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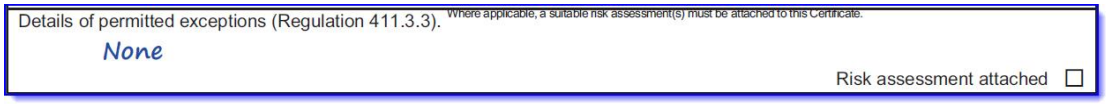
CHANGES TO MODEL FORMS OF CERTIFICATION AND REPORTING IN BS 7671

As part of BS 7671:2008+A3:2015 (IET Wiring Regulations Seventeenth Edition), which was published on 1 January 2015 and comes into effect on 1 July, some changes have been made to the model forms of certification and reporting in Appendix 6 of BS 7671. This article summarises the main changes.

Electrical Installation Certificate

A new section has been added on the first page of the Electrical Installation Certificate for details to be recorded of any permitted exceptions to Regulation 411.3.3 (see Figure 1). This relates to where additional protection for one or more socket-outlets rated at 20 A or less by an RCD has been omitted on the basis that a documented risk assessment has determined that such protection is not necessary. This exception may be used only for an installation other than in a dwelling. Where the exception is used, a copy of the risk assessment must be attached to the certificate as required by Regulation 411.3.3.

Figure 1 – New section regarding permitted exceptions

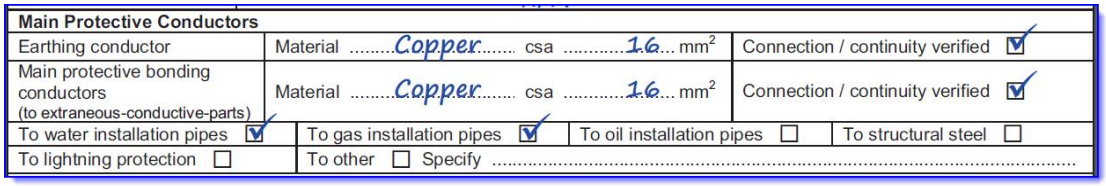

Details of permitted exceptions (Regulation 411.3.3). Where applicable, a suitable risk assessment(s) must be attached to this Certificate.

None

Risk assessment attached ☐

The section where details of the main protective bonding conductors of the installation are to be recorded has been expanded (see Figure 2). This now includes separate tick boxes for main bonding conductor connections to water installation pipes, gas installation pipes, oil installation pipes, structural steel, lightning protection and any other parts (as referred to in Regulation 411.3.1.2) to which such connections have been made.

Figure 2 – Changes to section for details of main bonding connections



Main Protective Conductors			
Earthing conductor	Material ..Copper.. csa ..16.. mm²		Connection / continuity verified ☑
Main protective bonding conductors (to extraneous-conductive-parts)	Material ..Copper.. csa ..16.. mm²		Connection / continuity verified ☑
To water installation pipes ☑	To gas installation pipes ☑	To oil installation pipes ☐	To structural steel ☐
To lightning protection ☐	To other ☐ Specify		

In the notes of guidance for recipients, a change has been made to the note that points out that, for safety reasons, the installation will need to be inspected at appropriate intervals. Instead of referring to ‘a competent person’, the note now refers to ‘a skilled person competent in inspection and testing of electrical installations’. The change has been made in order to describe more clearly the qualities that should be possessed by the person chosen to carry out such periodic inspections.

A new note of guidance has also been added to tell the recipient that the certificate is valid only if accompanied by the Schedule of Inspections and the Schedule(s) of Test Results.

Schedule of Inspections for the Electrical Installation Certificate

The existing Schedule of Inspections for the Electrical Installation Certificate has been deleted. It is replaced by (a) and (b) below, one of which (as applicable) is to be used as the basis for the Schedule of Inspections to accompany the certificate.

a. For installations in domestic and similar premises with up to 100 A supply, a model schedule of inspections for new installation work in such premises.
b. For installations not covered by (a), a list of examples of items requiring inspection during initial verification of new installation work.

(a) and (b) contain a greater number of items than were included in the existing Schedule of Inspections (deleted by Amendment No. 3), many of which are quite detailed or particular. This gives (a) and (b) the advantage of being more like checklists. A few examples of items in (a) and/or (b) are:

- items relating to the electrical intake equipment, such as the service cable, service head, distributor's earthing arrangement and metering equipment.
- items relating to parallel or switched alternative sources of supply.
- items relating to consumer units or distribution boards, such as:
    - adequacy of access and working space for items of electrical equipment including switchgear (132.12);
    - presence of linked main switch(s) (537.1.4, 537.1.5, 537.1.6);
    - suitability of enclosure(s) for IP and fire ratings (416.2, 421.1.6, 421.1.201); and
    - confirmation that all conductor connections are correctly located in terminals and are tight and secure.
- items relating to circuits, such as:
    - adequacy of conductors for current-carrying capacity with regard to type and nature of the installation;
    - segregation/separation of Band I (ELV) and Band II (LV) circuits, and electrical and non-electrical services (528);
    - cables correctly erected and supported throughout including escape routes, with protection against abrasion (521, 522); and
    - provision of additional protection by RCD not exceeding 30 mA (with a list of possible applications).

Minor Electrical Installation Works Certificate

In Part 3 (Essential Tests) of the Minor Electrical Installation Works Certificate, the fields for insulation resistance test readings to be inserted have been changed from 'Line/neutral', 'Line/earth' and 'Neutral/earth' to 'Live-Live' and 'Live-Earth'.

Also in Part 3, the amount of detail required to be inserted in relation to the testing of an RCD has been increased, such that the operating time at 5 $I_{\Delta n}$ (as well as at $I_{\Delta n}$) is included, as is confirmation that the test button of the device operates satisfactorily.

In Part 4 (Declaration), a field has been added for details to be recorded of any permitted exceptions to Regulation 411.3.3 relating to the omission of RCD protection to socket-outlets. As mentioned above in relation to the similar field in the Electrical Installation Certificate, this exception may be used only for an installation other than in a dwelling. Where

the exception is used, a copy of the risk assessment must be attached to the certificate as required by Regulation 411.3.3.

Electrical Installation Condition Report

In Section D (Extent and limitations of inspection and testing) of the Electrical Installation Condition Report, text has been added to the effect that an inspection should be made within an accessible roof space where other electrical equipment is present.

Section J (Particulars of installation referred to in the report) now includes separate tick boxes for main bonding conductor connections to water installation pipes, gas installation pipes, oil installation pipes, structural steel, lightning protection and any other parts (as referred to in Regulation 411.3.1.2) to which such connections have been made.

In Section K (Observations), the column headed 'Further investigation required (yes/no)' has been deleted. However, it is still possible to state that further investigation is required in relation to an observation, by means of additional classification code, 'FI (Further investigation required)', which is now recognised in Section K.

Note 9 of the notes for the person producing the report has been revised with regard to where the inspection has revealed an apparent deficiency that could not be fully identified due to the extent or limitations of the inspection. The note points out that if a further investigation may reveal that the deficiency warrants the award of classification code C1 (Danger present) or C2 (Potentially dangerous), a recommendation of further investigation required (Code FI) should be recorded at Section K (Observations). It should be appreciated, however, that an FI classification should not be recorded if the investigation could only be expected to lead, at worst, to the award of C3 classification (Improvement recommended) in relation to the observation.

Notes 7 and 8 of the notes of guidance for recipients have been revised with regard to the person who undertakes any necessary remedial work in relation to a deficiency revealed by the inspection. Instead of referring to 'a competent person', the notes now refer to 'a skilled person competent in electrical installation work'. The change has been made to the notes in order to describe more clearly the qualities that should be possessed by the person chosen to carry out such remedial work.

Note 9 of the notes of guidance for recipients has been revised for the same reason as Note 9 of the notes for the person producing the report, mentioned earlier; that is, in relation to further investigation.

Note 10 of the notes of guidance for recipients has been revised with regard to the person who undertakes re-inspection of the installation at appropriate intervals. Instead of referring to 'a competent person', the note now refers to 'a skilled person competent in inspection and testing of electrical installations'. The change has been made in order to describe more clearly the qualities that should be possessed by the person chosen to carry out such periodic inspections.

Some additions and modifications have been made to the Condition Report Inspection Schedule Guidance for the Inspector, and to the Condition Report Inspection Schedule for Domestic and Similar Premises with up to 100 A Supply. The result is that these schedules, which are essentially checklists, are more comprehensive than they previously were.

In the Condition Report Inspection Schedule for Domestic and Similar Premises with up to 100 A Supply, the column headed ‘Further investigation required (yes/no)’ has been deleted. Also, the text in the schedule relating to the use of recommendation codes has been revised to take account of the introduction of the new Code FI (Further investigation required), mentioned earlier.