REJECT A 4" SPHERE.
 6. STEPS TO MEET TREAD TO RISER RATIO - 2 RISES + 1 TREAD = 24" - 25"
 7. FLIGHT OF STAIRS NOT TO HAVE VERTICAL RISES GREATER THAN 12' BETWEEN LANDINGS.

RAY E. RISNER P.E. #33724
PO BOX 3
SUWANNEE, FL. 32692
352-318-4356

STEP RITE SOLUTIONS

PHONE:
FAX:
MOBILE:



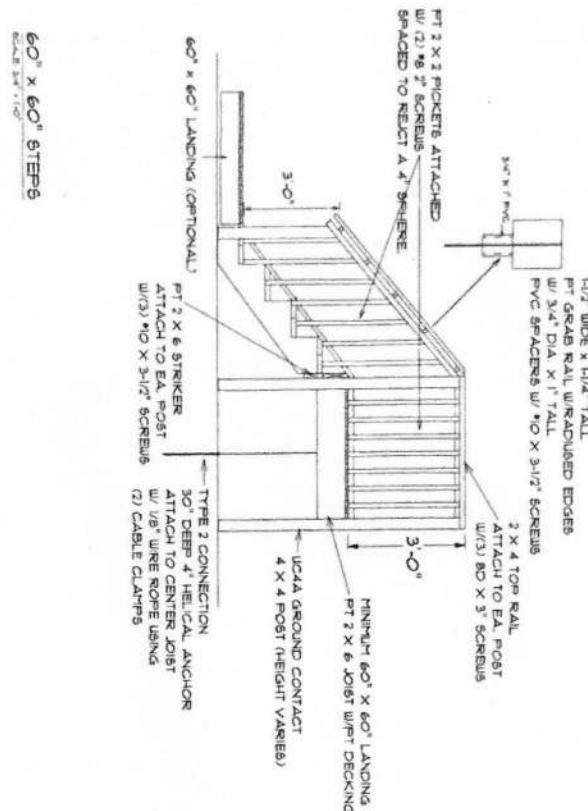
SECTION
LETTER

DRAWN BY: DKF
SCALE:3/4" = 1'-0"
DATE:Wednesday, November 6, 2024

PAGE:
1/2
40 INCH STEPS

NOTES:

1. STEPS HAVE A MIN. 60" X 60" LANDING
2. STEPS HAVE A RISER HEIGHT OF BETWEEN 6.75" TO 7.75"
3. HANDRAIL HEIGHT 36"
4. STEPS TO HAVE MIN. 10" TREAD DEPTH.
5. PICKETS TO BE SPACED TO REJECT A 4" SPHERE
6. STEPS TO MEET TREAD TO RISER RATIO-
2 RISES + 1 TREAD = 24" - 25"
7. FLIGHT OF STAIRS NOT TO HAVE VERTICAL RISES GREATER THAN 12' BETWEEN LANDINGS.



RAY E. RISNER P.E. #33724
PO BOX 3
SUWANNEE, FL 32692
352-388-3566

STEP RITE SOLUTIONS

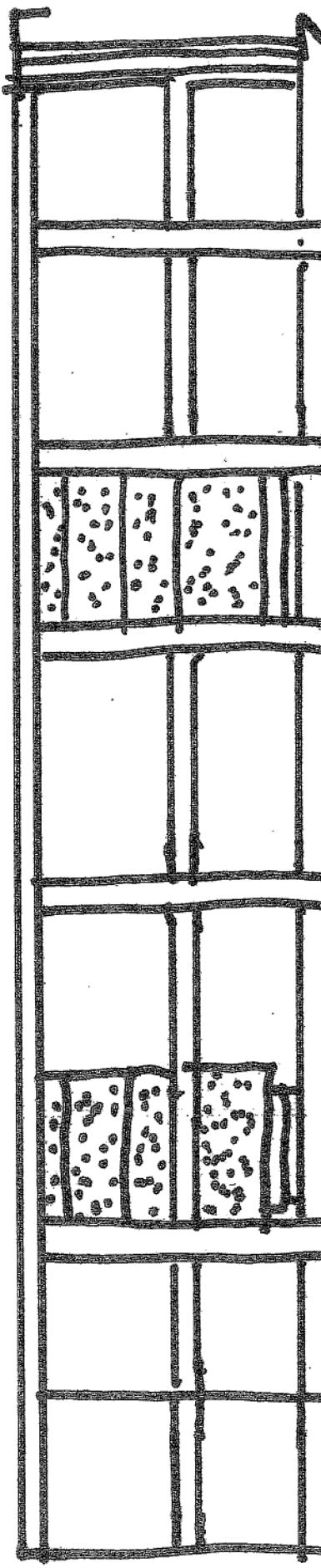
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MOBILE:



DRAWN BY: DKF
SCALE 3/4" = 1'-0"
DATE Wednesday, November 6, 2024

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60 INCH STEPS

INSTALLATION VERTICAL SKIRTING (WALL SECTION)



1. Top back rail will be screwed to bottom of home with 3/4" screw every 16".
2. Bottom track will be spiked every 16" with 7" galvanized nail.
3. Each panel must be installed with required screws. Screws installed in each panel top and bottom every 16".
4. Access allowed by any panel.
5. Any part of home over 36" from bottom of home to ground will require metal bracing with cross brace. (Bracing requirements 2 x 3 metal brace attached to bottom of home with 3/4" screws and buried in the ground every 4' with cross brace.)