

Electrical Testing Sequence

All [commercial properties](#) and [domestic rental properties](#) require electrical testing in order to comply with electrical safety standards under law. As part of this testing, it is important to follow the correct electrical testing sequence in order to ensure that it is performed correctly and safely.

Is there more than one electrical testing sequence?

The order of electrical tests will depend on whether the electrical installation is new or if the inspection is part of the [periodic testing](#) of an existing installation.

An 'Initial Verification' is required of new installations and alterations, and these inspections require a specific electrical testing sequence to be followed because each test relies on the previous one having passed.

This means that the correct results can be found without any danger from the test.

What is the initial verification testing sequence?

Dead testing (before connection of the supply)

1. Continuity of protective conductors
2. Main and supplementary bonding continuity
3. Continuity of ring final circuit conductors
4. Insulation resistance
5. Site applied insulation
6. Protection by separation
7. Protection by barriers and enclosures
8. Insulation of non-conducting floors and walls
9. Polarity

10. Earth electrode resistance if an earth electrode resistance tester is used

Live testing (with the supply connected)

1. Earth electrode resistance if an earth-fault loop tester or the ammeter and voltmeter method are used
2. Confirm correct polarity
3. Earth-fault loop impedance
4. Correct operation of residual current devices
5. Correct operation of switches and isolators

What is the periodic inspection reports testing sequence?

It's important to perform the correct [periodic inspection](#) and testing procedure, which will always start with a visual inspection.

This will check that the installation complies with British Standards, isn't sufficiently damaged to make testing unsafe, and that it is located in a suitable environment to meet current working practices.

What is included as part of a periodic inspection?

The following procedures should be followed as part of the periodic test and inspection sequence:

- Continuity
- Bonding Conductors Continuity
- Ring Circuit Continuity
- Insulation Resistance
- Polarity
- Earth Fault Loop Impedance
- Earth Electrode Resistance
- RCD testing

- Functional testing of isolators and breakers

Is it necessary to follow a specific sequence for periodic testing?

There is no specific sequence to follow as part of this [periodic inspection](#) and testing procedure. Instead, the engineer performing the test will decide what is the safest and most efficient sequence to follow.

This means that they will consider factors such as the nature of the issues identified during the visual test, the type and location of the equipment, and how best to minimise disruption during the testing.

Do you have any questions about electrical testing sequences?

When it comes to performing electrical tests, it's important to use professionals like Hexo Electrical Testing. [Contact us today](#) if you want to know more about electrical testing sequences, or if you have any other questions about electrical testing.

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