



Electrical Safety and Testing Policy

Adopted 01 April 2018
Updated September 2020

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| Title | Electrical Safety and Testing Policy |
| Users of Policy | Colchester Borough Council tenants and leaseholders, staff at Colchester Borough Homes |
| Date Adopted | April 2018 |
| Date last Reviewed | September 2020 |
| Review Frequency | Every 3 years |
| Best Before Date | 30 September 2023 |
| Scheme of Delegation | |
| Formation of Policy | Portfolio Holder(s) with delegated responsibility for the Financial Management of the Housing Revenue Account |
| Amendments | Portfolio Holder(s) with delegated responsibility for the Financial Management of the Housing Revenue Account |
| Monitoring | Client Asset Manager, Colchester Borough Council |
| Implementation | Head of Asset Management, Colchester Borough Homes |
| Approval of requests | Head of Asset Management, Colchester Borough Homes |

1. Purpose & Scope:

- 1.1 The purpose of this Policy is to set out specific guidelines to enable Colchester Borough Council to be assured that fixed electrical installations and portable appliances in its domestic dwellings are tested and inspected at appropriate frequencies and to the required legal standards, in order to minimise the risk of fire, injury and / or death.
- 1.2 This Policy refers to domestic dwellings only. The safety and testing of electrical installations and electrical appliances in non-domestic settings is covered by separate procedures, statute and regulation.
- 1.3 Legislative Requirements and Regulatory Guidance:
 - Landlord and Tenant Act 1985
 - Housing Act 1988
 - Management of Health & Safety at Work Regulations 1999
 - Workplace (Health, Safety & Welfare) Regulations 1992 (as amended)
 - The Construction (Design and Management) Regulations 2015

- The Building Act 1984 & 2000: Building Regulations (including Part P requirements)
- Right to Repair Scheme (introduced 1994)
- The Health and Safety at Work Act 1974
- Electricity at Work Regulations 1989
- Requirements for Electrical Installation IET Wiring Regulations 18th Edition BS7671:2018 (including all amendments)
- IET Guidance Note 3 – Inspection and Testing
- The Electrical Equipment (Safety) Regulations 1994
- Defective Premises Act 1972
- Environmental Protection Act 1990
- BS 5839-6:2019 Fire Detection and Fire Alarm System for Buildings
- Electrical Equipment (safety) Regulations 1994
- Electricity at Work Regulations 1989, BS 7671: 2008 – Requirements for electrical installations, IEE Guidance Note 3 (Inspection and Testing)
- Construction (Design and Management) Regulations 2015
- Fixed Electrical Installations - definition

1.4 All fixed electrical installations within the Council's housing stock are subject to regular inspection and testing.

1.5 The fixed electrical installation is the assembly of associated electrical equipment supplied from a common point of origin to fulfil a specific purpose and having certain co-ordinated characteristics.

2. Portable appliance testing

2.1 All electrical equipment owned/managed by CBC will be subject to an annual portable appliance test (PAT). Appropriate labelling of equipment and recording of all equipment will be undertaken in accordance with the Electrical Equipment (Safety) Regulations 1994.

3. Duties and Responsibilities

3.1 Colchester Borough Homes Employees; to ensure compliance with the Electricity at Work Regulations 1989, the Head of Asset Management, CBH assumes the role of Duty Holder, and is responsible for actions and requirements defined by this Policy. The Duty Holder may delegate some of the duties to others deemed skilled to aid operational requirements. This will be communicated in written form. Appropriate notice and the likely impact of the testing regime will be agreed with the relevant Managers and business users who will filter this information through to appropriate staff prior to the commencement of any testing.

3.2 Colchester Borough Homes employees will schedule electrical contractors to undertake formal Periodic Inspection and Testing of Electrical Installations and portable appliance testing at prescribed frequencies as detailed in Appendix A.

4. Tenant and Leaseholder responsibilities

- 4.1 Tenants will need to give access to their property so that inspections can be completed. Appointments will be made in advance to facilitate this.
- 4.2 To undertake fixed installation inspection and testing, it is necessary to de-energise (switch off) the electrical supply to the property. Where Electrical Inspection and Testing is to be carried out, tenants shall be written to informing them that the electrical installation will require de-energising accordingly, the tenant shall be advised;
 - a) to save files and log-off home computers prior to the commencement of the electrical testing.
 - b) To consider any contingency arrangements arising from the absence of electrical supplies are facilitated, e.g for any medical equipment.
 - c) to ensure access is given to electrical sockets and meters and to remove any obstacles or items as far as is reasonably possible.
 - d) freezers and fridges contain a minimum amount of perishable food stuffs.
- 4.3 Leaseholders – under the terms of their lease, leaseholders are responsible for the maintenance of the electrical installations in their homes. CBC retains responsibility for the testing and maintenance of the electrical installations in the communal areas.

5. Authorised Inspectors and Testers

- 5.1 Only skilled persons as defined by BS 7671 2018 (Requirements for Electrical Installations) including all current amendments will be authorised to carry out Inspection and Testing.
- 5.2 A person shall be deemed skilled to carry out the appropriate Inspection and Testing only if she/he has sufficient knowledge and experience of the test equipment, the installation being tested and testing procedures.

6. Testing of Fixed Electrical Installations

- 6.1 It is the responsibility of those undertaking Inspection and Testing:
 - a) To ensure no danger occurs to any person or livestock.
 - b) To ensure no damage occurs to property.
 - c) To compare the inspection and testing results with the design criteria
 - d) To take a view on the condition of the installation and advice on remedial works
 - e) In the event of a dangerous situation, to make an immediate recommendation to CBH to carry out the necessary remedial actions.
- 6.2 Contractor requirements and standards - contractors appointed to undertake Periodic Inspection and Testing of Electrical Installations will be required to conform in full of the requirements of this Policy. Additionally, all Contractors shall comply with the following:

- a) They shall be registered through the National Inspection Council for Electrical Installation Contractors (NICEIC) the Electrical Contractors Association (ELECSA) or the Nation Association for Professional Inspectors (NAPIT).
- b) All Electricians should have successfully completed City and Guilds 2382 (18th Edition) City and Guilds 2391 (Inspection, Testing and Certification of Electrical Installations) JIB approved. Unless the duty holder deems the Electricians skill level and experience adequate to carry out the testing accompanied by regular monitoring.
- c) The Duty Holder must be assured of the technical competence of any contractor, prior to appointment.
- d) All contractors shall be subject to monitoring to ensure appropriate standards are met and maintained by performance measure or Audits.
- e) All contractors and operatives carrying out portable appliance testing must have received appropriate training and be a competent person, defined as "A person possessing sufficient technical knowledge or experience to be capable of ensuring that injury is prevented".

7. Repairs and Rectification

- 7.1 Necessary repairs identified whilst carrying out the Inspection and Testing regime will be completed immediately if their estimated cost is less than the sum agreed under contract (presently £500). Repairs required which are over this financial threshold will require prior authorisation by a CBH staff member with appropriate authority.

8. Exceptions to the Requirements

- 8.1 All extra low voltage systems (below 50Va.c. or 120Vd.c (ripple free) are exempt from this policy. The following schedule shows typical installation of this type (the list is not exhaustive).
 - Lift shaft Wiring and Controls
 - Building Management System
 - Fire Alarm Installation
 - Central battery-operated Emergency Lighting Systems
 - Telephone and data systems.

9. New Installations

- 9.1 All new installations shall be provided with an Electrical Installation Certificate complete with a Schedule of Inspections and Test Results. The documents shall be suitably completed and in full compliance with BS 7671: 2018 Requirements for Electrical Installations., Guidance Note 1 (Selection and Erection) and all current amendments.

10. Frequency of Inspection and Testing

- 10.1 Appendix A Table T1 sets out the frequency of Periodic Inspection and Testing of Electrical Installations and conditions of use.
- 10.2 The frequency of periodic inspection and testing must be determined considering:
- the type of installation
 - its use and operation
 - the frequency and quality of maintenance
 - the external influences on which it is subjected.
- 10.3 The frequency of test and inspection will never be longer than the maximum recommended frequency as set out in Appendix A, but more frequent inspections may take place as part of a pro-active, risk-based approach to the management of properties where there are known usage factors which may impact on the property's general condition.
- 10.4 All buildings shall be subject to a full Periodic Inspection and Test at the prescribed frequency. Partial testing of circuits or installations is not generally permitted. However, should detailed records, test results and drawings be available, the Duty Holder may relax the requirements subject to completion of a Risk Assessment. This is especially relevant to change of occupancy of properties which may have been the subject of short term lets.

11. Tests to be undertaken

- 11.1 Tests to be carried out on each Periodic Inspection and Test are detailed on Appendix B - Table T2.

12. Labelling

- 12.1 The provision of Marking and Labelling shall be provided in full accordance with BS 7671 2018 Requirements for Electrical Installations and Guidance Note 3 (Inspection and Testing). Including all current amendments.

13. Records

- 13.1 Records shall be provided in full accordance with BS 7671:2018 Requirements for Electrical Installations and Guidance Note 3 (Inspection and Testing) including all amendments. Additionally, a clear and understandable diagram or chart, or its equivalent, detailing a brief overview of the installation, should be positioned adjacent to each distribution board. Original Inspection certificates must be provided to CBH in an electronic format.

14. Approved Test Equipment

- 14.1 Test equipment shall comply with the requirements of BS 7671:2018 Requirements for Electrical Installations and Guidance Note 3 (Inspection and Testing) GS38 Electrical test equipment for electricians including all amendments.

15. Risk Assessments

- 15.1 Prior to commencement of any works activities, Colchester Borough Homes appointed contractors shall undertake a suitable and sufficient risk assessment for the work involved.

16. Programme of Works

- 16.1 The Duty Holder or other appointed Colchester Borough Homes employees will agree an appropriate programme of works, and issue instructions for this to be carried out.

17. Further Information

- 17.1 Further information or advice on the requirements of this Policy is available from the CBH Property Services Team.

18. Definitions

Duty Holder: The person nominated by Colchester Borough Homes who has responsibility for implementation, monitoring of standards and quality in respect of Inspection and Testing. Additionally, they have responsibility for the health and safety and other legal requirements relating to the electrical work undertaken.

ECA: Electrical Contractors Association.

Electrical Contractors: An external procured competent resource appointed to undertake prescribed electrical operations on behalf of Colchester Borough Homes.

Extra Low Voltage: Normally not exceeding 50V a.c. or 120V d.c. (Ripplefree)

Low Voltage: Exceeding extra low voltage, but not exceeding 1000V a.c. or 1500V d.c.

NICEIC: National Inspection Council for Electrical Installation Contracting.

Skilled Person: A person with technical knowledge or sufficient experience to enable Him / her to avoid dangers which electricity may create.

19. Controls and Risk Assurance

- 19.1 The Duty Holder is to ensure this policy is being followed, and in doing so will:
- Monthly, provide an update report detailing performance against targets to the Capital Monitoring Group.
 - Annually, report details of compliance and material issues to the Director of Operations, to the Colchester Borough Homes Board through a detailed compliance report, a copy of which will be provided to Colchester Borough Council.

Appendix A

Table T1 - Recommended Frequencies of Inspection of Electrical Installations

| Type of installation | Maximum period between inspections and testing |
|----------------------------|---|
| Domestic (owner occupied) | Change of Occupancy/10 years (whichever is sooner) |
| Domestic (rented property) | Change of tenancy/5 years (whichever is sooner) |
| Emergency lighting | 1 year |
| Fire alarms | 3 years |
| Portable appliance testing | In accordance with legislation relating to the specific appliance |

Appendix B

Table T2 reproduced from Guidance Note 3: Inspection and Testing IEE.

TABLE T 2: - Testing to be carried out where practicable on existing installations.

| Test | |
|----------------------------------|--|
| Protective Conductors Continuity | <p>Between the earth terminal of distribution boards to the following exposed conductive parts.</p> <ul style="list-style-type: none">> Socket Outlet earth connections (Note 4)> Accessible exposed conductive parts of current using equipment and accessories (Note 4 & 5) |
| Bonding Conductors Continuity | <ul style="list-style-type: none">> All main bonding conductors.> All necessary supplementary bonding conductors. |
| Ring Circuit Continuity | <p>Where there are proper records of previous tests, this test may not be necessary. This test should be carried out where inspection/documentation indicate that there may have been changes made to the final ring circuit.</p> |
| Insulation Resistance | <p>If tests are to be made</p> <ul style="list-style-type: none">> Between live conductors, with phases and neutral connected together, and earth at all final distribution boards.> At main and sub main distribution panels, with final circuit distribution boards isolated from the mains. (Note 6) |

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| Polarity | <p>At the following positions</p> <ul style="list-style-type: none"> > Origin of the installation > Distribution boards > Accessible Socket Outlets. > Extremity of Radial Circuit. <p>(Note 7)</p> |
| Earth Electrode Resistance | <p>Test each earth rod or group of rods separately, with the test links removed, and with the installation isolated from the supply source.</p> |
| Earth Fault loop impedance | <p>At the following positions</p> <ul style="list-style-type: none"> > Origin of the installation. > Distribution boards. > accessible Socket Outlets. > Extremity of Radial Circuits. (Note 8) |
| Functional Tests RCD's, Circuit Breakers, Isolators and all Switching Devices | <p>Tests as required by Regulation 713-13-01, followed by the operation of the functional test button.</p> <p>Manual tests to prove that the devices disconnect the supply.</p> |

Notes; -

- 1) The person carrying out the testing is required to decide which of the above tests are appropriate by using their experience and knowledge of the installation being inspected and tested and by consulting any available records.
- 2) Where sampling is applied, the percentage used is at the discretion of the tester. However, a percentage of less than 10% is inadvisable.
- 3) The tests need not be carried out in the order shown in the table.
- 4) The earth fault loop impedance test may be used to confirm the continuity of protective conductors at socket outlets and at accessible exposed conductive parts of current using equipment and accessories.

- 5) Generally, accessibility may be considered to be within 3 metres from the floor or from where a person can stand.
- 6) Where the circuit includes SPD's or other electronic devices which may require a connection to earth for functional purposes, these devices will require disconnecting to avoid influencing the test result and to avoid damaging them.
- 7) Where there are proper records of previous tests, this test may not be necessary.
- 8) Some earth loop impedance testers may trip RCD's in the circuit. Table T2 reproduced from Guidance Note 3: Inspection and Testing IEE.