

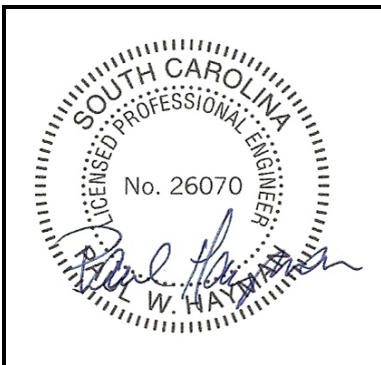
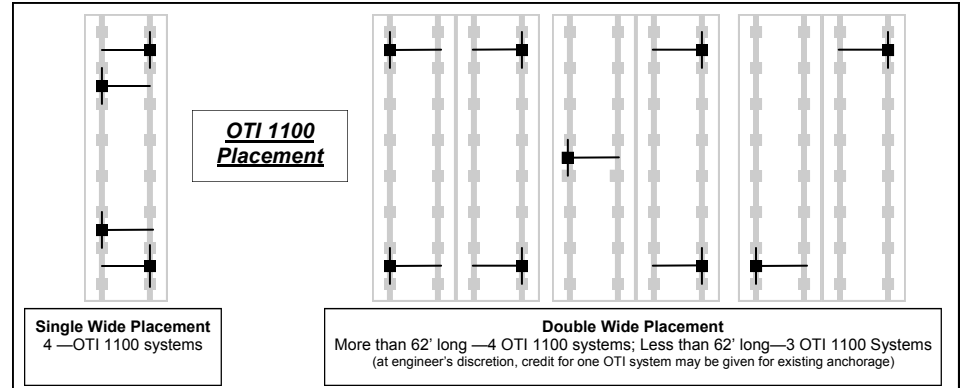
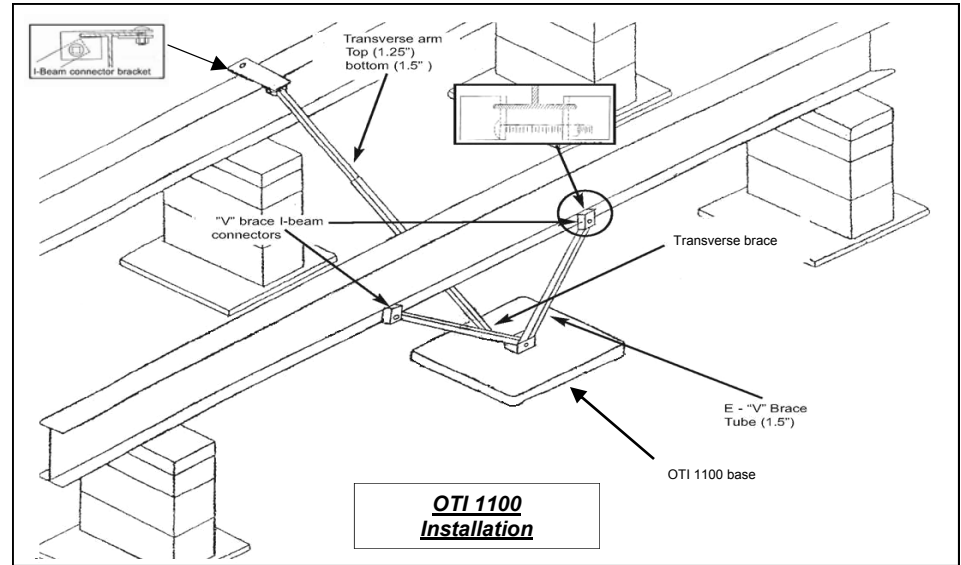
**CONSTRUCTION NOTES**

1. Pier(s) and footing(s) shall be located per home manufacturer's installation instructions.
2. All state and local requirements shall be followed.
3. Support piers other than the Oliver Technologies, Inc (OTI) System shall be in accordance with the manufacturer's installation instructions and shall be of designs approved by the home manufacturer.
4. Foundation Brace System shall be OTI All Steel Foundation System Model 1100 IC "V" or 1100 IV. Concrete footers may be required by the Authority Having Jurisdiction.
5. Foundation Brace System shall be installed in accordance with OTI installation instructions and this foundation plan using components specified on this plan.
6. A minimum of two Foundation Brace Systems are required on any home. More may be required given site conditions. See attached figure. If there is some existing anchorage that requires upgrading, the engineer may, at his discretion, reduce the required systems from four to three or from three to two.
7. Vertical tie down straps, if specified and required by the home manufacturer's installation instructions, shall be installed in accordance with equipment manufacturer's instructions. Straps and anchors shall have a working load capacity of 3150 lbs and a minimum ultimate capacity of 4725 lbs. Straps shall meet ASTM D3953-91.
8. Any special tie downs specified and required by the home manufacturer's installation instructions for shear walls, mating lines, porches or other architectural features shall be installed and connected to approved anchors.
9. The base of all footing(s) shall be placed at the frost penetration depth as specified by the Authority Having Jurisdiction.
10. Crawlspace access, ventilation and moisture protection shall meet the requirements of the Authority Having Jurisdiction.
11. Skirting shall be a continuous wall that keeps out vermin and water as required by the HUD Permanent Foundation Guide. It shall also meet requirements of the Authority Having Jurisdiction.
12. Design Criteria:  
 HUD Code Wind Zone 1  
 20 psf roof live load  
 40 psf floor live load  
 20 psf structural total dead load  
 Seismic Class D per IBC 2006  
 Soil minimum bearing 1000 psf  
 Maximum pier height 48 inches  
 Not to be sited within 1500 feet of the coast line

**For further information contact:**

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Oliver Technologies, Inc  
 (800) 284-7437  
 www.olivertechnologies.com



Date: May 26, 2010  
 Owner: Robert Wigfall  
 Address: 1375 Spring Plains Road, Cross, SC 29436

HUD Compliant Permanent Foundation  
 on Manufactured Housing—Retrofit to Existing Foundation  
**Oliver Technologies  
 Engineering Certification**

Additions and modifications have been inspected and do not impact the structural integrity of the property. All additions have proper foundations that meet the requirements of HUD PFGMH Sept 1996.

There is no indication that this manufactured home has been previously installed or occupied at another site or location

This Engineering Certification certifies that the foundation details as found at the above site location meet the requirements of HUD Permanent Foundations Guide for Manufactured Housing, dated September 1996.

**HAYMAN RESIDENTIAL ENGINEERING SERVICES**  
 Engineering Expertise for the Manufactured Housing Industry

Paul W. Hayman, P.E.  
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# HAYMAN RESIDENTIAL ENGINEERING SERVICES

Engineering Expertise for the Manufactured Housing Industry

Date: May 26, 2010

Owner: Robert Wigfall

Address: 1375 Spring Plains Road, Cross, SC 29436

Subject: HUD Compliant Foundation Engineering Certification

The above property has been inspected and found to comply with the following:

- This Engineering Certification certifies that the foundation details as found at the above site location meet the requirements of HUD 7584, Permanent Foundations Guide for Manufactured Housing, dated September 1996.
- There is no visual indication that this manufactured home has been previously installed or occupied at another site or location.
- Additions and modifications, including porches and decks, have been inspected and do not impact the structural integrity of the property. All additions have proper foundations that meet the requirements of HUD PFGMH Sept 1996.

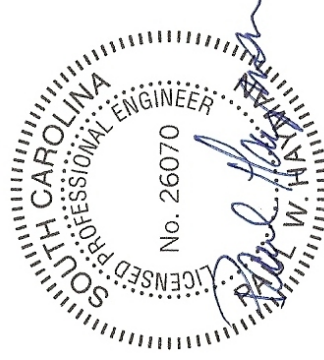
**100.C Definition of Permanent Foundation.** Permanent foundations must be constructed of durable materials; i.e. concrete, mortared masonry, or treated wood—and be site-built. It shall have attachment points to anchor and stabilize the manufactured home to transfer all loads, herein defined, to the underlying soil or rock. The permanent foundations shall be structurally developed in accordance with this document or be structurally designed by a licensed professional engineer for the following: Vertical stability: 1. Rated anchorage capacity to prevent uplifting and overturning due to wind or seismic forces, whichever controls. Screw in soil anchors are not considered a permanent anchorage: a. Footing size to prevent overloading the soil-bearing capacity and avoids soil settlement. Footing shall be reinforced concrete to be considered permanent. b. Base of footing below maximum frost-penetrations depth. c. Encloses a basement or crawl-space with a continuous wall (whether bearing or non-bearing) that separates the basement of crawlspace from the backfill and keeps out vermin and water. 2. Lateral stability. Rated anchorage capacity to prevent sliding due to wind or seismic forces, whichever controls, in the transverse and longitudinal directions.

**101-2. EXISTING CONSTRUCTION.** The practices recommended in the Handbook are not intended to be applied retroactively to existing sites unless the authority in the jurisdiction considers such application essential for safety and health of occupants. Upgrade of existing anchorages and footings shall meet the intent of the definition of permanent foundation stated herein.

This engineer does not consider a perimeter footing structurally necessary unless the skirting consists of a poured concrete or masonry block wall. There shall be blocking under the marriage wall as per manufacturer's recommendations. All construction shall meet applicable local building codes and manufacturer's recommendations in place at the time of construction. As this certification is for existing foundations, depth of footings and piers have not been physically verified. This certification is valid for this loan only and may not be valid for future loans.

This certification is the property of Hayman Residential Engineering Services, LLC. It is issued to the listed owner for the purpose of a specific loan approval. It may not be transferred to another owner without written permission from Hayman-RES, LLC. This information is an expression of professional opinion by this engineer, which is based on his best knowledge, information provided by others, and belief. It consists of neither a guarantee nor a warrantee expressed or implied.

Sincerely,



Paul W. Hayman, P.E.  
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(605) 381-2254

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