

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
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Grounding Electrodes For Single Family Dwellings

Code: 2005 Electrical Code
Section: 250.56

Date: March 1, 2005

Question:

Are two driven electrodes (ground rods) required for single family dwellings?

Answer:

Single electrodes made of rod, pipe, or steel plates must have a resistance to ground of 25 ohms or less, or must be augmented by an additional electrode of a type specified by Section 250.52(A)(2) through (A)(7). The installer is required to assure the system meets this requirement.

Note: In extensive testing throughout North Carolina soil conditions have found to be of types prohibiting conductivity meeting the 25 ohms or less requirement for resistance.