



## Manufactured Building

Wayne Goodwin | Commissioner of Insurance

Tim Bradley | Assistant State Fire Marshal

### MEMORANDUM

**DATE:** January 20, 2011

**TO:** Local Building Inspectors and Other Interested Parties

**FROM:** Joseph H. Sadler, Jr., P.E.  
Deputy Director  
Manufactured Building Division

**SUBJECT:** Insulated Grounding Conductors required in Manufactured and Mobile Homes

We have been made aware that some jurisdictions are allowing grounding conductors in manufactured and mobile home feeder cables that are not insulated. Please be advised that manufactured and mobile home feeders must have an insulated equipment grounding conductor. Bare equipment grounding conductors covered by a jacket in a cable assembly **are NOT INSULATED**. **Section 550.16(A)(1), NC Electrical Code, 2008 Edition** states:

*The grounded circuit conductor shall be insulated from the grounding conductors and from equipment enclosures and other grounded parts. The grounded circuit conductor terminals in the distribution panelboard and in ranges, clothes dryers, counter-mounted cooking units, and wall-mounted ovens shall be insulated from the equipment enclosure. Bonding screws, straps, or buses in the distribution panelboard on in appliances shall be removed and discarded. Where the distribution panelboard is the service equipment as permitted by 550.32(B), the neutral conductors and the equipment grounding bus shall be connected.*

**Section 550.33(A), NC Electrical Code, 2008 Edition**, states:

*Feeder conductors shall consist of either a listed cord, factory installed in accordance with 550.10(B), or a permanently installed feeder consisting of four insulated, color-coded conductors that shall be identified by the factory or field marking of the conductors in compliance with 310.12.*

If the listed cord option is chosen, **Section 550.10(B)** states:

*The cord shall be a listed type with four conductors, one of which shall be identified by a continuous green color or continuous green color with one or more yellow stripes for use as the grounding conductor.*

**Please make sure all grounding conductors in manufactured and mobile homes feeder cables are insulated.**

cc: Ron Chilton – Chief Electrical Inspector  
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