



Electrical Conductors Termination Torque Inspection

BUILDING INSPECTION REQUIREMENTS

The 2022 California Electrical Code section 110.3 (B) applies to landing conductors and equipment marking with tightening torques.

- **110.3 Examination, Identification, Installation, Use, and Listing (Product Certification) of Equipment, (B) Installation and Use**
Equipment that is listed, labeled, or both shall be installed and used in accordance with any instructions included in the listing or labeling.

General Information

Each nationally recognized testing laboratory requires all terminals and lugs to pass stringent tests as part of the listing process. As a result, the listing for terminals and lugs on panels, switches, circuit breakers and other equipment now include specific torqueing requirements. All manufacturers are required to identify appropriate values for each type of termination as part of their installation instructions. This is usually part of the labeling inside an electrical cabinet.

- It is the responsibility of the installer to torque all termination properly.
- It is the inspector's responsibility to verify terminations are properly torqued.

You may utilize the following verification options:

- 1) When provided at time of manufacture, breakaway torqueing devices will be considered to be installed in accordance with the manufacturer instructions. The breakaway portions of these devices should be left on the job site until witnessed and approved by the field inspector.
- 2) We will accept a third-party report from an acceptable unbiased agent to certify proper torqueing of all terminations. Please verify with the Building Official that the third-party agent you intend to engage is acceptable, prior to such an agreement.
- 3) As an alternate, your field inspector may witness the torqueing of all terminations. Do not tighten down conductors' terminals until the field inspector is present - leave snug not tight. It is required that the torqueing tools be calibrated and that the manufacture's torqueing instructions be on site at time of the inspection. Your field inspector will witness all terminations.