

COUNTY OF PICKENS

www.co.pickens.sc.us Building Codes Administration

TO: All Mobile Home Owners, Licensed Installers and Dealers:

FROM Bob Wilbanks, CBO CFM

SUBJECT: Mobile Home set-up information.

MOBILE HOME	PERMIT NUMBER:	•

The following information is provided to assist owners, licensed installers and dealers in the approved and accepted procedures for installing a Manufactured Home in Pickens County.

Please be advised that in order to have power placed on the home, a foundation, tie down, interior panel and exterior electrical inspection, exit and deck/stair and underpinning inspections are required.

It is important to us that you install the manufactured home in a safe and appropriate and factory recommended manner. Therefore please take time to read the attached "<u>Mobile Home Pre-Inspection Checklist</u>" If after reading the checklist and the other information contained herein you have any questions please contact this office for an explanation. Any time you contact the Building Codes Administration Office, please refer to the above permit number.

Thank you in advance for your cooperation in our life safety efforts.

Mobile Home Pre-Inspection Checklist

TWO (2) STEP INSPECTION PROCESS

CALL FOR THE FIRST INSPECTION WHEN THESE ITEMS ARE COMPLETE

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<u> </u>	Septic tank installed and plumbing complete. (SEE PLUMBING INFORMATION)
2.	<u>DO NOT</u> underpin until Building Inspector has inspected and approved piers and tie downs. You may underpin behind any decks and/or landings ONLY.
3.	Piers (blocking) and tie downs complete. Have manufacturer's instructions in a waterproof bag on the power pole to verify recommended tie down procedure. (SEE ATTACHED)
4.	All electrical work complete. (SEE ELECTRICAL INFORMATION)
	Access to the interior electrical panel is required.
5.	County issued address numbers must be installed.
6. 7.	Mobile Home Decal installed where visible from the outside and facing the street, which you live. All above ground water lines must be insulated.
STEP TW	<u>O:</u>
□ 8. □ 9.	Call for the second inspection when the underpinning for the mobile home is complete. All entrance decks and stairs complete. (3X3 minimum landing, steps, handrails, etc.)

WHEN ALL OF THE ABOVE ITEMS ARE COMPLETE AND APPROVED, YOU WILL BE PROVIDED DOCUMENTATION THAT YOU WILL NEED TO BRING TO YOUR POWER COMPANY TO HAVE A METER SET.

CALLING FOR AN INSPECTION

YOU MUST:

- 1. Call the Building Codes Department at 898-5950 and request an inspection.
- 2. Give your permit number.
- 3. If you have any questions, please call 898-5950 between the hours of 4-5 P.M. and ask for an inspector.

IF YOU CALL FOR AN INSPECTION AND FOR ANY REASON YOU CANNOT BE READY, PLEASE CALL AND CANCEL YOUR SCHEDULED INSPECTION SO THAT WE MAY SERVICE OTHER CUSTOMERS.

I F YOU DO NOT CANCEL, THERE WILL BE A \$50.00 REINSPECTION FEE. IF CHARGED A REINSPECTION FEE, YOU ARE REQUIRED TO PAY THIS FEE BEFORE ANOTHER INSPECTION WILL BE SCHEDULED.

IV. Mobile Home Set-up

 ${\bf 1.} \quad {\bf Underpinning \ and \ proper \ ventilation \ is \ required \ for \ all \ mobile \ homes.}$

<u>Pickens County Development Standard Ordinance #304 states that all mobile homes must be properly underpinned before the Certificate of Completion is issued.</u>

Therefore, all underpinning must be completed before the power can be "released" to the home.

A. <u>Underpinning and skirting:</u>

- 1. Ventilation requirements must be met.
- 2. Shall be underpinned with brick, concrete block, vinyl, or continuous aluminum or fiberglass skirting extending to the ground around the perimeter of the mobile home.
- 3. R-309.2-Access: An access crawl hole 18 inches by 24 inches shall be provided to the under floor space.

B. Ventilation:

1. 1 square foot of ventilation is required for every 150 square feet of floor area of home.

Example: A Mobile Home that is 14 feet wide by 70 feet long.

- 70 feet long minus the 4 foot hitch = 66 feet and a typical vent is 60 square inches
- 66 feet x 14 feet = 924 square feet of floor area
- 924 square feet divided by 150 square feet per vent = 6.61 square feet of venting required.
- 6.16 square feet X 144 square inches per 1 square foot = 887 square inches of required ventilation.
- 887 square inches divided by 60 square inches per vent = 14.78 or 15 vents required.
- 2. Vents must be located within 3 feet of each corner of the mobile home and can have operable screen louvers or mesh not less than 1/8 inch and not more than 1/2 Inch in any dimension.
- 3. Moisture producing devices such as dryers shall be vented to the outside beyond the perimeter of the home.

2. Manufactured Home Installation:

The Federal Manufactured Home Construction and Safety Standard program requires that all manufactured homes be provided with installation instructions covering foundation, anchoring and utility connections. This is described in your Manufacturer's Instruction Booklet. If this information is not available, we will use the following guidelines.

- A. Footings: All piers shall be placed on solid concrete blocks or other manufacturer approved process: less than 80 inches in height, 16 inches X 16 inches X 4 inches thick; more than 80 inches in height, 24 inches X 24 inches X 6 inches thick.
- B. Piers:
 - 1. Piers less than 36 inches in height: 8 Inch X 16 inch block with open cells located vertically.
 - 2. The piers shall be covered with a 2 inch X 8 inch X 16 inch wood or concrete cap.
 - 3. All piers between 36 inches and 80 inches in height AND all corner piers must be double blocked (8 inch X 16 inch blocked inter-locked) and capped with a 4 inch X 16 inch X 16 inch pressure treated pier cap or a 4 inch masonry cap.
 - 4. Piers over 80 inches in height require engineering certification.

TIE DOWNS AND ANCHORS:

A	В	C	D	
LENGTH OF	# OF VERTICAL	# DIAGONAL TIES	MINIMUM NO. OF	
HOME	TIES	PER SIDE	ANCHORS	
UP TO 40	2	4	8	
40 TO 46	2	4	8	
46 TO 49	2	5	10	
49 TO 54	3	5	10	
54 TO 58	3	5	10	
58 TO 64	3	6	12	
64 TO 70	3	6	12	
70 TO 73	3	7	14	
73 TO 84	4	7	14	

- a. Double section manufactured homes require only the diagonal ties specified in column C.
- b. Length of manufactured home (as used in the above table) refers to length excluding the draw bar or tongue.
- c. Double sections will be bolted together by manufactured requirements.
- d. Open hook ends shall not be used in any part of the anchoring system.
- e. Anchors need to be at ground level.

V – Electrical:

FOUR WIRE SYSTEM – Use 4 separate insulated conductors approved for rated amps of the disconnect.

CONDUCTOR TYPE AND SIZES

COPPER			ALUMINUM			
AMPS	2 HOT	NEUT.	GRND.	2 HOT	NEUT.	GRND.
200	2/0	#1	#6	4/0	2/0	#4
175	1/0	#2	#6	3/0	1/0	#4
150	#1	#3	#6	2/0	#1	#4
125	#2	#4	#8	1/0	#2	#6
100	#4	#8	#8	#2	#4	#6

NOTE: Wiring must be all copper or all aluminum, no mixing types of wire.

- 1. Meter can be mounted on the home if HUD approved by manufacturer.
- 2. Any outside receptacles must be on the G.F.C.I. protection.
- 3. Bond double sections of mobile homes to each other with #6 copper if they are not bolted together.
- 4. Ground Rod Installation: Install two 8-foot ground rods 16 feet apart. Top of the ground rods must be 8 inches below grade. The ground wire must be buried 8 inches deep and attached to the ground rods with acorn type clamps. Do not cover ground rods or ground wire until approved. The vertical portion of the grounding wire must be in rigid non-metallic conduit from the panel box to 8 inches into the ground for protection. (minimum or 4 feet required)
- 5. All meter cans and panel boxes must be located back to back. When installed with a main disconnect on the exterior of the home, a 4-wire system must be used to sub-panel inside home. Bond the panel enclosure.
- 6. Bonding at the main panel goes to the neutral bus bar, bonding at a sub-panel goes to the grounding bus bar. Remove the jumpers in the sub-panel so the neutral and grounding bus bars are isolated. Bond the panel enclosure.

VI – Plumbing:

- 1. All plumbing installed shall conform to the 2003 International Plumbing Codes.
- 2. 2003 International Plumbing Code requires that all plastic water service piping shall be rated for a minimum working pressure of 160 PSI or better and sized 3/4 inch or larger and must be insulated.
- 3. 2003 International Residential Code requires water service lines <u>shall not</u> be in the same ditch as the sewer line unless they meet code requirements.
- 4. No water service may pass over or through any septic tank or its drain field.
- 5. The water distribution system shall be protected against backflow with a "Backflow Prevention" device.
- 6. A separate service shut-off valve shall be installed on the water line at the supply side located near the mobile home
- 7. Where water pressure in the home exceeds 80 PSI, a water pressure-reducing valve must be installed.
- 8. Water line must be 18 inches below grade from meter to home.
- 9. Any above ground water line must be insulated.
- 10. A clean out for routing out a plugged sewer septic line must be installed with-in 5 feet of the mobile home and visible.

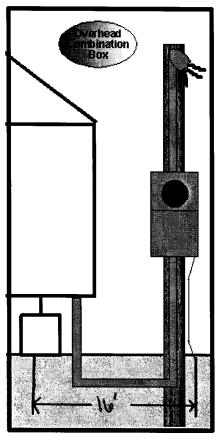
VII – General Building Requirements:

- 1. County provided home numbers (911 Number) Size Requirements
 - Residential Numbers Minimum 3 inch in height
 - Business Numbers Minimum 4 inch in height

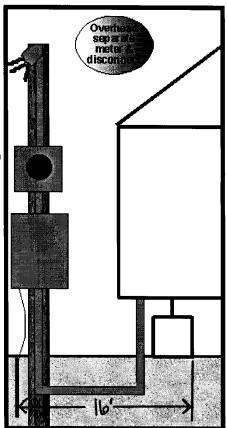
All numbers must contrast to the color of the building and be readable from the road. Buildings more than 50 feet from the road must also have numbers near the road (on your side of the road) such as on a mailbox, on a 4X4 treated post or in another appropriate place.

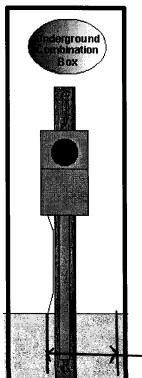
- 2. The grade away from the mobile foundation shall fall a minimum of 6 inches within the first 10 feet.
- 3. Landings International Residential Code (see attached drawing).
 - a. A minimum 3 foot by 3 foot landing shall be required on the outside of an exit door.
 - b. Homes with "In swing" doors or sliding doors, the landing at the exterior of an exit door must not be more than 7 3/4 inches below the top of the door threshold. [EXCEPTION: If the door swings out, the landing should be 1 ½ inches or less below the threshold. (This rule does not apply to storm doors.)]
- 4. Handrails International Residential Code
 - a. Handrails having minimum and maximum heights of 30 inches and 38 inches respectfully, measured vertically from the nosing of the treads.
 - b. Handrails required on at least one side of the stairs having 4 or more risers and shall be continuous the full length of the stairs and shall extend 6 inches beyond the top and bottom risers.
- 5. Guardrails International Residential Code
 - a. Porches, balconies of raised floor surfaces located more than 30 inches above the floor or grade level shall have guardrails not less than 36 inches in height.
 - b. Required guardrails on open sides or stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures, which will not allow passage of a 4-inch diameter object.
- 6. Treads/Steps International Residential Code
 - a. Minimum tread width = 9 inches
 - b. Minimum step height = $8 \frac{1}{4}$ inches
 - c. Handrail needed on one side when there are four or more risers.
- 7. All exterior lumber MUST be treated or painted.

ELECTRICAL INSTALLATIONS



- Service disconnect minimum 100 amp
- For overhead services, use a 6"x 6"x16" treated pole. Placed in ground to depth of 3' 6"
- Underground services using combination boxes may be mounted on a single 6"x 6"x 10" treated pole, placed in ground to depth of 3" 6"
- For overhead installation, secure service rise with straps 12" from head and not exceeding 30" intervals.
- Maximum distance between home and service =30'
- Wring above ground, to burial depth, must be in conduit.
- Trench depth must be:
 6" burial/ Rigid metal conduit
 18" burial/ Rigid non-metallic conduit
 24" Direct burial wire type

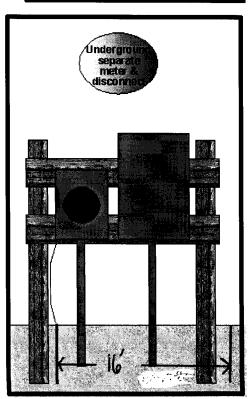


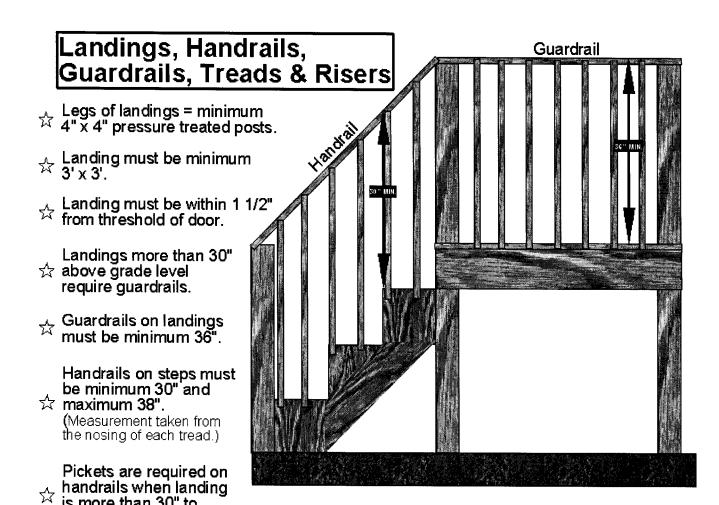


- 2' minimum clearance from bottom of disconnect to grade level.
- Meter height between 5' & 6' above grade level.
- Trench must be left open for inspection.
- Separate Meter & Disconnect should be mounted on 4"x4" pressure treated posts. 2"x6" treated cross members joined with galvanized nails.

 Posts must be 3'6" in the ground.
- Service ground wire must be minimum #6
 Copper wire to ground rod.
 (same for overhead service)
- Ground rod must be minimum 5/8" x 8'
 Ground rod must be driven to grade level or
 below.

DRAWINGS ARE NOT TO SCALE





grade level. Pickets on guardrails and handrails must be

is more than 30" to

- Landings must be freestanding.
- ☆ Minimum tread width = 9"

spaced 4" apart or less.

- ☆ Maximum riser height = 8 1/4"
- ☆ Minimum tread length = 36"

A handrail is required any time stairs have 4 risers or more. Risers include from ground to first tread and also from last tread onto landing.

