

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

General Protection Against Physical Damage

Code: 2017 Electrical Code
Section: 300.4

Date: August 30, 2019

Question:

Who determines when a cable, conductor, raceway, or wiring method is subject to physical damage?

Answer:

The electrical inspector with jurisdiction is the person who determines when an installation is subject to physical damage. Where neither the State Electrical Division, through interpretation, nor NEC provides direction for protecting a wiring method, the electrical inspector's judgment of the surrounding environment shall govern the installation. This includes all sections within the electrical code that require protection where physical damage is likely to occur to the installation.

Because State Electrical Inspectors do not inspect local projects, it is infeasible for the State Electrical Division to determine if an electrical installation in a local jurisdiction is or will be subject to physical damage. Specific sections of the NEC that the State Electrical Division has issued an interpretation for recognizing a particular means of protection or wiring method from not requiring further protection from physical damage must still be approved by the local electrical inspector as compliant in accordance with such State interpretation. The electrical inspector with jurisdiction over the project is the most qualified person to make this decision while physically observing the installation and environment or while performing a plan review. Therefore, any concerns with the enforcement of "subject to physical damage" should be addressed with the inspections department having jurisdiction prior to performing the installation.

Whenever the local department suspects a proposed installation may be subject to physical damage, the State Electrical Division asks both electrical inspectors and inspections departments to aid installers in solving these disputes prior to the installation. Additionally, if an inspections department has a local rule that broadly defines a typical area of installation as subject to physical damage, the State Electrical Division asks that inspections department notify electrical installers prior to issuance of a permit for the work.

Example of a broad determination for subject to physical damage: Everywhere unconcealed that is outside and below 8 feet.