

2020

# Electrical Rewire Specification



## **SUMMARY OF WORKS**

- Rewire of existing Village Hall
- Wiring of proposed new kitchen extension

## **ELECTRICAL WORKS**

The whole of the electrical installation is to be installed by an approved and registered firm. The detailed design of the installation is the responsibility of the Contractor and notwithstanding anything included in the Specification must comply with the requirements of the latest Edition of the Regulations for the Electrical Equipment of Buildings issued by the Institution of Electrical Engineers (hereinafter referred to as the "IEE Regulations") and comply with Parts E and P of the Building Regulations.

The Contractor shall carry out a complete series of tests as laid down in the IEE Regulations and issue the prescribed testing certificates to the Employer's Agent prior to practical completion. Wiring is to be concealed and all accessories flush mounted. The layout of the installation shall be as neat and unobtrusive as possible and all accessories shall be uniformly and correctly aligned. All cables within the floor zone shall be laid out neatly and be fully supported. All cables within the roof space shall be laid out neatly and clipped to roof timbers in accordance with the Regulations.

Each dwelling shall be served by a consumer unit easily accessible to the householder and fitted with miniature circuit breakers and a Residual Current Circuit Breaker giving overall protection to socket outlets and any external services. Consumer units should be located generally 1.2m above finished floor level and be provided with a lockable cover.

All buried wiring shall be capped for protection and are to be vertical.

Approved makes of electrical fittings are Crabtree, MK Electrical and Tenby. Fittings from only one of these manufacturers are to be selected and used throughout the Contract. All fittings to be of a contrasting colour to the wall finish.

Electrical points (in addition to spurs for heating appliances) shall not be less than existing provision

### **New Kitchen:**

- 4 twin 13amp switched socket outlets above the worktop
- 3 single 13amp un-switched sockets with neon indicator isolating switches above worktop (washing machine, dishwasher, tumble dryer and fridge/freezer). Alternatively, the use of a grid switch may be appropriate.

- 1 cooker point suitable for hard wiring with switch and separate 13amp un-switched socket for gas ignition.
- 1 13amp fused spur for a cooker hood located above the cooker position.
- 1 single 13amp un-switched socket within the cooker spaced wired from the cooker circuit for gas ignition or for a 13A appliance.

Standard bayonet light fittings are to be provided with low energy lamps to suit CSH requirements. Dedicated CFL fittings to pendants and batten holders are not permissible.

Electrical points and switches shall be positioned to take account of likely furniture layouts and to avoid inoperable locations. All socket outlets shall be positioned 450mm above finished floor level except above worktops. Light switches shall be positioned generally 1050 mm above finished floor level.

All socket outlets shall be switched and shall be wired from a 13A ring main system. Locations of socket outlets are to suit the relevant space. Where refrigerators or washing machines are intended to be situated below worktops, an unswitched socket outlet shall be located in the space below the worktop and wired to a switched spur unit above the worktop and to one side of the space so that the appliance may be switched off without unplugging.

Cooker switches shall be located to one side of cooker spaces with a separate cable outlet pre-wired to the control switch. Cooker control switches shall not have kettle sockets. Adequate sockets to include the use of an electric kettle shall be provided on the RCCB protected circuit.

External lighting shall be controlled by photocell rather than timeclocks. Photocells shall not be located in areas of deep shade or under eaves so that lights are unnecessarily activated.

Lighting adequate for safety and security.

The use of large numbers of low-level lights of bulkhead or bollard type shall be avoided. Bracket or column mounted low-energy lanterns shall be employed whenever possible but at a maximum of 3.0m above ground level. Care shall be taken to avoid light disturbing occupants of dwellings, particularly in bedrooms.

### **Cables and fittings fully insulated partitions and ceilings:**

The design and installation shall take due account of good practice when installing cables and/or fittings in fully insulated partitions and ceilings and have regard to BRE BR262, Thermal Insulation:avoiding risks, section 2.3.

### **Cable runs within the insulation void:**

For service runs within the insulated void use suitable ductwork to prevent overheating of the cables.

### **Fire Precautions:**

All rising services are to include fire collars to all ceiling junctions.

### **Fire Alarms, Smoke & Carbon Monoxide Detectors:**

The building shall be provided with a mains wired smoke detector situated on each floor and wired into a separate circuit (not wired with lighting). The detectors shall be of British Standard non ionising type and should have a battery backup, preferable re-chargeable. Heat detectors to be used in kitchens. They shall be equipped with test button or, where situated out of reach, of the type tested by torchlight beam.

### **Builder's Work:**

All cables shall be installed with felt between them and at cross over points including crossover points with pipes to ensure that there is no transfer of heat or cable rubbing or noise generation.

### **Testing:**

All installations shall be tested in accordance with the Regulations and test certificates submitted to the Employer's Agent prior to Practical Completion or Partial Possession.

The Contractor will be responsible for co-ordinating the electrical installation related to other elements and finishings in the building.