

J C McINTYRE  ELECTRICAL
WORKING IN ASSOCIATION WITH



DECENT HOMES INITIATIVE, PETERBOROUGH

CONTENTS

- 1. ABOUT THIS DOCUMENT**
- 2. STRATEGY FOR MANAGEMENT OF ELECTRICAL WORKS, DECENT HOMES INITIATIVE, PETERBOROUGH**
- 3. COMPANY STRUCTURE**
- 4. ELECTRICAL SPECIFICATION – TO INCLUDE UPGRADING, REWIRING AND AREAS NOT COVERED SPECIFICALLY FOR REFURBISHMENT**
- 5. CENTRAL HEATING SPECIFICATION**
- 6. BATHROOM SPECIFICATION**
- 7. KITCHEN SPECIFICATION**
- 8. HEALTH AND SAFETY POLICY**
- 9. ENVIRONMENTAL POLICY**
- 10. EQUAL OPPORTUNITIES POLICY**
- 11. ENQUIRIES ABOUT THIS DOCUMENT**

ABOUT THIS DOCUMENT

STRATEGY

ELECTRICAL SPECIFICATION

INTRODUCTION

Where improvement works are planned at a property as dictated by the stock condition survey results an electrical test shall be carried out.

The electrical test shall be used to identify any required electrical upgrading or rewiring to bring the property up to BS7671:2001 (2004) 16th Edition IEE Wiring Regulations.

Under this improvement programme (and if a rewire is not required), works identified during electrical test as requiring urgent attention, requiring improvement or further investigation, shall be carried out as part of this project.

If the electrical test shows problems with supply, the supply company shall be contacted by the contractor and instructed to carry out any remedial works.

All improvement works shall be carried in accordance with the current IEE Regulations.

On completion of all works the electrical contractor shall fill out a Domestic Electrical Installation Report, this certificate should be issued to Cross Keys Homes. No items coded 1, 2 or 3 should remain on this certificate.

All works should be notified to the NIC.

ELECTRICAL UPGRADING PROPERTIES

Electrical upgrading or rewiring shall be carried out to all properties to ensure that the property complies with the current requirements of BS7671.

The installation of a new consumer unit will be required if there is not a 30ma RCD protection to the sockets that may be used outdoors. The consumer unit shall also be replaced if there is not at least one spare way on both the main switch side of the consumer unit and the RCD protected side.

Earthing within the dwelling shall comply with BS7671:2001 (2004) 16th edition IEE wiring Regulations. 10mm main earth bonds shall be installed from the consumer unit to each incoming gas/water/oil service. Supplementary earth bonding shall be carried out to hot and cold pipes

below the kitchen sink and from the bathroom light fitting to the bath, sink and radiator in 4mm cable (or 2.5mm cable if mechanically protected). All earth clamps are to be securely installed complete with safety labels.

REWIRE PROPERTIES

Where properties require a full rewire, the contractor should produce a specification for the property taking into account the following considerations:

All new cabling to PVC/PVC twin and earth (6242Y) with copper conductors. Minimum live conductor size will be 1.5mm unless otherwise specified. All wiring will be in accordance with BS7671:2001 (2004) 16th Edition IEE Wiring Regulations.

Cabling will be generally installed within surface mounted white PVC mini trunking ran horizontally and vertically. Where possible all trunking runs will be adjacent to architrave, coving or in corners to leave the finished works as unobtrusive as possible. Properties that are also having a replacement kitchen within this improvement project shall have cabling chased into the fabric of the building and protected with PVC oval conduit or top hat trunking (capping) as appropriate.

Where cables are run within roof spaces and voids, prior calculations shall have been made to ensure that cable size is sufficient to be in contact with thermal insulation.

Cabling and installation for fire alarms/smoke detectors to be in accordance with current BS5446.

Split load consumer units are to be installed. These are to be from the Volex range or similar approved and leave at least one spare way for future use. 25mm meter tails and 16mm earth conductors shall be installed if not already in place.

Electrical installations require a full rewire will include:

- Mains/Transformer Door Bell**
- Light switches**
- 13 Amp socket outlets**
- Lighting points**
- Light fittings**
- Electric cooker point**
- Central Heating boiler supply point (and associated control wiring)**
- Electric shower point**

Mains/Battery smoke detectors
Extractor fans
Tubular heater and guard (only where specified)
Focal point fires (only where specified)
Electric fan heaters (only where specified)
Reinstatement of outhouse supplies (only where specified)

All lighting points are to be switched at the room door position. If a room has two or more doors that are more than 2.5m apart, two way (and intermediate if necessary) switching will be provided.

AREAS UNSPECIFIED FOR REFURBISHMENT

Lounges: There are to be a minimum of 4no 13 Amp twin socket outlets wired within the lounge area (additional outlets for equipment such as DVD'S, TV'S and Video recorders may need to be installed following consultation with the projects manager.

Dining Rooms: There are to be a minimum of 3no 13 Amp twin socket outlets wired within the dining room.

Bedrooms: There are to be a minimum of 3no 13 Amp twin socket outlets wired within double bedrooms. Single bedrooms will have a minimum of 2no 13 Amp twin socket outlets.

Halls and Landing: There is to be 1no 13 Amp twin socket outlet wired to each hall and landing area.

All rewired dwellings will have a minimum of 1no hard-wired mains optical smoke detector with battery back-up. Where there are two or more units installed, they shall be interlinked so all units sound if one is activated. If the dwelling has an occupant who is hard of hearing, additional means of alert shall be installed (i.e. strobe light/vibrating pads etc).

All flats below the top floor shall have plaster coving install to hide surface clipped cabling.

Wall accessories in rewired properties should be fixed in the same positions as the old as far as is reasonably practicable. Where this is not possible, blank plates should be fitted.

All redundant electrical accessories are to be removed from the property at the end of each day.

ALL IMPROVEMENT PROPERTIES

Consumer units are to have the following labels (whether or not it has been replaced):

- a) Periodic inspection label
- b) RCD test label
- c) Caution label, where 2 different wiring colours are installed
- d) Additional labels covering consumer unit cover fixing security screws
- e) Clear designations of current consumer unit circuits

Main equipotent bonding conductor shall be 10mm csq.

All accessories must be suitable for their location and in good condition.

Upon completion of electrical works, relevant NICEIC certificates shall be issued along with confirmation of Part P registration and compliance. All safety labels shall be fixed to the consumer unit with a retest date of 10 years.

An NICEIC Periodic Inspection Certificate is to be issued to the Mears office within 5 working days of the programmed completion day. The Periodic Inspection Certificate should not contain any items 1, 2 or 3 for action as these are deemed to have been included within the improvement works.

A Part 'P' notification number is to be issued with the certificate at handover stage to Cross Keys Homes. All Part 'P' certificates should be sent direct to the Cross Keys Homes office and not to the property where the work was carried out.

During the improvement works, the contractor shall keep the client and tenant informed of progress including of any loss of power or any inconvenience during the works. Prior to works commencing the contractor shall arrange for any possessions belonging to the resident to be relocated to allow for the works, (elderly residents or those with individual needs shall be given assistance by the contractor). The contractor shall protect all carpets and furniture with appropriately sized clean dust sheets in the area of work.

OPTIONAL EXTRAS

The contractor shall carry out any electrical works associated with the tenant's choice of optional extras at the time of electrical improvements.

CENTRAL HEATING SPECIFICATION

- Heating systems are to be supplied on a dedicated circuit; circuits are to be installed where this is not already installed.
- The boiler spur (combination boiler only) when located in a kitchen will have a spur at the same height as the kitchen sockets, this will feed a flex outlet plate mounted adjacent the boiler allowing for only a short piece of flex to connect the boiler (or concealed if possible).
- The boiler spur for conventional systems shall be located in the airing cupboard and shall be used to isolate the whole central heating system. A flex outlet plate shall be mounted adjacent to the boiler allowing only for only a short piece of flex to connect to the boiler (or concealed if possible).
- Any new control cabling to the boiler will be surface mounted. Properties being rewired as part of a new kitchen installation shall have new wiring for the boiler chased into the surface of the wall (if the property is also having central heating and the boiler is located in the kitchen).

BATHROOM SPECIFICATION

- **Electrical works to the bathroom will consist of replacing the existing light fitting and pull cord operated switch. Light fitting to be all enclosed drum type with white base and opal cover. Light fitting must be suitably IP4X rated for the area it is to be installed in and must be rated to take a 100w lamp.**
- **An Xpelair LVCF20T extractor fan shall be installed to an external wall complete with 100mm telescopic duct and external wall grill. Where there is no physical room on an external wall for an extractor fan, alternative arrangements will be made following consultation with the Projects Manager (see Ventilation Options). The fan shall be positioned in accordance with the manufacturer's instructions and current IEE Regulations.**

Ventilation Options

1	Bathroom	Wall	Centrifugal	LVCF20T	91042AW	WD100
2	Bathroom	Wall	Axial	LV100HP	90849AW	WD100

Centrifugal LVCF20T fans should always be installed as a first option.

- **A triple pole isolator shall be installed for isolation/maintenance purposes outside the bathroom either above or adjacent to the door along with the low voltage transformer. The fan supply to come from the lighting circuit or local power supply.**
- **If an electric shower circuit is required, it is to be wired in 10mm 6242Y PVC/PVC twin and earth. Local isolation is to be achieved via a 45 Amp double pole pull cord operated switch conveniently located within the bathroom.**
- **Shower circuit to be wired to back to the consumer unit and connected to the RCD side.**
- **The lighting circuit shall be bonded at either the switch or the light fitting, the shower is to be bonded at either the switch or the shower unit. The bonding conductor will be connected to these (where applicable) and taken into the loft space (where possible). The bonding conductor will enter the airing cupboard or suitable position where all pipes are present and will bond all pipes at high level. The bath will be bonded between one pipe and the bath. If there is metal waste pipe, this will be bonded either under the bath or behind the basin pedestal.**

- **A continuity test will be carried out to confirm that the maximum resistance between any of the bonded metal work is 0.05 ohms.**

- **KITCHEN SPECIFICATION**

- New kitchen installations shall include the following electrical installations:
- Kitchens are to have a new ring final circuit incorporating socket outlets and switched fused spurs for appliances. Where a property has an existing kitchen ring final circuit, this shall be altered to cater for the refurbishment works.
- New electrical installation to kitchens will include 1no electric cooker point complete with low level outlet.
- A minimum of 4no twin 13 Amp socket outlets fixed above worktop.
- Washing machines , tumble dryers, fridges, freezers etc are to have unswitched sockets behind the appliance with a fused switched spur above worktop height. All spurs to be engraved to identify it's destination. Spurs to be installed adjacent to socket outlets wherever possible.
- The cooker control switch will be 45 Amp double pole with no socket outlet incorporated and connected to the non-rcd side of the consumer unit. Cooker circuit including outlet point, cooker isolation switch not to have socket and on completion of 2nd fix will be connected to the side of the consumer unit NOT protected by an RCD.
- A single unswitched socket is to be installed adjacent the cooker outlet, this is to be installed off the kitchen ring circuit via a switched spur engraved Hob.
- All switched fused spurs are to form part of the new kitchen ring final circuit.
- An extractor fan is to be installed in the position marked on the drawing. Where this is not marked, a suitable position is to be chosen, with consideration taken into account for the kitchen layout and fan manufacturer's recommendations – see Ventilation Options.

Ventilation Options

Option	Location	Installation	Type of Fan	Fan Reference	Cat No	Ancillaries Required
1	Kitchen	Wall	Centrifugal	CF40	91086AW	WD100
2	Kitchen	Wall	Axial	GX6HT	90814AW	WK6/8

- Kitchen fans ceiling mounted can be installed into 140mm void utilizing a FPP Plenum box or flexible 100mm ducting.
- Premier CF40 should always be installed as a first option. These products provide trickle ventilation, variable humidity speeds, delay start to prevent running at night and override pull cords. If a CF40 does not fit then a GX6HT can be installed.
- The existing light fitting and switch is to be exchanged for new like for like, with the exception of pendant fittings that will be changed for batten holders. Tenants own light fittings may remain in place providing they comply to BS7671:2001 (2004) 16th Edition IEE Wiring Regulations.
- All accessories are to be Volex range or similar approved.
- Mark out chases from kitchen drawing; check that all final positions will not be impeded by kitchen units. Spur points must not be positioned behind fridges etc. Ensure all outlets; connection units etc. are positioned at the correct continuous horizontal height to bottom edge of accessory, to finish 1200mm above finished floor level.
- Whilst chasing out the walls, the doors are to be sealed off. Where this is not possible, dust sheets are to be used over open doorways and secured to prevent any dust transfer.
- Chasing is to be carried out using a 110v chasing machine and suitable industrial grade vacuum cleaner.
- Where the existing power circuit in the kitchen feeds other areas, it must be removed from the kitchen and the existing ring circuit made continuous. If this is not possible, advice must be sought from Mears Electrical Supervisor.
- The new circuits installed into the kitchen are to be installed above the ceiling unless access to the floorboards above is not possible. In this case, advice should be sought from the Contractors Electrical Supervisor. Where cabling is not installed above the ceiling and

permission has not been sought, all costs for installing coving shall be charged to the contractor. (Where cabling cannot be installed above the ceiling the Contractor Electrical Supervisor will authorize the cables to be clipped at high level).

- Cables that are routed through cupboards etc. shall be installed and secured in trunking.
- On completion of the cabling, the sockets and spurs are not to be installed. The cooker circuit is to be installed with a double gang box in an upright position adjacent to the cooker position. The cooker outlet point is to be installed and the tenant's cooker (if electric) shall be connected.
- All relevant tests are to be made on the cooker circuit and this shall be energized.
- The contractor shall ensure that the fridge, freezer and heating are operational before leaving the property. Give the tenant clear instructions to the temporary electrical supply and operation available.
- Where possible, a temporary supply and appropriate plumbing should be left for the washing machine or the contractor must come to an agreement with the resident when the washing machine will be reconnected. Under no circumstances should a washing machine be out of service for more than 5 days (including weekends). Elderly residents or those with special requirements should be given further consideration and the duration should be agreed between the resident and CKH.
- All properties should be left clean and tidy at the end of each day. The contractor shall provide all necessary cleaning equipment.

HEALTH AND SAFETY POLICY STATEMENT

The following is a statement of the company's general health and safety policy in accordance with section 2 of the Health and Safety at Work etc. Act 1974.

It is the policy of J. C. McIntyre Electrical to ensure so far as is reasonably practicable, the health, safety and welfare of all employees working for the company or other persons who may be affected by our undertakings.

J. C. McIntyre Electrical acknowledges that the key to successful health and safety management requires an effective policy, organization and arrangements, which reflect the commitment of senior management. To sustain that commitment, we will continually measure, monitor and revise where necessary an annual plan to ensure that health and safety standards are adequate.

The Site Co-Ordinator will implement the company's health and safety policy and recommend and changes to meet new circumstances. The instructions will then be carried out through the normal chain of management. The company recognizes that successful health and safety management contributes to successful business performance and will allocate adequate finances and resources accordingly.

The management of J. C. McIntyre Electrical looks upon the promotion of health and safety measures as a mutual objective for themselves and their employees at all levels. It is therefore, the policy of the management to do all that is reasonably practicable to prevent personal injury and damage to property. Also, the company aims to protect everyone, including all visitors and members of the public, insofar as they come into contact with the company or its activities, from any foreseeable hazard or danger.

All employees have duties under the Health and Safety at Work etc. Act 1974 and they are informed of their personal responsibilities to take due care for the health and safety of themselves and to ensure that they do not endanger other persons by their acts or omissions. They are also informed that they must co-operate with the company in order that it can comply with the legal requirements placed upon it and in the implementation of this policy.

The company will ensure continued consultation with the workforce to enable all viewpoints and recommendations to be discussed at regular intervals.

The company will ensure a systematic approach to identifying hazards, assessing the risk, determining suitable and sufficient control measures and informing employees of the correct procedure.

The company will provide, so far as is reasonably practicable, safe places and systems of work, safe plant and machinery, safe handling of materials and substances, the provision of adequate safety equipment and ensure that appropriate information, instruction, training and supervision is given.

The company regards all health and safety legislation as the minimum standard and expects management to achieve their managerial targets without compromising health and safety.

Signature:

Name:

Date:

Review Date:

OUR FULL HEALTH AND SAFETY POLICY IS AVAILABLE AT YOUR REQUEST.

ENVIRONMENTAL POLICY

J. C. McIntyre Electrical recognizes the need for sustainable development and continually aims to improve the environmental effect of it's activities. To achieve this we will: -

Establish sound environmental management by: -

Meeting or improving upon relevant legislative, regulatory and environmental codes of practice.

Developing objectives that target environmental improvements and monitor performance by regular review.

Considering any environmental issues in the decision-making process.

Developing a relationship with suppliers and contractors so that we all recognize our environmental responsibilities.

Educating staff so that they carry out their activities in an environmentally responsible manner.

Provide for the effective use of resources by:-

Promoting waste minimization by recycling or finding other uses for by-products whenever economically viable.

Promoting the efficient use of resources, energy and fuel throughout the company's operations.

Co-operate with:-

The communities in which we operate.

The government, regulatory bodies and other interested parties with the shared vision of being a good and trusted neighbour.

Signature:

Name:

Date:

Review Date:

EQUAL OPPORTUNITIES POLICY STATEMENT

The aim of the policy is to ensure no job applicant or employee is discriminated against either directly or indirectly on any unlawful grounds.

The Partners have overall responsibility for ensuring that this policy is implemented in accordance with the appropriate statutory requirements and full account will be taken of all available guidance and in particular any relevant Codes of Practice.

The Company will ensure that the policy is circulated to any agencies responsible for it's recruitment and a copy of the policy will be made available for all employees and made known to all applicants for employment.

The policy will be communicated to all private contractors reminding them of their responsibilities towards the equality of opportunity.

The Company will maintain a neutral working environment in which no worker feels under threat or intimidated.

Discrimination is unacceptable and breaches of the policy will lead to disciplinary proceedings and, if appropriate, disciplinary action.

Signature:

Name:

Date:

Review Date:

OUR FULL EQUAL OPPORTUNITIES POLICY IS AVAILABLE AT YOUR REQUEST.

ENQUIRIES ABOUT THIS DOCUMENT

We hope that you have found this document to be self-explanatory. However, if you have any questions relating to any of the material covered in this document, please do not hesitate to contact us at the following address:

**J. C. MCINTYRE ELECTRICAL
UNITS 14 & 16 CULLY COURT
BAKEWELL RD
ORTON SOUTHGATE
PETERBOROUGH
PE2 6XS**

Alternatively, you may contact us by telephone, fax or e-mail using the following information:

Telephone: 01733 367203

Fax: 01733 367204

E-mail: enquiries@mcintyre-electrical.co.uk