

**NC Department of Insurance  
Office of the State Fire Marshal - Engineering Division  
1202 Mail Service Center, Raleigh, NC 27699-1202  
919-647-0001**

**Exterior Grounding Electrode Conductors Exposed to Physical Damage**

**Code:** 2017 Electrical Code  
**Section:** 250.64(B)

**Date:** August 30, 2019

**Question:**

Is there any method the State Electrical Division recognizes for installing a grounding electrode conductor on the exterior of a structure without exposing the conductor to physical damage?

**Answer:**

Yes. The State Electrical Division does not consider a grounding electrode conductor exposed to physical damage if the installation possesses all the following characteristics.

1. the type of the conductor is a solid (non-stranded) wire
2. the conductor is size 6 AWG or larger
3. the conductor is ran tightly along and attached to the surface of a structure's exterior finishing or to the conduit of a service lateral everywhere the conductor is exposed to the exterior (securing the wire to the lateral with cable ties is acceptable)
4. where below ground, the conductor is covered with soil, rock, gravel, decorative pavers, wooden walkways, concrete, brick, or similar elements

Examples:

