

Why complete paperwork?

This requirement will be new to many electrical installation installers.

Its rationale is to ensure that future owners or users of the installation, as well as those who maintain it or who may modify it, have full information.

If difficulty is experienced in preparing the operational manual, reference to BS 4884 and to BS 4940, may be helpful.

Records of the results of all tests (in the form of Electrical Installation and Periodic Test and Inspection Certificates) should be kept, ideally with the Operational Manual, for the life of the installation.

Electrical installation certificate

Following completion of inspection and testing, an electrical installation certificate, together with of the electrical installation and a schedule of test results, must be provided to the person who ordered the work.

It must be signed three times (by the designer, the installer and the inspector/tester) to certify that the installation has been designed, constructed, inspected and tested in accordance with BS 7671 (BS 7671 the 17th Edition of the IET Wiring Regulations).

but a single-signature version of the certificate may be used where design, construction, inspection and testing are all the work of the same person.

There is a form of the certificate giving of the electrical installation and of completion and inspection.

In some cases, where there are good reasons and where a qualified electrical engineer has given his approval, the installation may not comply fully with the Regulations.

In such a case, full details of the departures must be stated on the completion and inspection certificate, although this table may be expanded and redesigned as necessary to cover the installation under test.

A full schedule of test results must be appended to the Electrical Installation Certificate and the Periodic Inspection Report.

The complete certificate must be handed (or sent) to the person ordering the work, together with a copy to be given to the user of the installation where different.

The installer, designer and tester should also keep copies for their records.

Why complete paperwork?

When an installation is complete, including additions or alterations to an existing installation, the persons responsible for the work must report to the owner that it is complete and ready for service.

This is in the form of an electrical installation certificate which must be separately signed to verify the design, the construction and the inspection and test aspects to confirm that the installation complies with BS7671.

Sometimes, the person ordering the work is not the user, in which case it must be ensured that the user has copies of the forms for inclusion in the installation manual.

This certificate will verify that the installation is safe to use and ready for service, and should be signed by a competent person who should preferably be one of the following:

1. - a professionally qualified electrical engineer, or
2. - a member of the ECA (Electrical Contractors' Association), or
3. - a member of the ECA of Scotland, or
4. - an approved contractor of the NICEIC (National Inspection Council for Electrical Installation Contracting),
or
5. - a qualified person acting on behalf of one of the above.

In all cases, the Certificates must state for whom the qualified person is acting.

The installer should also compile an operational manual for the installation, which will include all the relevant data, including:

1. a full set of circuit and schematic drawings,
2. all design calculations for cable sizes, cable volt drop, earth-loop impedance, etc.
3. leaflets or manufacturers' details for all the equipment installed,
4. 'as fitted' drawings of the completed work where applicable,
5. a full specification,
6. copies of the electrical installation certificate, together with any other commissioning records,
7. a schedule of dates for periodic inspection and testing,
8. the names, addresses and telephone numbers of the designer, the installer, and the inspector/tester.