

Electrical Safety Office

Multiple Earth Neutral (MEN) connections

In Queensland, the majority of electrical installations employ the multiple earth neutral (MEN) earthing system.

This system of earthing requires an electrical connection to be made between the protective earthing system and the neutral connections of the installation, usually made at the main neutral link in the main switchboard of the installation (MEN connection).

This system of earthing provides a lower value of fault loop impedance, allowing for faster and more reliable operation of protection devices in the event of a fault.

With no MEN connection in place protective devices may not operate correctly or within the required times to ensure the installation is electrically safe.

Licensed electrician to check the MEN connection

Where the electrical work performed may have affected the MEN connection of the installation, verification and testing must include testing to confirm the integrity of the MEN connection.

Where the electrical work performed would not have affected the MEN connection but it is practicable and safe to do so, a visual inspection of the MEN connection should always be made before leaving site.

Performing a fault loop impedance test, with supply available and a suitable plug-in test instrument, is a simple and reliable indication that the MEN connection is intact. A low value of fault loop impedance (refer Table 8.1 of the Wiring Rules AS/NZS 3000) is a good indication that the fault loop path, including the MEN connection, is intact. High fault loop impedance readings should always be investigated.

Re-energising an electrical installation with no MEN connection in place is one of the most potentially dangerous errors that can be made.

**TEST BEFORE YOU TOUCH
TEST BEFORE YOU LEAVE**

For more information

Visit www.electricalsafety.qld.gov.au or call the Electrical Safety Infoline on 1300 650 662.

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