

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
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Tightening Torque Inspection and Responsibility

Code: 2017 Electrical Code
Section: 110.14

Date: March 8, 2019

Question 1:

Can a conductor's termination be physically and visually inspected; if so, what section should be cited as a violation if the conductor appears to be loose within the termination?

Answer 1:

Conductors can be physically touched, tugged, and visually observed to determine if the conductive material is secured properly in a terminal. If the conductor appears to be loose, or moves under the terminal when touched or tugged, section 110.14(A) should be cited as not possessing a "thoroughly good connection".

Question 2:

Who is responsible for ensuring that the tightening of terminations are in accordance with the manufacturer's specifications and performed with a calibrated torquing tool as described in section 110.14(D)?

Answer 2:

The installer.

An electrical inspector is rarely present during the installation of electrical equipment and conductors. An electrical inspector should never place tools on an installer's terminations; therefore, the electrical inspector cannot be held responsible for the proper calibrated tightening requirements of the section 110.14(D).