

## Installation Instructions for 1100 "V" Series All Steel Foundation System

**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.

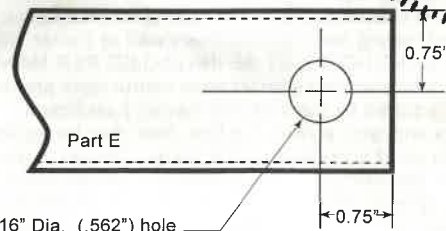
**SPECIAL NOTE:** The longitudinal "V" brace system serves as a pier under the home and should be loaded as any other pier. It is recommended that after leveling piers, and one-half inch (1/2") before home is lowered completely onto piers, complete items 3 through 7 below.

### 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.

