



SET-UP OF MANUFACTURED HOME

Single, Double and Triple-Wide Homes shall be Set-up in Accordance with the Manufacturer's Instructions.

Place the Manufactures Installation Manual between front door and screen or storm door for access by the Inspector.

If the Installation Manual is Not Available then the Home shall be Set-up in Accordance with the NC State Regulations for Manufactured Homes.

NOTE: No skirting shall be installed until all inspections underneath the Home have been completed and Passed Inspection.

- (A) Piers: Location of piers depends upon the size of the I-Beam under the Home. If unsure use the following:
- (1) I pier shall be installed within (1) foot of each end of each I-Beam. Piers located between the end piers shall not be spaced more than (7) feet (2) inches apart and extra piers each side of all openings.
 - (2) The footing {Bottom Blocks} of each piers shall be (4) inch solid block minimum (Cross- stacked 8x16x4 inch thick).
SEE DRAWING {A&B} ON THE ATTACHED SHEET.
 - (3) The top of the bottom block shall be flush with the grade or below.
SEE DRAWING {A&B} ON THE ATTACHED SHEET.
 - (4) Each pier shall have a solid cap not less than (2) inch minimum thickness for masonry or 2x8 treated lumber.
 - (5) Wedges are to be placed in pairs and fitted parallel to the I-Beam and piers. Wedges shall be at least (3 ½) inches wide and (6) inches long. Wedges are to be made of hardwood, treated wood or other approved material.
 - (6) Wedges shall not occupy more than (1) inch between the top of the pier and bottom of the I-Beam.
SEE DRAWING {C} ON THE ATTACHED SHEET.
 - (7) Bottom Board shall be repaired to resist moisture and rodent entry.
 - (8) THE HUD LABEL SHALL NOT BE REMOVED, COVERED< DAMAGED or OBSCURED.

STRAPS

- (1) (1) A strap shall be installed within (2) feet of each end of each I-Beam. The strap shall complete a circle around the I-Beam and overlap its self. Connect to the I-Beam on the inside at the top.
- (2) Straps installed between the end straps shall not be installed more than 8 feet apart with 8 inch I-beam, (10) feet apart with 10 inch I-beam or 12 feet apart with 12 inch I-beam.
- (3) Anchors and straps shall be installed by one of the approved methods on the attached sheet.
SEE DRAWING {C} ON THE ATTACHED SHEET.
- (4) Anchor Plates are required for indirect pull.

NOTES: Approved Alternate Methods by NC Department of Insurance are allowed.

STEPS & LANDINGS

- (1) A (3) foot x (3) foot Landing is required at all doors in which the door swings out. This does not include Storm or Screen Doors.
- (2) Handrails are required if stairs have (4) or more risers.
- (3) The maximum distance between step treads shall not exceed (8 ¼) inch. The greatest riser height or tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch.
- (4) Deck permit is required if any landing is more than (36) square feet.
- (5) Guardrails are required around landings and decks when the top of the floor is (30) inches or more above the ground.
- (6) All steps must rest firmly on the ground or slab.
- (7) All wood for steps and decks shall be treated wood.
- (8) All auxiliary structures (Decks, Porches, Garages, Additions, Interior Remolding) shall be self-supporting unless designed and approved by a Registered Engineer or Architect a separate permit for construction is required.
- (9) Temporary stairs shall not exceed 19 inches per OSHA rules.

ELECTRICAL

All electrical work (field wiring only) shall inspected by this Dept. and shall be in accordance with the current North Carolina National Electrical Code.

- (1) Trenches for wiring shall be a minimum of (24) inches deep and (18) inches if protected by conduit.
- (2) All conduit covering wire from the panel and from the home shall extend a minimum of (18) inches in the ground for the protection of the wire.
- (3) All wire and breakers installed shall be sized for the required load.
- (4) All material used in the ground shall be approved for below ground use.
- (5) Exact Measurements are to be used for the grounding system:
Install a minimum of (2) ground rods (5/8) inch x (8) feet long (72) inches or more apart with one uninterrupted ground wire (not cut).

PLUMBING

(A) Water Line:

- (1) **Water Service Pipe:** minimum size ¾ inch, 160 psi and 73.4 f (ABS;CPVC;PVC)
- (2) **Water Distribution Pipe:** minimum size ¾ inch, 100 psi and 180 f(CPVC;PEX)
- (3) Minimum depth for waterline is 12 inches below ground to top of pipe.
- (4) Install Cut-Off Valve within 5 feet of skirting, 3 feet of crawlspace access door or inside home. Main service valves shall be identified.
- (5) If connected to Hoke County water, install a pressure reducer valve (ASSE 1003).
- (6) If on Well Water, only install Water Cut-Off valve as stated (#4).
- (7) Install Thermal Expansion Tank cold side water-heater.
- (8) Cross connections with Private/County water supplies is prohibited.

(B) Sewer Line:

- (1) Minimum size Building Drain serving not more than (3) water closet shall be (3) inches. Maximum (3) inch pipe length from skirting is (10) feet.
- (2) Minimum sewer line size is (4) inches. (starts at a point 10 feet from house)
- (3) All 90-degree turns in the drain line shall have proper fittings with cleanouts. All changes of direction shall be done using fittings not bent or bowed.
- (4) PVC (white) and ABS (black) drain lines cannot be glued together.
- (5) Waste and soil piping shall have 3 inch minimum cover
- (6) A strap shall be installed within 2 feet of each drop in the crawlspace.
- (7) All additional straps shall be spaced 4 feet maximum.

MECHANICAL

- (1) Cross-Over Ducts shall have a minimum clearance of 4 inches above the ground/poly.
- (2) Heat Pumps and Central air conditioner units shall be installed meeting all applicable codes (state, federal & local).
- (3) Hanger supports shall be provided within (1'-0") one foot of collar or V-box connection and then at intervals of not more than (4) feet.
- (4) Hanger material contacting the duct must not be less than 1" wide. Clearance obtained by hanger supports.
- (5) Clothes dryer exhaust duct system shall be completely installed whether or not the clothes dryer is present at the time of the installation. Properly secure in place. Exhaust vent cap not less than (12) inches from ground.

NOTE:

A \$30.00 re-inspection fee will be charged on all inspections that fail to pass and on all homes with locked doors.

If you have any questions please call our office at

910-878-1268

8:00am to 5:00pm.

Please check with your local power company for their requirements.

3.7.2 Minimum Pier Height and Ground Clearance

Pier heights shall be such that a minimum clearance of 18 inches is maintained between the grade under the home and the bottom of floor joists. In addition, sufficient clearance shall be maintained between the bottom of the main frame I-beams and the grade level such that crossover ducts can be installed with required ground clearance. In no case shall the clearance between the underside of the I-beam and grade be less than 12".

3.7.2.1 Piers Set Plumb

All piers, regardless of height, and whether single or double stacked, shall be set reasonably plumb with respect to the vertical plane.

3.7.3 Pier Materials

Piers shall be constructed of 8"x 8"x 16" open or closed cell concrete masonry blocks, normal weight, Type I, in accordance with ASTM C90-99a, *Standard Specification for Loadbearing Concrete Masonry Units*, OR listed and labeled adjustable manufactured piers, OR shall be of materials designed and certified by a North Carolina professional engineer or architect specifically for a given installation. Sealed documentation from the engineer or architect must be provided to the local official and must reflect that the engineer, architect, or his or her representative has personally inspected the specified materials and the completed installation. Listed and labeled adjustable manufactured piers shall be installed in strict compliance with the pier manufacturer's instructions. The prescriptive pier design criteria given in this Section will assume the use of open cell concrete masonry block.

3.7.4 Single Stacked Piers

3.7.4.1 Single Stacked Main I-Beam Support Piers

Subject to the limitations of Section 3.7.7, main I-beam support piers that are NOT MORE THAN 40 INCHES IN HEIGHT, MEASURED FROM THE GRADE LINE TO THE UNDERSIDE OF THE I-BEAM (See Figure 3.7.4.1, below), shall be constructed of single stacked 8"x 8"x 16" concrete blocks, placed with open cells vertical. Piers shall be oriented such that the 16" dimension is perpendicular to the I-beam.

3.7.4.2 Single Stacked Marriage Line and Perimeter Support Piers

Marriage line and perimeter support piers that are NOT MORE THAN 56 INCHES IN HEIGHT, MEASURED FROM THE GRADE LINE TO THE UNDERSIDE OF THE MARRIAGE LINE JOISTS OR PERIMETER JOIST (See Figure 3.7.4.1), shall be constructed of single stacked 8"x 8"x 16" concrete blocks, placed with open cells vertical. Marriage line piers may be oriented with the 16" dimension either perpendicular or parallel to the marriage line joists. Perimeter piers shall be oriented such that the 16" dimension is parallel to the perimeter joist, and with the outside face of the block flush with the outside face of the perimeter joist. If pier and curtain wall construction as described in Section 3.6.4 is used, the outside face of the brick curtain wall shall be flush with the outside face of the perimeter joist. Footings for marriage line piers and perimeter piers that are not part of a pier and curtain wall system shall be sized in accordance with the procedure given in Section 3.7.10.

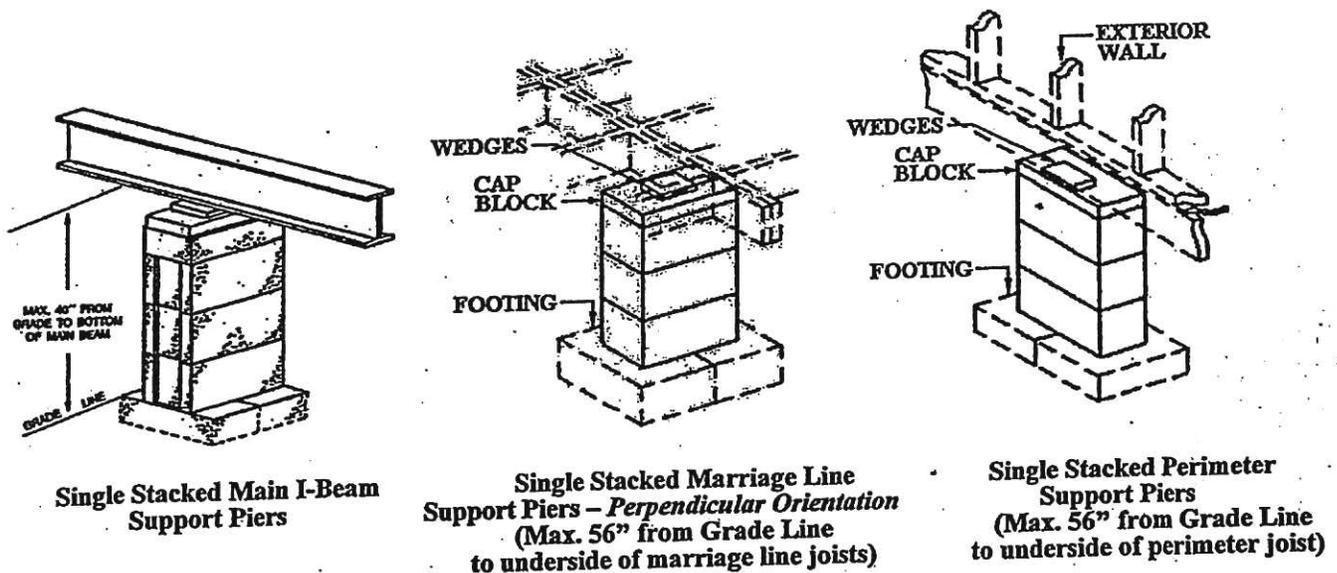


FIGURE 3.7.4.1
Typical Single Stacked Piers

A

3.7.5.2 Double Stacked Marriage Line and Perimeter Support Piers

Marriage line and perimeter support piers that are MORE THAN 56 INCHES BUT NOT OVER 96 INCHES IN HEIGHT, MEASURED FROM THE GRADE LINE TO THE UNDERSIDE OF THE MARRIAGE LINE JOISTS OR PERIMETER JOIST (See Figure 3.7.5.1), shall be constructed of double stacked 8" x 8" x 16" concrete blocks and shall fully comply with the requirements of Section 3.7.5.1 above. Double stacked perimeter piers shall be located such that the outside face of the block is flush with the outside face of the perimeter joist. If pier and curtain wall construction as described in Section 3.6.4 is used, the outside face of the brick curtain wall shall be flush with the outside face of the perimeter joist. Footings for double stacked marriage line piers and perimeter piers that are NOT part of a pier and curtain wall system shall be sized in accordance with the procedure given in Section 3.7.10.

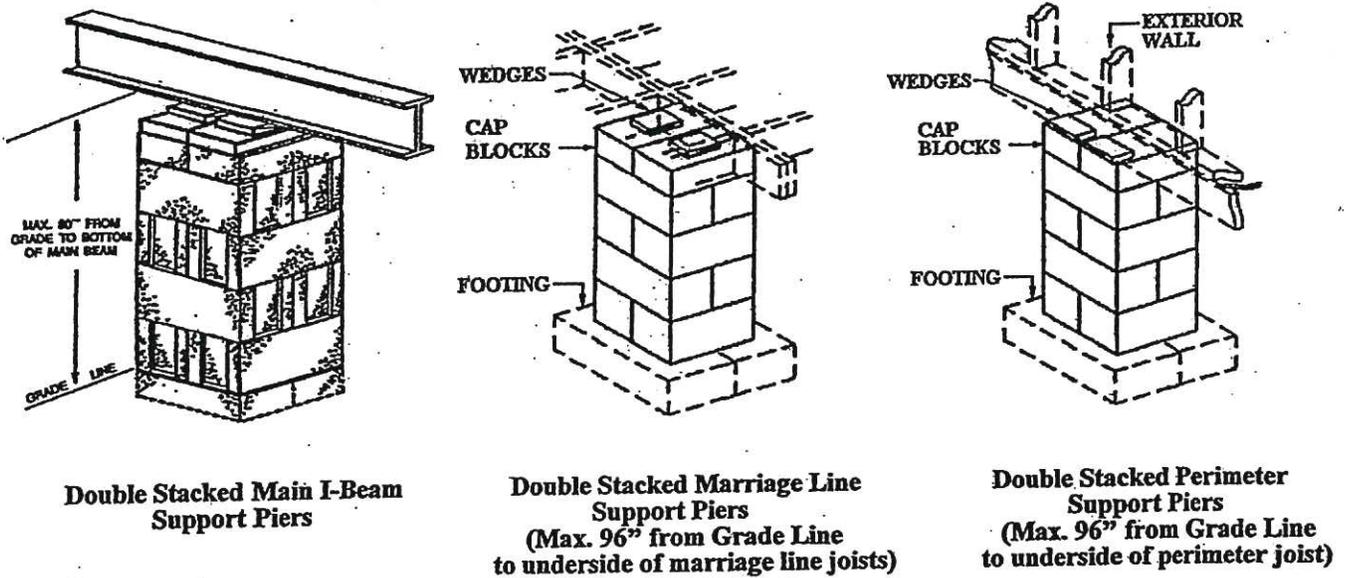


FIGURE 3.7.5.1
Typical Double Stacked Piers

3.7.5.3 Caps Blocks for Double Stacked Piers (Applies to Main I-Beam, Marriage Line, and Perimeter Support Piers)
Double stacked piers shall be capped with 16" x 16" solid concrete masonry of not less than 4" nominal (3 5/8" actual) thickness, OR two 8" x 16" solid concrete masonry blocks of not less than 4" nominal (3 5/8" actual) thickness placed side by side (shown in Figure 3.7.5.3). Solid concrete masonry used in either of above shall comply with ASTM C90-99a. When two 8" x 16" solid concrete masonry blocks are placed side by side, the joint between the blocks shall be perpendicular to the I-beam, marriage line joists, or perimeter joist. Any remaining gap between the top of the pier cap and the underside of the I-beam, marriage line joists, or perimeter joist shall be filled with either solid concrete masonry, pressure treated or hardwood lumber, and wedges as described in Section 3.7.5.4. Wood filler above the masonry cap shall consist of not less than two 2x8 nominal (1 1/2" x 7 1/4" actual) x 16" long pieces placed side by side. Solid concrete masonry less than 2" in thickness may be used as filler above the cap as described above so long as it complies with ASTM C90-99a. The cumulative thickness of wood above the top of the cap, including filler and wedges, shall not exceed 3 inches. See Figure 3.7.5.3.

B

3.8.3.3 Endwall Connections

Endwall connections may be accomplished as follows:

Space #8 x 4" wood screws staggered along marriage endwall at 12" o.c. (24" o.c. on each side). Place screws at an angle of approximately 45 degrees such that framing in each unit will be fully engaged. See Figure 3.8.3.3.

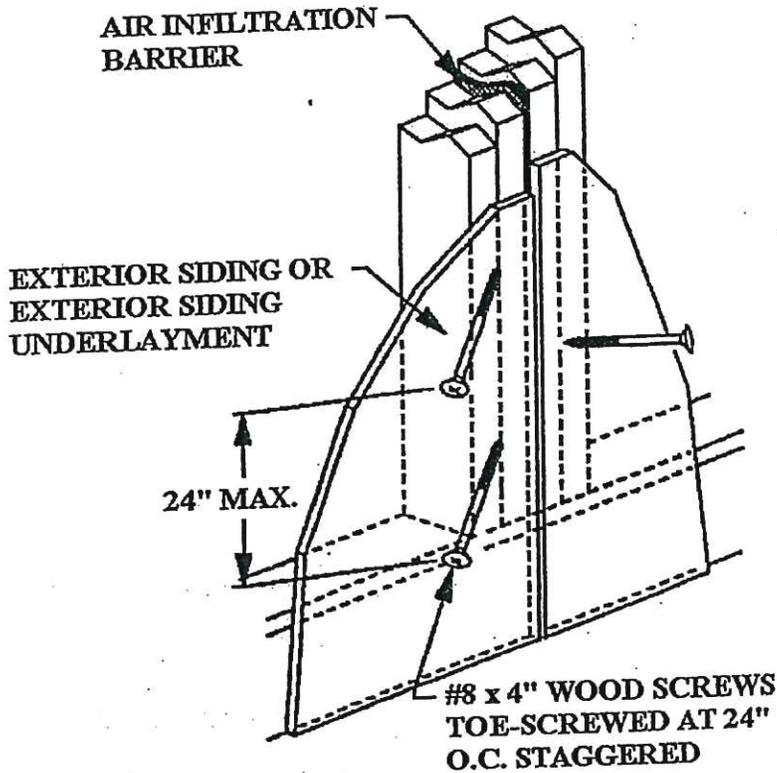


FIGURE 3.8.3.3
Endwall Connection

NOTES FOR FIGURE 3.8.3.3

1. All gaps greater than 1/4" between endwall mate studs shall be shimmed at each point where the studs are fastened together.
2. Shims shall be plywood, dimension lumber, or equivalent and shall be a minimum of 6" wide, centered on the screw, and shall be at least as deep as the mate line stud. Wood screw length must be increased as necessary to maintain at least 1 1/2" penetration into the main member.

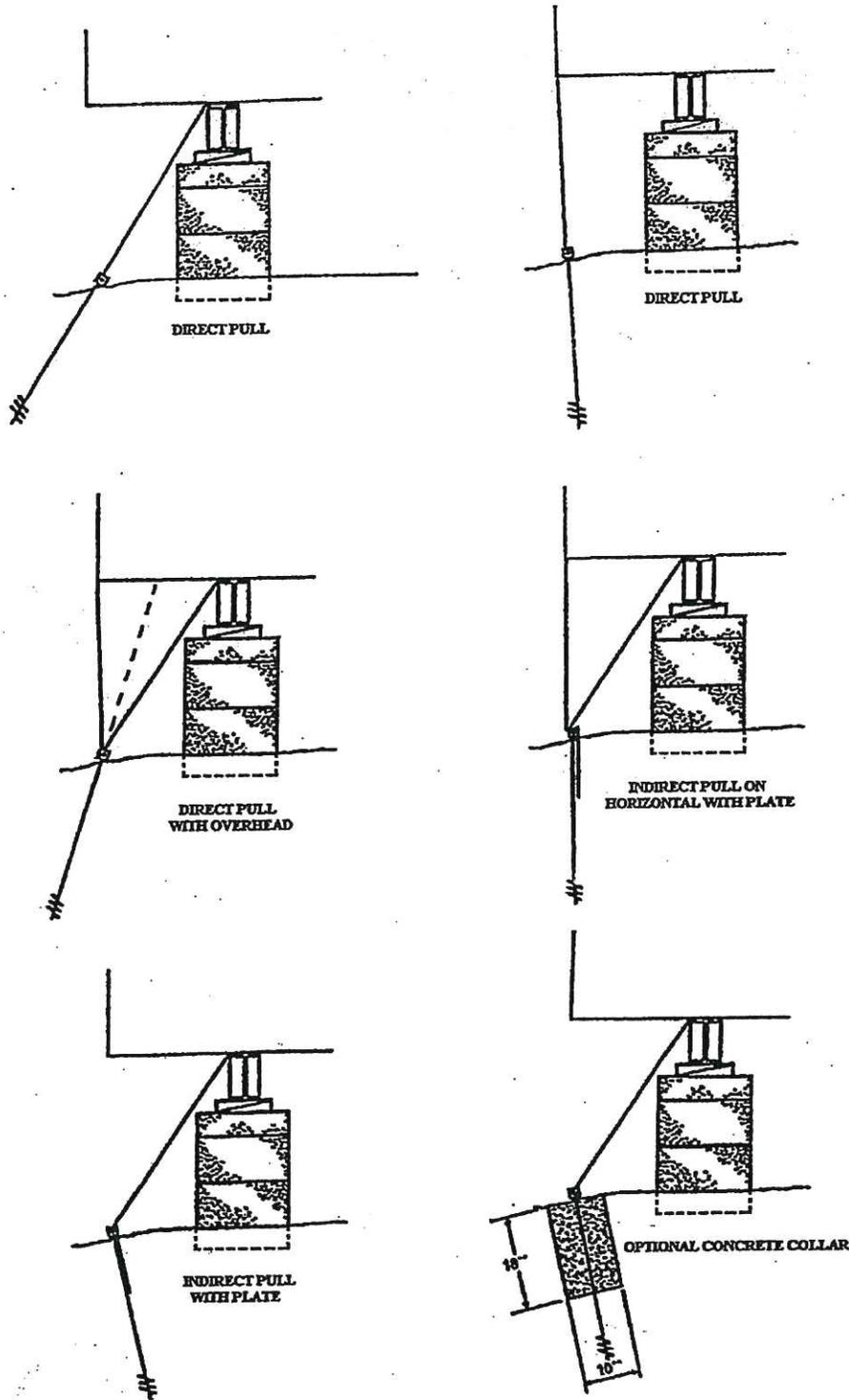


FIGURE 3.9.6.1
Examples of Approved Methods of Ground Anchor Installation

3.9.6.4 Anchors Embedded in Concrete

Anchors designed for embedment in concrete may be used in lieu of ground anchors. However, sufficient concrete must be placed in a single pour at each anchor location such that the anchor is capable of resisting a load of 4725 pounds in the direction of the tie without displacement of either the anchor or surrounding concrete.