Appendix A

RUNNYMEDE BOROUGH COUNCIL

Electrical Safety Policy

Review due:

1. Introduction

1.1 This policy is to set out specific guidance to ensure the safety of fixed electrical installations and portable appliances (where applicable) in properties Runnymede Borough Council (The Council) own and manage. Installations in dwellings owned and managed are to be installed, maintained, and serviced to required standards and inspected at appropriate intervals to minimise the risk of electrocution, fire, damage to property, injury and or death.

1.2 The Council will ensure that a specific Electrical contract is in place, in accordance with best practice, which provides adequate provision for suitably qualified and accredited electrical contractors to manage all aspects of the delivery of electrical testing, repairs, upgrades and the provision of new installations.

1.3 The Council is committed to ensuring that tenants 'and leaseholders 'homes remain safe and fit for purpose. In achieving this the Council will comply with all relevant legislation and regulations.

2. Aim

2.1 This policy aims to ensure that the Council meet its obligations as a landlord and seeks to provide assurance that electrical safety is adequately managed, ensuring the safety of our tenants, leaseholders, and the general public.

2.2 The main aims of this policy are to:

- Set out a clear approach for the maintenance and upgrading of electrical installations.
- Ensure a prompt, efficient and cost-effective electrical repair, servicing, and inspection service.
- Ensure legal compliance and promote good practice.
- Ensure remedial works are carried out within appropriate timescales so that homes remain safe and electrical installations are maintained to a high standard.
- Outline a comprehensive electrical inspection and monitoring system.
- Ensure adequate records and quality monitoring systems are implemented.

3. Legal Requirements

3.1 Electrical standards are applied as set out within the Electricity at Work Regulations 1989 (EAWR) and for new works, the standards applied follow current requirements of BS7671 (the IET Regulations for Electrical Installations) and the current Building Regulations.

3.2 The safety of workplace electrical systems and equipment is covered by
The Electricity at Work Regulations 1989 (EAWR), which set out specific principles and requirements relating to electrical safety. The requirements of The Provision and Use of Work Equipment Regulations 1998 also apply to electrical equipment. The Dangerous Substances and Explosive Atmospheres Regulations 2002 are applicable to the use of electrical equipment on systems that can be exposed to a potentially explosive atmosphere or explosible dust.

The main purpose of EAWR is to prevent danger arising from electrical shocks, burns, electrical explosions, arcing or fire, or explosions initiated by electricity. The Regulations are applicable to the generation, provision, transmission, transformation, rectification, conversion, conduction, distribution, control, storage measurement or use of electrical energy.

3.3 The Regulations require that electrical systems and equipment are:

- Constructed of suitable materials.
- Effectively maintained in a safe condition.
- Protected against adverse conditions (mechanical, electrical, environmental and flammable or explosive atmospheres, including explosible dust).
- Correctly installed and used with appropriate physical and mechanical protection.
- Provided with suitable earthing or other protection to protect against shock, and protective devices (such as fuses and circuit breakers to protect against danger arising from excess current).
- Provided with effective insulation.
- Provided with suitable means for disconnecting and isolating the supply.
- Used in accordance with safe systems of work (instructions and training).

The Regulations also have provisions relating to precautions for work on equipment that has been made dead to allow safe working and place specific restrictions on live work being undertaken. Requirements are also imposed in relation to the competence of those working with electricity to avoid danger and injury.

The EAWR do not lay down detailed requirements on the technical standards for electrical installations, such as the current carrying capacity of cables, the exact methods of protecting cables and earthing installations, or specific requirements relating to locations, such as bathrooms and swimming pools. The accepted standard covering these aspects is currently BS 7671 2008 (as subsequently updated and amended) ‘Requirements for Electrical Installations in Buildings’, which is commonly referred to as the IET Wiring Regulations 18th Edition.

Although the document is referred to as ‘Regulations’ it does not have of itself a legal status. Compliance with BS 7671, however, will generally cover all the technical requirements of an installation to meet the requirements of EAWR. BS 7671, however, is not intended to address safe-working practices, which are also covered by EAWR.

3.4 It should be noted that BS 7671 is only intended to cover conventional installations supplied at nominal voltages up to 1,000 volts AC or 1,500 volts DC (referred to as low voltage) and is not applicable to high-voltage installations. BS 7671 is also not intended to cover electricity distribution systems for distributing electricity to the public or installations such as those for railways, vehicles or ships. The use of the term ‘low voltage’ in this context should not be confused with reduced voltage, or extra low voltage, intended to give protection against electric shock. The normal mains electrical supply of 240 volts single phase, or 415 volts three phase, falls within the BS 7671 (and international) definition of ‘low voltage’.

BS 7671 2008 has now been replaced by BS 7671 2018, the 18th Edition IET Wiring Regulations, which was published in July 2018, and all new electrical installations designed after 31 December 2018 have to comply with BS 7671 2018. The main changes are in relation to protection against electric shock, protection against thermal effects (a new Regulation has been introduced recommending the installation of arc fault detection devices (AFDDs), protection against voltage disturbances and electromagnetic disturbances, selection and erection of wiring systems, and a completely revised Chapter 53, which deals with protection, isolation, switching, control and monitoring. Amendment 1 to BS 7671 which took effect from 1st February 2020 has changed the standards for newly installed electric vehicle charging points to increase the level of electric shock protection.

3.5 At the time of writing it is proposed to introduce Amendment 2 to which would require the use of AFDDs for all final circuits supplying socket outlets and fixed equipment with a rated current of up to 32 amps. Such devices reduce the risk of fire by detecting arcs in electrical equipment and circuits and then isolating the relevant circuit.

Part P of The Building Regulations 2010 (as amended 2017) (which deals with electrical safety in new buildings in England and Wales) requires that for newly constructed dwellings and associated buildings, and changes to the electrical installation in existing dwellings, the electrical installation must meet the requirements of BS 7671.

Part P also applies to the common parts of flats and to business premises that share an electricity supply with a dwelling. This would apply, therefore, to a shop or public house with a flat above.

Part P requires that significant electrical work is notified to the Building Control Department unless undertaken by a competent person who is registered with an authorised competent person self-certification scheme.

4. Scope

4.1 This policy covers repair, upgrading, testing and inspection of all electrical installations. All electrical repairs, upgrades and renewals will be categorised to ensure that the correct levels of priority are given. The Council will take specific account of any health and safety requirements during the prioritisation process for these works.

4.2 An electrical installation is made up of all the fixed electrical wiring and equipment that is supplied beyond the electric meter of a property. It includes the cables that are usually hidden in the fabric of the building (walls, floors and ceilings), accessories (sockets, switches and light fittings), and the consumer unit (fuse box) that contains all the fuses, circuit-breakers and residual current devices (RCDs).

4.3 The policy also covers any portable equipment owned by the Council that is used to provide services or is in the communal areas of buildings. Electrical systems will be repaired, renewed, upgraded, and tested in accordance with industry guidance and manufacturers ’recommendations.

4.4 Typical installations and systems covered include:

- Domestic electrical installation.

- Communal landlord installations.
- Emergency lighting systems.
- Fixed fire or carbon monoxide alarm installations.
- Door entry systems.
- Electric heating systems (including conventional and sustainable heating systems, i.e., air source heat pumps).
- Portable equipment owned by the Council.

5. Policy statement

5.1 The Council will take every opportunity to involve interested tenants in managing and developing this service. Including utilising their skills in procuring contracts, challenging contractor performance at core groups, and advising on revised policy changes.

5.2 The Council will ensure that prior to any works commencing the appointed person must assure themselves of the technical competence of the contractors and gain appropriate information relating to the skills and competence of those responsible for carrying out the works.

5.3 The Council recognises that in certain cases there may be underlying issues that contribute to access problems. These can relate to a support need, language or format issue, or a specific tenancy management problem. In these circumstances, where it is reasonably practicable to identify the need, the Council will try to overcome or resolve the cause of the problem and be sensitive to the issue before pursuing legal action.

5.4 Appropriate and regular electrical safety awareness training will be provided to all property and first point of contact staff. Contract Management will be undertaken in accordance with the specific requirements set out in the Electrical Works Contract.

6. Fixed Electrical Installations & Equipment - Testing & Inspection

6.1 All electrical installations require periodic testing and inspection to ensure they are safe for continued use. The fixed installation will comprise the incoming supply cables, switchgear, distribution boards, fixed cabling of the installation and the socket outlets, fused connection units, lighting connections, etc.

Only appropriately skilled and competent persons will carry out electrical inspection and testing (by NICEIC or SELECT registered electrical contractors). A person shall be deemed skilled to carry out the appropriate inspection and testing only if they have sufficient qualification, knowledge, and experience. Council staff are clearly instructed that they are not permitted to undertake any electrical repairs.

6.2 The Council will ensure that all its homes and communal installations are tested in accordance with the Institute of Engineering Technology (IET) Regulation statutory timescales. The Council will arrange for testing and issue certification prior to the re-letting of its properties.

The Council will carry out Electrical Installation Condition Reports (EICR) testing on all properties that are subject to particular types of improvement works where electrical circuits are affected.

The frequency of inspection and testing will be determined considering:

1. The type of installation and adequacy of earthing and bonding.
2. Suitability of the switchgear and control gear.
3. Serviceability of accessories and fittings.
4. Type of systems and their condition.
5. Extent of any wear and tear, damage, or other deterioration of other parts of the installation and level of misuse (e.g., vandalism).
6. Presence of adequate identification and notices.
7. Any change in use of the premises which have led to, or might lead to, deficiencies in the installation.
8. EICR observations and recommendations.
9. The frequency and quality of maintenance.

6.3 The Council will regularly review and monitor the qualifications of all contractors' employees delivering works to ensure that only appropriately trained and skilled employees are engaged on these works. All new installations shall be provided with an Electrical Installation Certificate complete with a schedule of inspections and test results.

6.4 The documents shall be suitably completed and comply with the appropriate regulations. On completion of a periodic test, certification will be issued. This will make recommendations which will be reviewed by a competent person and the necessary remedial works prioritised accordingly.

6.5 Where appropriate, works will be batched and delivered through programmes, although all code C1 and C2 recommendations will be completed at the time of the periodic test and not be subject to batching. Where recommendations relate to observations only (I.e., C3), these will be monitored through subsequent inspection and testing.

6.6 Electrical works identified on certification are recorded using the following categories:

Code C1: "Danger present''. Where a real and immediate danger is observed that puts the safety of those using the installation at risk. The contractor will advise in writing, immediately, of the urgent work necessary to remedy the deficiency.

Code C2: "Potentially dangerous". An observed deficiency not considered to be dangerous at the time of inspection but would become a real and immediate danger if a fault or other foreseeable event was to occur.

Code F1: "Further investigation required without delay".

Code C3: "Improvement recommended". Used to indicate that, whilst an observed deficiency is not considered to be a source of immediate or potential danger, improvement would contribute to an enhancement of the safety of the electrical installation.

6.7 The Council's homes will be subject to a full electrical condition report (EICR) test at the following times:

- All properties and communal areas are to be inspected every five years.
- At a change of occupancy, including mutual exchanges.
- Following any major upgrade works where electrical installations are affected.
- After any significant fire, flood or activity or occurrence that would warrant inspection

Arc fault detection devices (AFDDs) – 2022 requirements

AFDDs provide important additional protection against fire that other protection devices cannot provide.

The installation of AFDDs is now mandated for specific higher-risk areas in order to mitigate the risk of fire from the effects of arc fault currents and is recommended in all other types of premises for the prescribed socket-outlet circuits.

BS 7671:2018+A2:2022 Regulation 421.1.7 now requires arc fault detection devices (AFDDs) conforming to BS EN 62606 to be provided for single-phase AC circuits supplying socket-outlets with a rating not exceeding 32 A in the following installations:

- Higher Risk Residential Buildings (HRRB)
- Houses in Multiple Occupation (HMO)
- Purpose-built student accommodation
- Care homes

HRRBs are assumed to be residential buildings over 18 m in height or in excess of six storeys, whichever is met first. See Note 1 of Regulation 421.1.7 for further guidance on HRRBs.

It is recommended for all other premises that AFDDs are provided for single-phase AC circuits supplying socket-outlets with a rating not exceeding 32 A.

Where used, AFDDs shall be placed at the origin of the circuit to be protected.

The use of AFDDs does not obviate the need to apply one or more measures provided in other clauses in BS 7671.

NOTE: For busbar systems conforming to BS EN 61439-6 and Powertrack systems to BS EN 61534, the AFDD may be placed at a location other than the origin of the circuit.

7. Portable Appliance Testing

7.1 All portable electrical equipment owned/managed by the Council to provide services or located in communal areas 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 Electricity at Work Regulations 1989 (EAWR) and Electrical Equipment (Safety) Regulations 2016.

7.2 The Mobility Scooters in the Council's Sheltered Schemes Policy defines the requirements regarding the PAT testing of tenants' own mobility scooters. Monitoring and control to ensure full compliance, monitoring will be undertaken regularly through the use of the IT system or Register, documenting all assets and their relevant testing timescales.

7.3 Operational teams will review the register regularly and performance information will be shared internally and with the relevant committee meeting. Inspection certificates will be reviewed and stored electronically.

The Council may also engage a third-party audit to check for errors in both condition reports provided and to check the quality of work undertaken on site.

8. Protection

8.1 Buildings and electrical installations can be protected from the effects of lightning strike and voltage transients on the electrical system caused by lightning in a variety of ways. Buildings and structures are protected by a lightning protection system consisting of lightning conductors and the bonding of external metalwork to lightning conductors. The function of a lightning protection system is to discharge the lightning strike directly to earth. Lightning protection systems have to be regularly maintained and annually inspected. The need for a lightning protection system and the risk of lightning strike increases with the area and height of a building and other factors such as the absence of surrounding structures. BS EN 62305 Part 1 2011, Part 2, 2012 and Part 3 2011, cover the design and risk assessment relating to lightning protection of structures.

8.2 A lightning protection system for a building will not protect electrical and electronic systems within the building from damage due to voltage transients on the incoming mains supply or through other connections, such as phone or communication connections. Protection can be provided by purpose-designed lightning protection barriers, which prevent such transients from propagating through an electrical system. They are typically provided at the mains input to an installation or on individual pieces of equipment such as surge-protected connectors for computers. Such protection is covered by BS EN 62305-4:2011.

8.3The Council will ensure that lightning risks are evaluated, and lightning protection systems are installed and maintained as appropriate.

Structural lightning protection systems will be tested in accordance with BS EN 62305-3.

9. Council Roles & Responsibilities

9.1 The following roles have responsibilities:

- **The Chief Executive** - overall responsibility for the implementation of this policy.
- **Head of Housing Technical Services** - will take the lead on contract management for the main service areas involving electrical testing and installation.
- **Compliance Manager** - has day-to-day responsibility for implementing this policy, including ensuring adequate processes and procedures are in place to manage the risks arising from electrical works; ensuring sufficient information, instruction and training is conducted; monitoring the performance of contractors;

9.2 **Employees**
All employees, irrespective of their position shall:

- Take reasonable care for their own health and safety and that of other persons who may be adversely affected by electrical works, including members of the public, tenants, visitors and contractors.
- Co-operate as appropriate with other staff and agencies to ensure compliance with this policy and all other legal requirements.
- Halt works that, constitute a serious risk to health and safety.
- Report any concerns that they may have in relation to the management of electrical compliance and electrical safety

10. Tenants and Leaseholders' Responsibilities

10.1 Tenant's responsibility Under the terms of their Tenancy Agreement tenants must allow access to their property for maintenance and/ or safety checks to be conducted.

10.2 To undertake works it may be necessary to cut the electrical supply to the property. Prior to undertaking any work, written confirmation will be provided in accordance with the Council's general Consultation Strategy.

10.3 It is the tenant's responsibility to ensure that:

- Any action in relation to saving electronic files i.e., IT-related software, programmes or other electronic storage is taken prior to the commencement of the work.
- Any contingency arrangements arising from the absence of electrical supplies are highlighted and agreed in advance of works.
- Appropriate access and relocation/removal of any obstacles will need to be undertaken (in situations where the tenant is unable to manage support will be agreed). The emptying and storage of freezers/ fridges etc.
- Loft spaces kept empty.
- Any repairs or faults are reported in a timely manner.

10.4 Where tenants carry out property alterations and improvements, which include additions/alterations to the electrics, they should seek authorisation prior to any works being undertaken. If works are approved, tenants are responsible for ensuring appropriate safety checks are carried out and all relevant certificates are supplied following the works/installation. Tenants are also responsible for meeting the cost of this. Any defective or unauthorised works needing rectification may incur a recharge. If any installation has been undertaken without the Council's permission, and is found to be defective, the supply may be terminated

10.5 Leaseholders and shared owners' responsibility Typically, these groups do not fall directly under the Council's responsibility for ensuring electrical safety, as the responsibility for this remains with the leaseholder or shared owner.

11. Contractor's Responsibility

11.1 Electrical safety is a specialist area requiring the advice and guidance of a competent electrical engineer or electrician as appropriate to the circumstances. However, the aim of this guidance is to outline the general requirements, hazards and safe-working procedures for electrical systems.

11.2 Any contractor undertaking electrical installation work must be registered through the National Inspection Council for Electrical Installation Contractors (NICEIC) the Electrical Contractors Association (ECA), National Association for Professional Inspectors (NAPIT) or other accredited body.

11.3 Where 'notifiable 'works are required, contractors must be registered with a competent person self-certification scheme, to certify compliance with Part P of the Building Regulations. Individual engineers working on electrical installations must be trained, competent and hold a relevant industry recognised qualification.

11.4 When undertaking any electrical installation works, the contractor will also be required to conform in full with the requirements of this policy. All appointed electrical contractors shall be registered with the NICEIC, ECA, NAPIT or other accredited body and shall be registered under a recognised Domestic Installer Self Certification Scheme in compliance with Part P of the Building Regulations.

Every effort will be made to arrange a convenient time and date with the tenant for access to complete the works.

11.5 Appointments will be made and in certain situations written notice provided. In cases where access is denied on a number of pre- arranged occasions and following several written notifications, the Council will consider using legal action to gain access Risk Prior to commencement of any work activities, a suitable risk assessment covering the full scope of works will be completed.

This assessment will include the impact of works on all tenants and leaseholders affected, especially those who are vulnerable.

11.6 The main hazards of Electricity and Electrical Equipment would include:

- Contact with exposed live parts.
- Faults which could cause fires or electrocution.
- Burns
- Shocks - electric shock occurs when electric current passes through the body.
- Fire or explosion where electricity could be the source of the ignition.
- Defective and inoperable systems.
- System overload.
- Inadequate or deficient earthing and bonding.

- Failure to comply with legislative requirements

12. Consultation, communication and training

12.1 The Council will provide clear and comprehensive advice and information to residents, with an aim for a single point of contact.

12.2 Internal stakeholders have also been consulted.

13. Monitoring and performance management

13.1 The Council aims to review this policy in three years or sooner if needed to ensure it reflects current legislation and latest examples of best practice.

13.2 Technical Services will monitor contractor performance (KPIs) and any complaints from residents

14. Equalities Implications

14.1 An Equality Impact Assessment (EIA) has been carried out for this policy.

14.2 An EIA is a way of assessing the impact, or likely impact, that a particular policy, procedure or decision will have on particular groups. This is used to assess whether in making the decision whether the Council has complied with its public sector equality duty under S149 of the Equality Act 2010 (as amended) to; eliminate discrimination and any other conduct that is prohibited under this act and to advance equality between those who share a protected characteristic.

15. Version Control

Version Number	Date Amended	Comments	Date Approved	Author	Approved By
V1	September 2022	Draft created in line with current leg and includes sections on lighting protection and AFDDs		Stephan Scheiner	