ELECTRICAL POWER FOR GARDEN ROOMS AND GARDEN LIGHTING

Introduction

More and more people are commissioning a garden room to give them additional play space, storage space or a dedicated work area.

It is not always clear to the client how the electricity required for the sockets and lights is actually delivered to the structure so this data sheet aims to describe the process of installing the supply circuit and the related issues.

A description of the problem

A fundamental aspect of the design is that the power for the garden and its buildings should **not** be supplied from the circuits that supply the house. The circuit may be supplied from a dedicated fuse in the existing fuse board (consumer unit) under certain conditions or a new, additional, fuse board but **it should not be the case that a fault in a garden circuit causes loss of power inside the house**. For this reason I will always propose the installation of a completely separate supply for external power.

The solution

The internal and external circuits need to be electrically separated from each other. This entails the installation of a fuse in the existing consumer unit that is not under the protection of an RCD device (found in most contemporary units) or, more suitably, the installation of a small secondary fuse board dedicated to the supply of external circuits and power

Safety

The garden is a place where cables can easily suffer physical damage with tools or machinery or through the action of vermin. There are also the extremes of temperature and weather to contend with.

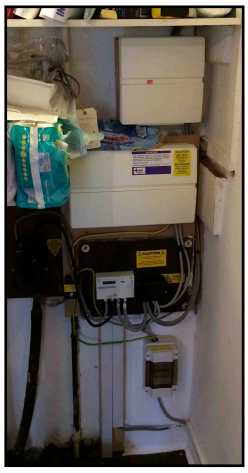
Cable must be physically protected along its length and terminated in safe, weatherproof, enclosures. For this reason I often choose to use a combination of steel conduit and Steel Wire Armoured cable and the highest quality junction boxes.


SWA terminations at a weatherproof junction box, with clearly visible green/yellow earthing leads.


SWA cable run in steel galvanised conduit for additional protection. This can be covered safely and offers a very high level of protection against physical/rodent damage.


SWA cable safely terminated in weatherproof enclosures and securely clipped to prevent loose cables.

Well secured, well laid out and clearly labelled electrical accessories in a garden office storeroom.


The additional consumer unit is just visible at the bottom right hand corner of this picture. It is dedicated to the garden circuits only and is completely separate from the other consumer units (the larger white boxes above it). Consequently the existing internal circuits are not affected by external faults.

Conclusion

There are different ways to take electricity outside. The simplest would be to use an extension lead plugged into a socket in the kitchen and run the length of the garden. But it would not be a suitable or permanent way to supply power to a garden room as it is vulnerable to physical damage and is supplied by the house internal wiring. Plug in a faulty lamp or let a mouse chew through the cable and the house lights and sockets will loose power too…

The above equipment may look unnecessary but it is not: it is the best way to supply safe and permanent power to the garden. You really can 'fit it and forget it'….