

Mobile Home Permit Worksheet

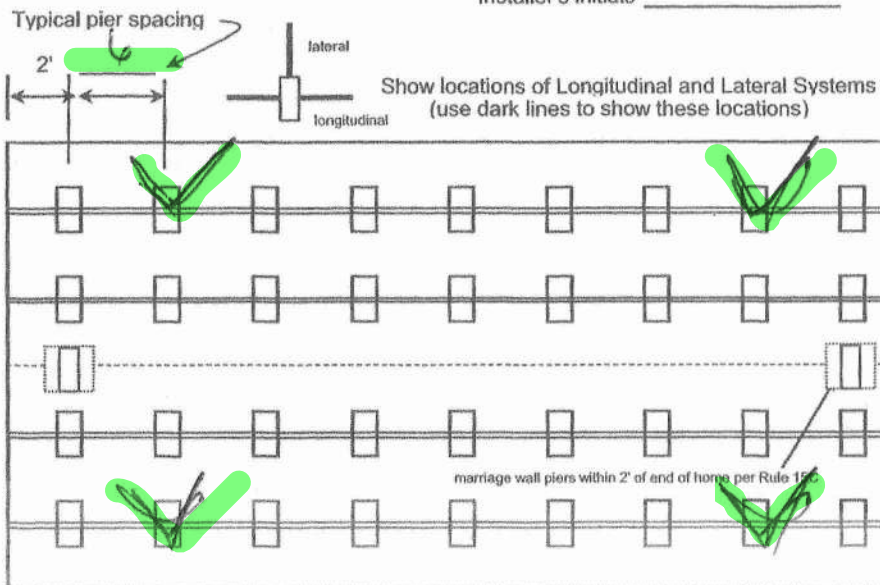
Installer: Glenn Williams License # IH1054858

Address of home being installed TBD Parcel 00-00-00-00929-066

Manufacturer Live Oak Length x width 32X58

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
I understand Lateral Arm Systems cannot be used on any home (new or used)
where the sidewall ties exceed 5 ft 4 in.

Installer's initials _____



Anthony Islan

12-20-2021

Application Number: _____ Date: _____

New Home ☒ Used Home ☐

Home installed to the Manufacturer's Installation Manual
Home is installed in accordance with Rule 15-C

Single wide ☐ Wind Zone II ☒ Wind Zone III ☐

Double wide ☒ Installation Decal # **867061**

Triple/Quad ☐ Serial # LOHGA10022287AB

PIER SPACING TABLE FOR USED HOMES

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'
1500 psf		4' 6"	6'	7'	8'	8'	8'
2000 psf		6'	8'	8'	8'	8'	8'
2500 psf		7' 6"	8'	8'	8'	8'	8'
3000 psf		8'	8'	8'	8'	8'	8'
3500 psf		8'	8'	8'	8'	8'	8'

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

PIER PAD SIZES

I-beam pier pad size 24x24

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
_____	_____
_____	_____
_____	_____

TIEDOWN COMPONENTS

Longitudinal Stabilizing Device (LSD)
Manufacturer _____
Longitudinal Stabilizing Device w/ Lateral Arms
Manufacturer 4

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 1/4 x 26 1/4	348
20 x 20	400
17 3/16 x 25 3/16	441
17 1/2 x 25 1/2	446
24 x 24	576
26 x 26	676

ANCHORS

4 ft ☒ 5 ft

FRAME TIES

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

OTHER TIES

	Number
Sidewall	30
Longitudinal	0
Marriage wall	0
Shearwall	0

Mobile Home Permit Worksheet

POCKET PENETROMETER TEST

The pocket penetrometer tests are rounded down to 1500 psf or check here to declare 1000 lb. soil without testing.

x 1500 x 1500 x 1500

POCKET PENETROMETER TESTING METHOD

1. Test the perimeter of the home at 6 locations.
2. Take the reading at the depth of the footer.
3. Using 500 lb. increments, take the lowest reading and round down to that increment.

x 1500 x 1500 x 1500

TORQUE PROBE TEST

The results of the torque probe test is 150 inch pounds or check here if you are declaring 5' anchors without testing. A test showing 275 inch pounds or less will require 5 foot anchors.

Note: A state approved lateral arm system is being used and 4 ft. anchors are allowed at the sidewall locations. I understand 5 ft anchors are required at all centerline tie points where the torque test reading is 275 or less and where the mobile home manufacturer may require anchors with 4000 lb holding capacity.

Installer's initials

ALL TESTS MUST BE PERFORMED BY A LICENSED INSTALLER

Installer Name Brandy Hall Glenn Williams

Date Tested _____

Electrical

Connect electrical conductors between multi-wide units, but not to the main power source. This includes the bonding wire between multi-wide units. Pg. _____

Plumbing

Connect all sewer drains to an existing sewer tap or septic tank. Pg. _____

Connect all potable water supply piping to an existing water meter, water tap, or other independent water supply systems. Pg. _____

Application Number: _____ Date: _____

Site Preparation

Debris and organic material removed
Water drainage: Natural Swale Pad ☒ Other _____

Fastening multi wide units

Floor: Type Fastener: 1AG Length: 6 Spacing: 2ft
Walls: Type Fastener: 1AG Length: 6 Spacing: 2ft
Roof: Type Fastener: 1AG Length: 6 Spacing: 2ft
For used homes a min. 30 gauge, 8" wide, galvanized metal strip will be centered over the peak of the roof and fastened with galv. roofing nails at 2" on center on both sides of the centerline.

Gasket (weatherproofing requirement)

I understand a properly installed gasket is a requirement of all new and used homes and that condensation, mold, mildew and buckled marriage walls are a result of a poorly installed or no gasket being installed. I understand a strip of tape will not serve as a gasket.

Installer's initials GW

Type gasket Rum
Pg. 99

Installed:
Between Floors Yes _____
Between Walls Yes _____
Bottom of ridgebeam Yes _____

Weatherproofing

The bottomboard will be repaired and/or taped. Yes _____ Pg. _____
Siding on units is installed to manufacturer's specifications. Yes _____
Fireplace chimney installed so as not to allow intrusion of rain water. Yes _____

Miscellaneous

Skirting to be installed. Yes _____ No _____
Dryer vent installed outside of skirting. Yes _____ N/A _____
Range downflow vent installed outside of skirting. Yes _____ N/A _____
Drain lines supported at 4 foot intervals. Yes _____
Electrical crossovers protected. Yes _____
Other: _____

Installer verifies all information given with this permit worksheet is accurate and true based on the manufacturer's installation instructions and or Rule 15C-1 & 2

Installer Signature

Glenn Williams

Date 12-14-01



Installation Instructions for 1100 "V" Series All Steel Foundation System Wind Zones I & II

SPECIAL CIRCUMSTANCES: If following conditions occur - STOP! Contact Oliver Technologies at 1-800-284-7437 for further instructions:

- a) Pier (system) height exceeds 48" b) Roof eaves exceed 16" c) Roof pitch greater than 7/12 d) Location is within 1500 feet of coastline
- e) Soil conditions less than 4B f) Thick and wide I Beam attachments are available.

INSTALLATION OF GROUND PAN FOR DIRT SET (IV)

- 1) Remove weeds and debris in an approximate three foot square to expose firm, level undisturbed soil or controlled fill for each ground pan. The 1100 V Pan is equivalent to a 21 x 21 footing. Top of ground pan (C) must be installed at ground level or per local jurisdiction.
- 2) Place center ground pan (C) directly below chassis I-beam. Press or drive pan completely into soil until flush with or below soil.

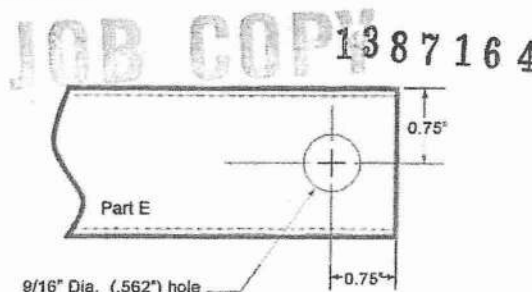
SPECIAL NOTE: The longitudinal "V" brace system serves as a pier under the home and should be loaded as any other pier. It is recommended that after leveling piers, and one-half inch (1/2") before home is lowered completely onto piers, complete items 3 through 7 below.

INSTALLATION OF LONGITUDINAL "V" BRACE SYSTEM

- 3) Select the correct square tube brace (E) length for set-up (pier) height at support location.

PIER HEIGHT (Approx. 40-60 degrees Max.)	1.5" Tube Length
14" to 18"	20"
18" to 25"	28"
24" to 35"	39"
30" to 40"	44"
36" to 48"	54"

PIER HEIGHT = the dimension from the top of the pan to the bottom of the I-Beam



- 4) Install both of the 1.5" square tubes (E) into the "V" bracket (J), insert carriage bolt and leave nut loose for final adjustment.
- 5) Place I-beam connector (F) loosely on the bottom flange of the I-beam.
- 6) Attach the selected 1.5" tubes (E) to the I-beam connectors (F) and fasten loosely with bolts and nuts. NOTE: The ground pan must be level in both directions to ensure the angle markings on the center point connector are correct from the horizontal plane of the pan. The angle is not to exceed 60 degrees and not less than 40 degrees. The "V" bracket (J) is stamped with the angles to verify correct degree. Use proper length tube or cut and drill tube to achieve proper length. (The tube may be cut using any appropriate steel cutting method such as steel saw, cutting torch, etc. New holes must be drilled to the dimension and at the location as shown for part (E).
- 7) Using standard hand tools, tighten all nuts and bolts. When connecting the brace tube to the model 1100-10-P I-beam connector bracket, tighten at least one and a half to two full turns past hand tight.

INSTALLATION OF (LATERAL) TELESCOPING TRANSVERSE ARM SYSTEM (1100 ITV)

- 8) Select the correct transverse arm (H). The 60" sections are standard. The 72" sections are used on frame widths greater than 99.5"
- 9) Install the 1.5" transverse brace (H) to the ground pan connector (D) with the bolt and nut.
- 10) Slide 1.25" transverse brace into the 1.5" brace and attach to adjacent I-beam connector (I) with bolt and nut.
- 11) Secure 1.5" transverse arm to 1.25" transverse arm using four (4) 1/4" - 14 x 3/4" self-tapping screws in pre-drilled pilot holes.

INSTALLATION USING CONCRETE (ICV)

The concrete footer, runner or slab may be of any shape, that has a minimum of 2900 cu. in., with a minimum depth of 3.5" (dry set) or 6" (wet set), at each system location. The surface of the footing shall be large enough to support the pier load and allow at least 4" from the concrete bolt to the edge of the concrete (ie. 22"x22"x6" footer). The concrete shall be a minimum of 2500 psi mix (pre-blended sacked concrete mix is acceptable). Special inspection of footing is not required. If the 1100 ITC transverse system, (D (W or D) bracket only) is to be installed without the use of the 1100 ILC (V) longitudinal system (J (W or D) bracket), it MUST be installed within 18" of pier.

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

LONGITUDINAL (V)

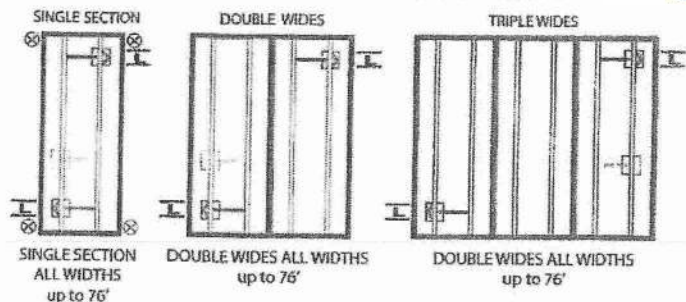
When using the 1100 wet set J(W) bracket, simply install the bracket in runner/footer OR when installing in cured concrete, use the 1100 dry set J(D) bracket. The 1100 dry set J(D) bracket is attached to the concrete using (2) 1/2" X 3" concrete wedge bolts. Place the bracket in desired location. Mark bolt hole locations, then using a 1/2" masonry bit, drill a hole to a minimum depth of 3". Be sure all dust is blown out of the holes. Place wedge bolts into drilled holes, then place 1100 J(D) bracket onto wedge bolts and start wedge bolt nuts. Take a hammer and lightly drive the wedge bolts down by hitting the nut (Do not hit the top of threads on bolt). Complete by tightening the nuts.

LATERAL (Transverse Arm)

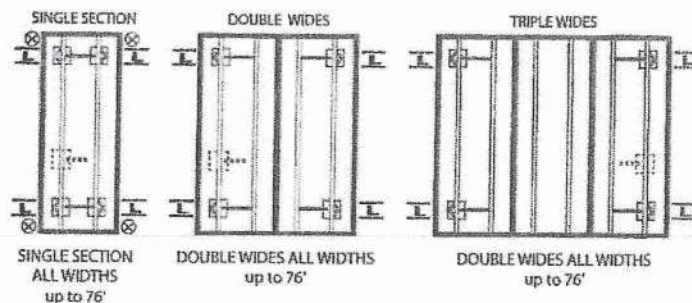
For wet set installation set the transverse connector bracket D(W) into runner/footer at desired location. For dry set installations, the transverse connector bracket D(D) is attached to the concrete using (2) 1/2" X 3" concrete wedge bolts. Mark bolt hole locations, then using a 1/2" masonry bit, drill a hole to a minimum depth of 3". Be sure all dust is blown out of the holes. Place wedge bolts into drilled holes, then place transverse connector bracket J(D) bracket onto wedge bolts and start wedge bolt nuts. Take a hammer and lightly drive the wedge bolts down by hitting the nut (Do not hit the top of threads on bolt.) Complete by tightening the nuts.



REQUIRED NUMBER AND LOCATION OF MODEL 1100 "V" SERIES BRACES FOR 4/12 & 5/12



REQUIRED NUMBER AND LOCATION OF MODEL 1100 "V" SERIES BRACES FOR 6/12 & 7/12



LEGEND:

1. - - Approximate location of the system (See note H)
2. - - Location of ASF Model 1100 "V" (Lateral and Longitudinal Bracing) or 1100 T (Lateral only)
3. - - Location of additional ASF Model 1100 T "V" System (Lateral only) for homes exceeding 76' in length or with roof pitch between 4.37/12 (20 degrees) and 5/12, the additional system is to be installed at approximately the midpoint of the house and may be installed at either exterior beam.
4. - - Installation of single wide homes require two (2) anchors per side located not more than ten (10) feet from each end (with a minimum of 3150 load rating)
5. - - Location of additional ASF Model 1100 T "V" System (Lateral only) for homes exceeding 76' in length, sidewall height exceeding 96' or with roof pitch between 6/12 & 7/12 the additional system is to be installed at approximately the midpoint of the house and may be installed at either exterior beam.

(Length of house is actual box size)

NOTE:

- a) Installation of the longitudinal system eliminates the need for the longitudinal anchors.
- b) Installation of the transverse system eliminates the need for all anchors, diagonal frame ties and stabilization plates except when noted. (Legend #5 & note C)
- c) All other home manufacturer's instructions for installation of stabilizing devices must be followed, including installation of vertical tie-down anchors, and mating line column, shear wall or center-line tie-down anchors. NOTE WIND ZONE II: ALL VERTICAL ANCHORS (NOT TO EXCEED 8' SPACING) MUST BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS!
- d) If the home manufacturer's installation instructions are not available, the home must be installed in accordance with any state promulgated rules or as required by the authority having jurisdiction.
- e) If bolts, nuts and tech screws are lost, they may be replaced as long as they meet or exceed the specs for OTI ASFS hardware.
- f) When the length of home exceeds 76', sidewall height exceeds 96' or the roof pitch is between 4.37/12 (20 degrees) and 5/12, add 1 transverse system (see location diagrams above) 6/12: a total of 4 Transverse & 3 Longitudinal systems are needed & 7/12: a total of 5 Transverse & 3 Longitudinal systems are needed. (Longitudinal portion only required when longitudinal bracing is required by home manufacturer).
- g) An alternative method using the 1100 CVD anchors (dry set) or 1100 CVW (wet set) may be used on a footing size of 16" diameter X 24" depth. These brackets are designed for lateral and longitudinal protection.
- h) It is recommended that the systems be installed at the 2nd pier in from each end of the house. However, they may be installed at any location at least 2 feet, but not more than 1/4 the house length, in from the ends of the home.

STATE OF MICHIGAN ONLY: As required by Section 1805.2 of the 200 Michigan Building Code, the depth of the footer shall be a minimum depth of 42 inches below grade, except that the authority having jurisdiction may approve a lesser depth based on known prevailing soil and weather conditions, or as provided by the exception under Section 1805.2.1 of the Code.

STATE OF ALABAMA ONLY: Maximum pier height is limited to 32" with pier defined in the Alabama Regulation as "that portion of the support system between the top of the footing and the bottom of the pier cap."

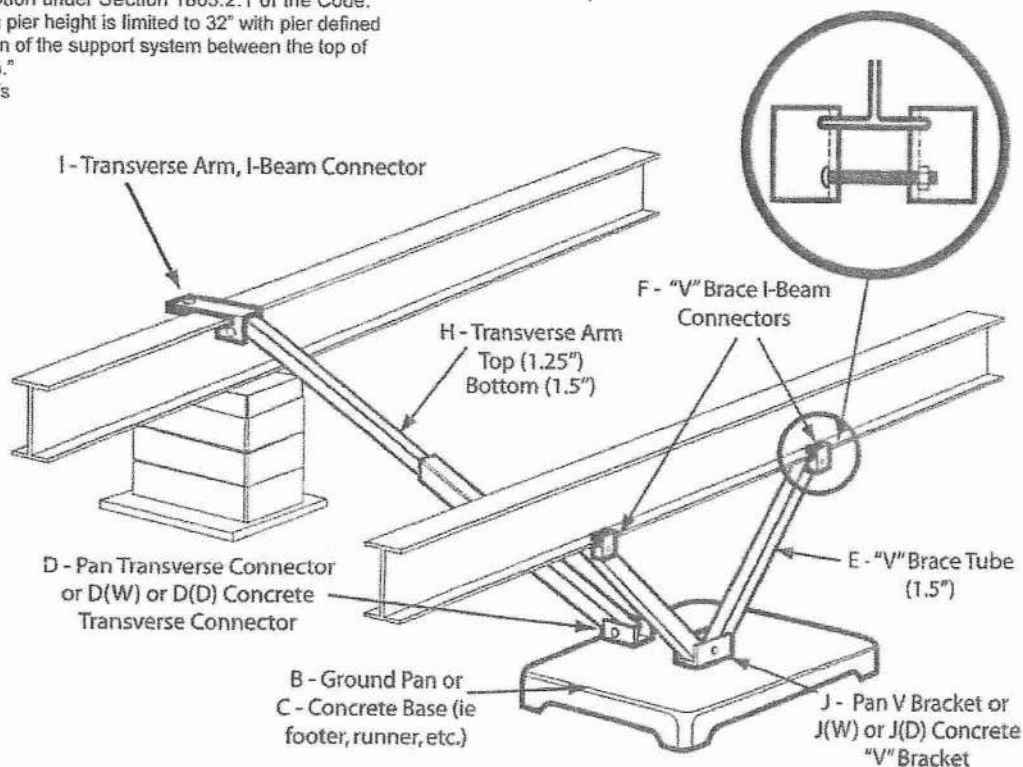
The State of Alabama limits the use of this system to H.U.D labeled homes.

STATE OF NORTH CAROLINA ONLY:

Tubing must be galvanized and, when the manufacturer's installation instructions are not available, vertical wall tie-downs must be installed not to exceed 8-feet on center. (Wind Zone II)

STATE OF IDAHO ONLY:

Concrete must be a minimum of 8" in depth.



OLIVER
467 Swan Ave
Hohenwald, TN 38462
(800) 284-7437
www.olivertechnologies.com



Installation Instructions for ABS Pads For use on all Mobile and Manufactured Homes, including HUD approved Homes and Modular Building Patent #5503500 and other patents pending

GENERAL INSTRUCTIONS:

1. All pads are to be installed flat side down, ribbed side up.
2. The ground under the pads should be leveled as smooth as possible with all vegetation removed. Pads to be placed on fully compacted or undisturbed soil, at or below the frost-line or otherwise protected from the effects of frost. Refer to NCSBCS/ANSI A225.1
3. Pier & pad spacing will be determined by the manufactured homes' written set-up instructions or any local or state codes.
4. The open cells between the ribbing on the upper side of the pads may be filled with soil or sand after installation to prevent any accumulation of stagnant water in the pads.
5. A pocket penetrometer may be used to determine the actual soil bearing value. If no soil testing equipment is available – use an assumed soil value of 1000 lbs. / square foot.
6. All pad sizes shown are nominal dimensions and may vary up to 1/8".
7. The maximum deflection in a single pad is 5/8" measured from the highest point to the lowest point of the top face.
(NOTE: Actual test results were less than 5/8")
8. Pad loads are the same when using single stack or double stack blocks.
9. The maximum load at any intermediate soil value may be determined as the average of the next lower and next higher soil value given in the table below.
10. If the home manufacturer shows soil densities greater than 3000 lbs. When using ABS pads, do not exceed 3000 lbs. soil pier spacings per set up manual.

PAD SIZE	ID NO.	PAD AREA	1000 PSF SOIL	2000 PSF SOIL	3000 PSF SOIL
Oval 16" x 18.5"	1055-23/AIT-06-1000	288 sq. in.	2000 lbs.	4000 lbs.	6000 lbs.
Oval 17" x 22"	1055-16/AIT-06-1001	360 sq. in.	2500 lbs.	5000 lbs.	7500 lbs.
Oval 17.5" x 22.5"	1055-21	384 sq. in.	2667 lbs.	8000 lbs.	8000 lbs.
Oval 17.5" x 25.5"	1055-17/AIT-06-1002	432 sq. in.	3000 lbs.	6000 lbs.	9000 lbs. *
Oval 21" x 29"	1055-22/AIT-06-1003	576 sq. in.	4000 lbs.	8000 lbs. *	12000 lbs. *
Oval 23.25" x 31.25"	1055-20/AIT-06-1004	675 sq. in.	4694 lbs.	9388 lbs. *	9388 lbs. *

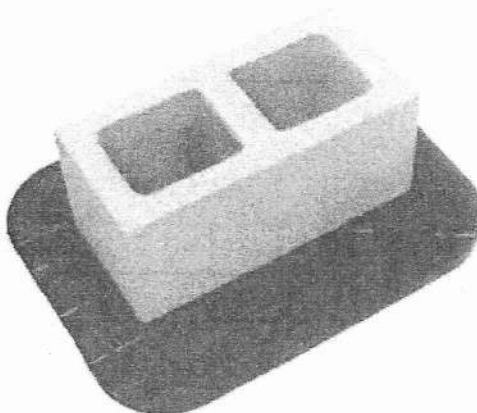
PAD SIZE	ID NO.	PAD AREA	1000 PSF SOIL	2000 PSF SOIL	3000 PSF SOIL
Square 16" x 16"	1055-14/AIT-06-1005	256 sq. in.	1785 lbs.	3560 lbs.	5333 lbs.
Square 18.5" x 18.5"	1055-9/AIT-06-1006	342 sq. in.	2375 lbs.	4750 lbs.	7100 lbs. *
Square 20" x 20"	1055-7/AIT-06-1007	400 sq. in.	2750 lbs.	5500 lbs.	8250 lbs. *
Square 24" x 24"	1055-13/AIT-06-1008	576 sq. in.	4000 lbs.	8000 lbs. *	8000 lbs. *

* Concrete blocks are required to be double blocked.

11. Any ABS pad configuration may be used to replace a home manufacturer's recommended concrete or wood base pad.
12. **ALABAMA ONLY:** The 23.25" x 31.25" ID#1055-20 may not be installed in the State of Alabama.
For the State of Alabama all ABS pads shall not have more than 3/8" deflection. See chart below for details on correct installation in Alabama.

EXAMPLE: 16' x 80' section (Alabama only)

PAD SIZE	1000 PSF	2000 PSF
Oval 16" x 18.5"	2'9"	5'6"
Oval 17" x 22"	3'0"	6'0"
Oval 17.5" x 22.5"	3'9"	7'6"
Oval 17.5" x 25.5"	4'0"	8'0"
Oval 21" x 29"	4'5"	8'0"
Oval 23.25" x 31.25"	6'0"	8'0"



13. **TEXAS ONLY:** 17.5" x 22.5" ID #1055-21 and 23.25" x 31.25" ID #1055-20 may not be installed in the State of Texas.
14. **Steel Piers:** All pads are tested with steel piers on 1000 PSF soil density unless otherwise noted. (See 15) If required, attach with (04) 2" #12 x 1/2" hex tech screws. Minimum Pier Base 7 1/4 inches. The Mult-Pad configuration 35" x 25.5" ID #AIT-06-1002 (03) requires minimum 9 1/4" pier base.
15. Available pads tested on 2000 PSF soil density using steel piers are: ID #1055-14, 1055-9, 1055-7 and 1055-13.
16. **CALIFORNIA:** Use an assumed value of 1000 lb/sq. ft. unless engineering and calculations are provided.

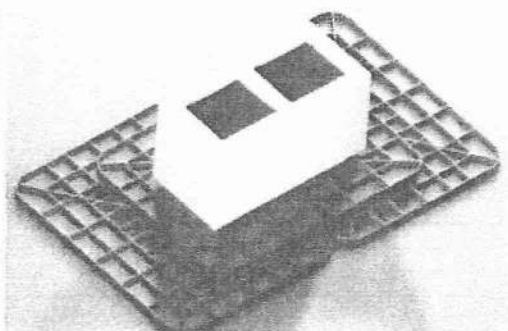
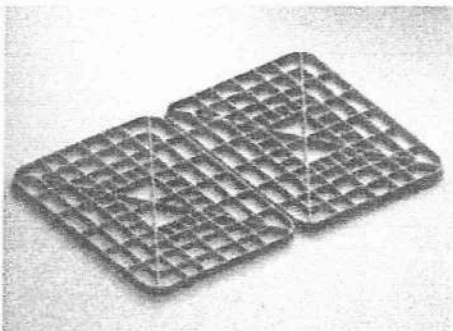
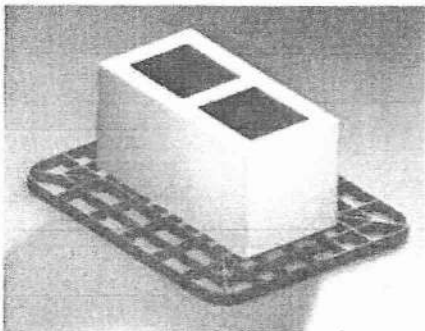
INSTRUCTIONS for Mult-Pad Configurations

MAXIMUM PIER LOAD IN POUNDS:

ABS Pad Types			8" Cell Block			
				Soil Bearing Value		Maximum Load
Oval 16" x 18.5" Pad	2.00 Square Feet	ID # 1055-23/AIT-06-1000	32" x 18.5" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	4000 lbs.
Oval 32" x 18.5" Pad Configuration (03)	4.00 Square Feet			Double Stack	2000 lbs. / sq. ft.	8000 lbs. *
Oval 17" x 22" Pad	2.50 Square Feet	ID # 1055-16-AIT-06-1001	34" x 22" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	5000 lbs.
Oval 34" x 22" Pad Configuration (03)	5.00 Square Feet			Double Stack	2000 lbs. / sq. ft.	10000 lbs. *
Oval 17.5" x 25.5" Pad	3.00 Square Feet	ID # 1055-17/AIT-06-1002	35" x 25.5" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	6000 lbs.
Oval 35" x 25.5" Pad Configuration (03)	6.00 Square Feet			Double Stack	2000 lbs. / sq. ft.	12000 lbs. *

*Concrete blocks are only rated at 8000 pounds, 8001 pounds and higher must be double stacked.

PAD ASSEMBLY

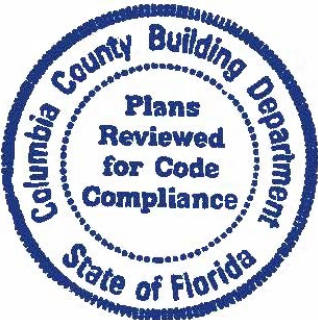


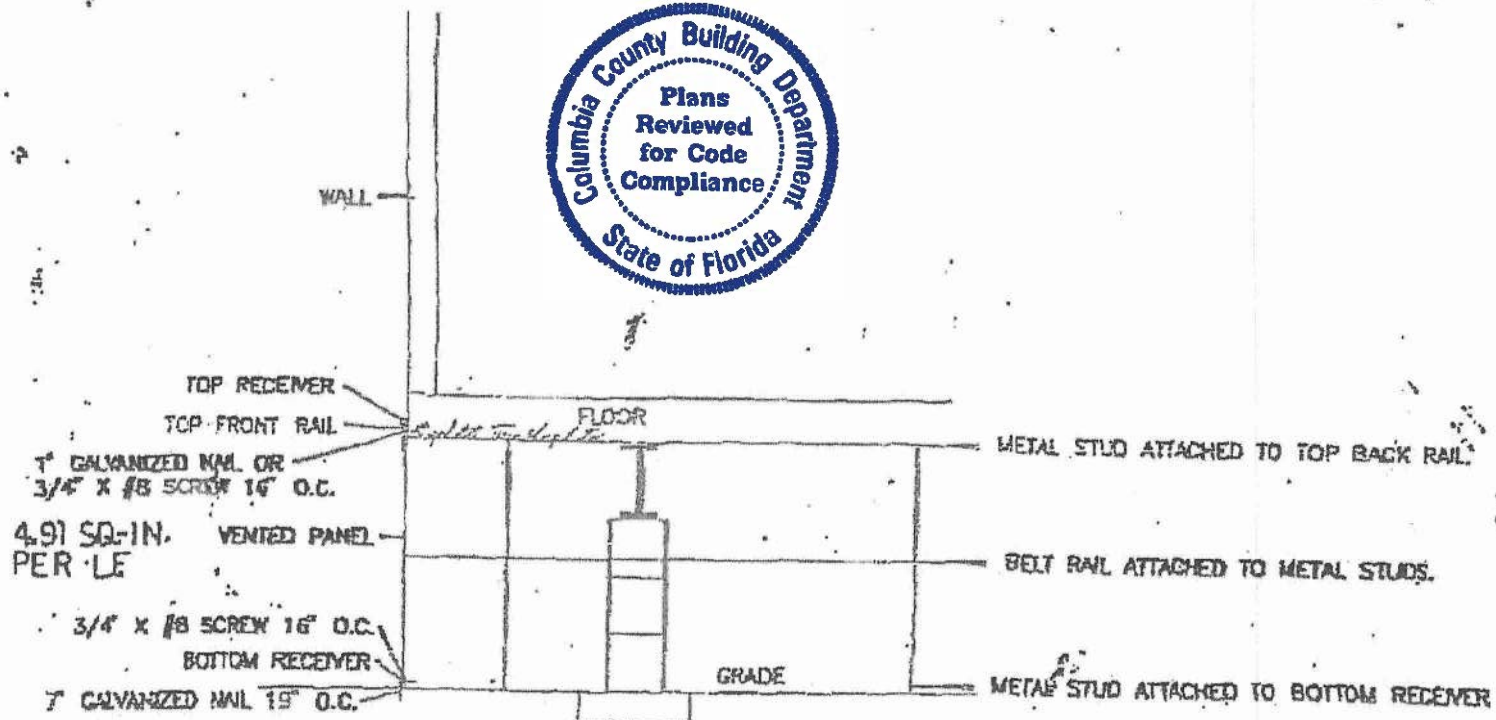
- STEP 1 - 17" x 22" ABS Pad**
(Note: Use 2 blocks side by side for soils rated at more than 1,000 lbs / sq. foot)

STEP 2 - (2) 17" x 22" ABS PADS (34" x 22" Configuration)

STEP 3 - Complete Assembly 34" x 22" Multi-pad Configuration

1. General instructions (on reverse) apply to all multi – pad configurations.
2. The 32" x 18.5" pad configuration is formed by using (3) 16" x 18.5" ABS Pads. Place (2) 16" x 18.5" side by side, and place (1) 16" x 18.5" on top, laid in the opposite direction to the bottom pads.
3. The 34" x 22" pad configuration is formed by using (3) 17" x 22" ABS Pads. Place (2) 17" x 22" pads side by side, and (1) 17" x 22" pad on top. The top pad is laid in the opposite direction to the bottom pads.
4. The 35" x 25.5" pad configuration is formed by using (3) 17.5" x 25.5" ABS Pads. Place (2) 17.5" x 25.5" pads side by side, and (1) 17.5" x 25.5" pad on top. The top pad is laid in the opposite direction to the bottom pads.





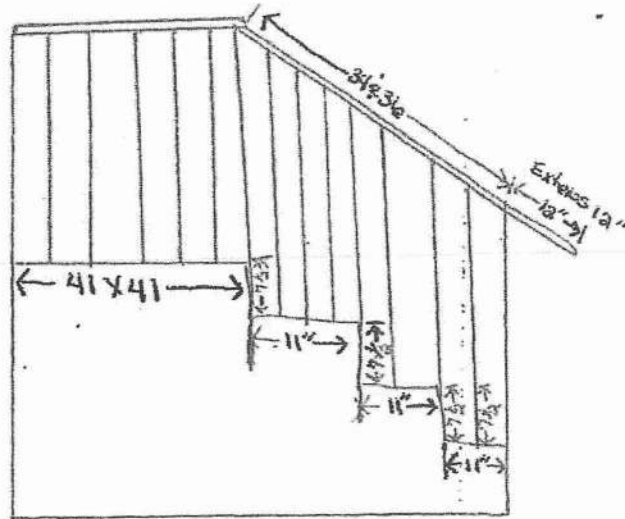
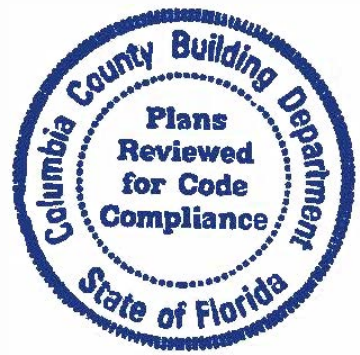
TYPICAL CRAWL SPACE WALL SECTION

$\frac{1}{2}'' = 1'$

SIZE AND LOCATION OF ACCESS DOOR TO BE PLACED TO COORDINATE WITH WATER CUT-OFFS. ACCESS TO BE 18" X 24" MINIMUM.

PER MARION COUNTY REQUEST, SCREWS TO BE INSTALLED AT TOP AND BOTTOM OF EACH PANEL.

ANY HOME HAVING IN EXCESS OF 36" HEIGHT MUST HAVE VERTICAL STUDS EVERY 48" WITH BELT RAIL INSTALLED FOR BLOW OUT PROTECTION.



Platform 41x41
Spindels 4" on center
treads 11"
risers 7 1/2"