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OLIVER TECHNOLOGIES, INC.
Installation Instructions for 1100 Series All Steel Foundation System
Wind Zones I & II

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

- Any pier height exceeds 48"
- Soil conditions less than 4B
- Roof eaves exceed 16'
- Roof pitch greater than 7/12
- Location is within 1,500' of coastline
- Sidewall height exceeds 108"

The 1100 series ASFS Offers 3 packages:

- 1100ITV (1 Arm- Lateral) see 1.3, 9-12
- 1100IV (3 Arm- Lateral and Longitudinal- Replaces Pier) 1.3, 4a-8a, 9-12
- 1100 SOLO (2 Arm- Lateral and Longitudinal) 1-3, 4b-9b, 9-12

INSTALLATION OF GROUND PAN FOR DIRT SET

- Remove weeds and debris in an approximate 3' square to expose firm, level undisturbed soil or controlled fill for each ground pan. The 1100 Pan is equivalent to a 21 x 21 footing. Top of ground pan (C) must be installed at ground level or per local jurisdiction.
- If using the SOLO longitudinal arm, ensure the longitudinal HW is installed on the correct side. Hold lock washer flush to pan, hand tighten bolt and washer to lock washer. Hammer bolt head until washer and bolt are flush with pan. Refer to Diagram 1A.
- Place center ground pan (C) directly below chassis I-beam. Press or drive pan completely into soil until flush with or below soil.

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 1/2" before home is lowered completely onto piers, refer to diagram 1B.

INSTALLATION OF LONGITUDINAL "V" BRACE SYSTEM

- Select the correct square tube brace (E) length for set-up (pier) height at support location.
- Install end of the 1.50" square tubes (E) into the "U" bracket (J), insert carriage bolt and leave nut loose for final adjustment.
- Place I-beam connector (F) loosely on the bottom flange of the I-beam.
- 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° and not less than 40°. The "V" bracket is stamped with angle marks to use as a guide. Use an Angle Finder to verify proper angle. 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).

- 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 1100 SOLO LONGITUDINAL ARM

- Determine the correct length of the longitudinal arm (K) to be installed based on pier height.
- Make sure the longitudinal bolt (L) is centered under the I-beam. Note: It is required that each longitudinal arm is installed in opposite directions underneath the home.
- Place the flattened end of the Longitudinal Arm over the bolt (L) on the ground pan and loosely secure with provided nut and washer.
- Place both I-beam connectors (F) loosely on the bottom flange of the I-beam.
- Attach the opposite end of the longitudinal arm to the bottom flange of the I-beam using the longitudinal I-beam connectors (F) with bolt and nut. Using standard hand tools, tighten all nuts and bolts.

NOTE: Angle of longitudinal Arm must be between 15° and 45°.

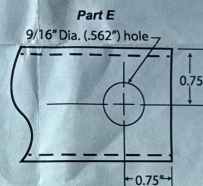
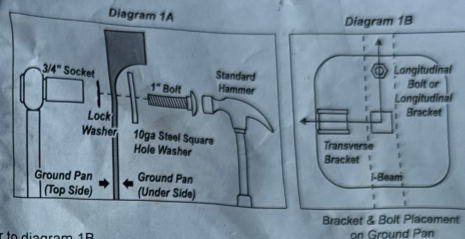
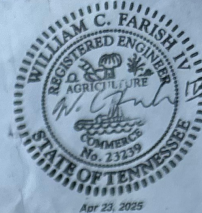
INSTALLATION OF (LATERAL) TELESCOPING TRANSVERSE ARM SYSTEM (1100 ITV)

- Select the correct transverse arm (H). The 60" sections are standard. The 72" sections are used on frame widths greater than 99.5".
- Install the 1.5" transverse brace (H) to the ground pan connector (D) with the bolt and nut.
- Slide 1.25" transverse brace into the 1.5" brace and attach to adjacent I-beam connector (I) with bolt and nut.
- 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.

NOTE: Installation speed should not exceed 1800 rpm.

INSTALLATION USING CONCRETE (ICV)

The concrete footer, runner or slab 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" x 22" x 6" 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 1100ITC Transverse system is to be installed without the use of a longitudinal system, it MUST be installed within 18" of pier.



PIER HEIGHT (40" MIN. - 60" MAX.)	1.50" TUBE LENGTH
14" - 18"	20"
18" - 25"	28"
24" - 35"	39"
30" - 40"	44"
36" - 48"	54"

PIER HEIGHT = The dimension from the top of the pan to the bottom of the I-Beam.
*Vertical pier load should not exceed 4,800lbs

PIER HEIGHT (15" MIN. - 45" MAX.)	LONGITUDINAL ARM LENGTH
12" - 24"	39"
12" - 32"	44"
12" - 40"	54"
12" - 48"	65"

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