

Electrical Condition Report - Llangwm Community Centre. June 2020

Recommendations.

2.1. Incoming Electric Supply and Metering

Inspection. The energy meter has a lower rating than the 100A WPD service head. It is recommended that an inspection by WPD is arranged to confirm the actual rating of the supply fuse to ensure it does not exceed the rating of the energy meter.

2.2 On-Site Generation Systems

Renewable Energy. The Feed In Tariff (FIT) government scheme finished in April 2019 but has since been replaced by the the Smart Export Generation (SEG) scheme available from various suppliers. The direct benefit or export of energy back onto the grid will need to be assessed with any future proposal for a renewable energy system(s) installation.

2.3 Earthing and Bonding

Inspection. An inspection of the existing electrical installation is recommended of all earth conductors and cables to ensure the earthing system is fully compliant with BS 7671.

2.4 Distribution Boards

Replacement. To ensure that the electrical installation is protected to current wiring standards in accordance with BS 7671 and circuits are individually RCD protected to minimise inconvenience in the event of a fault from a single circuit, it is recommended that the existing distribution boards be replaced with new distribution boards utilising modern MCB and RCBO protective devices.

2.5 Sub Circuit Wiring

Inspection. An inspection of the existing electrical installation is recommended of all installed cables to ensure the integrity of the system is fully compliant with BS 7671.

2.7 Water Heating

Inspection. The water heaters noted above have been installed recently and in good condition. However, the Gents toilet does not have any provision for hot water to the hand basin. The Santon water heater in the Kitchen is in good condition. However, the client advised that there have been problems with the tap in the past. A detailed inspection of the heater will be required to confirm if it is a vented or unvented unit which maybe the cause of the problems to date.

2.8 Space Heating

Problems. Heaters should be switched on for a reasonable period before the Hall is to be occupied to allow the walls and floors to heat up.

The build-up of condensation is usual for a building which is not kept at a constant heated temperature and indicates that there may be problems with ventilation in the building to allow moist air to escape.

The Kitchen and toilet areas have no heating installed and may present a risk to pipes freezing up in winter.

2.10 Lighting

LEDs. The building would benefit from lower energy use by replacing the existing lamps or luminaires with comparable LED versions.

There would be very little benefit in replacing the existing bulkhead luminaires in the toilet areas as compact fluorescent lamps are also low energy efficient and with PIR automatic on/off controls which are ideal for areas with transient occupation.

2.11 External lighting

Lack of provision. The provision of external lighting is limited and additional lighting is recommended to improve visibility of the car parking area and of the gateway in the boundary wall path leading from the car park.

Although security or vandalism is not reported as an issue it would be recommended to provide additional perimeter lighting from wall mounted bulkhead luminaires particularly on the East, South and West elevations which would improve lighting to the immediate vicinity of the building in the car park, highlight the entrance and illuminate the building escape route via the fire exits in the Hall and Kitchen.

2.12 Emergency Lighting

The existing emergency lighting does not comply with the current requirements of BS 5266-1 due to the following reasons:

- No emergency lighting provided in the toilets, kitchen/distribution boards and externally to the main entrance,
- Emergency light levels and uniformity for anti-panic are unlikely to be compliant in the Hall,
- The external luminaire adjacent the fire exit from the Hall appears to be faulty.
- No records to confirm the emergency lighting has been regularly tested and inspected.

As the existing emergency luminaires appear to be older than 10 years and the expected useful life of the standby batteries is at least 6 years, it is recommended that a new fully compliant emergency lighting system be installed consisting of LED surface bulkhead and exit signs with 'Running Man' exit legends plus ceiling mounted luminaires to improve illumination and uniformity particularly in the toilets and Hall.

2.14 Fire Alarms

The building is small enough to allow an alarm to be raised by word of mouth or by the use of a rotary gong. However, this will need to be based on the client's risk assessment to comply with the Regulatory Reform (Fire Safety) Order 2005 and as required by the local Fire Safety Inspections Officer.

2.15 Security Systems

The provision of security systems should be considered on the client's own risk assessment and insurance policy requirements.

2.16 Disability Systems

Alarms and Hearing Loop. The layout of the assistance alarm components does not comply with the layout and mounting heights detailed in Building Regs Part M. The pull cord should be located over the horizontal grab rail between the toilet and hand basin. The reset button should be mounted much lower at 1000mm FFL to bottom edge of plate.

To comply with Part M a fixed hearing induction loop or infra-red system should be installed in the Hall to assist people who are hard of hearing to fully benefit from performances and participate in discussions etc.