

## Electricity in the Home

### Electricity in the modern home

Electricity has been used in domestic properties since the early 1920s following the invention of a cost effective and reliable lamp in 1907. But from its humble beginnings running a simple light bulb it has wormed its way into the very heart of our homes. It now allows us to mow the lawn, watch television, take a shower, wash clothes, cook and connect to the rest of the world via our personal computers and the internet.

Home owners usually take the electrical system for granted—and why not? Flick a switch and the light or the TV comes alive.

It generally requires very little or no maintenance on a year-on-year basis, never mind day to day. However, although electricity in the home appears to be inherently safe it should be remembered that Official Health and Safety figures show that unsafe electrical installations cause more than 750 serious accidents and 12,500 fires in homes each year.

### Government introduction of Part P of the Building Regulations

Due to the large number of accidents, fires and deaths caused by poor installation, maintenance and general upkeep of electrical systems within domestic houses the government introduced legislation in the form of a document known as PART P of the Building Regulations. These regulations came into effect on 1 January 2005. The overall desired effect of the new regulations is to ensure the health and safety of the occupants and visitors within a domestic dwelling.

### Who is allowed to carry out electrical work in a house?

#### 1. Part P registered electrician—full scope.

As from 1 of January 2005 all electrical installations (including alterations and additions) must be carried out by a competent person. In order to be recognised as a competent person he/she must have received suitable and sufficient training, qualifications and experience and registered in one of the governments 'competent persons' schemes. Being a member of such a scheme allows the electrician to 'self certify' his work. This means he is able to design, install and test any work without notifying the local authority building control department prior to starting the work.

All Part P registered electricians must adhere to the exacting standards laid down in the Institute of Electrical Engineers (IEE) Wiring Regulations **BS7671**.

#### 2. Part P registered electricians—limited scope.

Some kitchen & bathroom fitting companies are deemed competent to carry out electrical work limited to the connection of their primary role, i.e. kitchen and bathrooms only.

#### 3. The home owner is permitted to carry out small repairs and maintenance, generally extending to:

- Replacing existing accessories, such as sockets & switches
- Replacing a single length of damaged cable on a like for like basis.

### What to expect from an electrician?

On completion of all work carried out by an electrician the home owner should be provided with a copy of a test certificate, which come in two forms:

1. **Minor works certificate** covering alterations or additions to the original wiring.

2. **Installation certificate** covering all major installation tasks such as installing a new circuit, maybe a shower or installing a new consumer unit. All installation tasks **and** any minor works carried out in what are deemed as '**special locations**' (outdoors, kitchens, bathrooms or rooms containing a shower) must be notified to the Local Authority Building Control Department.

The electrician is responsible for doing this in conjunction with his Part P scheme provider. Within 6-8 weeks a Building Control Certificate should be received. The certificates will be required by a solicitor upon the sale of the property.



## Why should I have my electrical system tested?

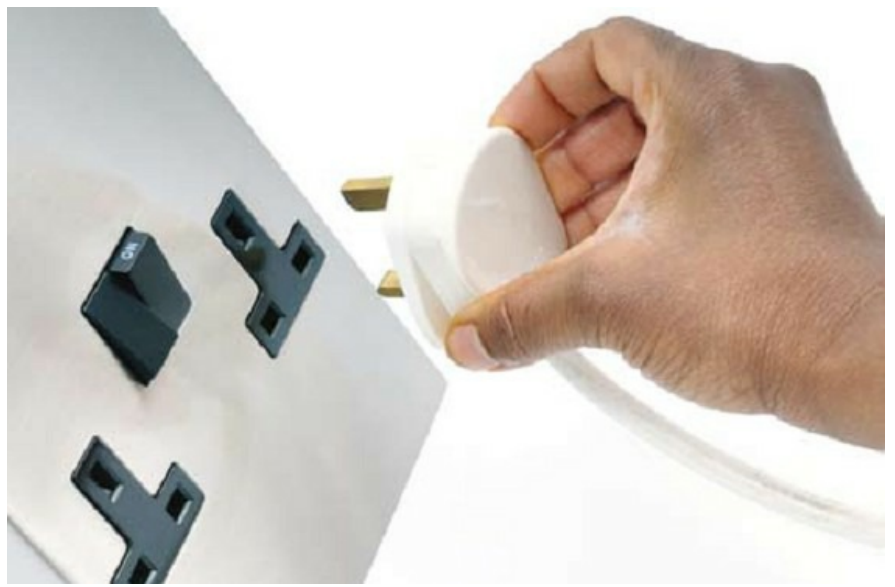
The vast majority of the electrical installation is built deep within the fabric of the building, hidden in the walls, the ceiling, the floors, loft space and even under the bath. The fuse box (now called a consumer unit) will be hidden in a dark cupboard at the bottom of the stairs behind the vacuum cleaner or the ironing board.

These items receive almost no attention from the day they were installed. All elements of the installation will deteriorate over time, nothing lasts forever. Cables become worn due to heat damage, rodents nibble away at the insulation, and screws work themselves loose and create bad joints. If your house was built in the 1970s its wiring is now getting on for 40 years old. As time has passed improvements and safety features have been built into the modern electrical installation. Is your house as safe as it could be?

The recommendation given by the Institute of Electrical and Electronics Engineers is that all domestic dwellings should be tested at a period not exceeding 10 years.

If you are moving home, you need to know about the electrics in your new property. Be extra cautious if the property is old as it runs a higher risk of having faulty wiring. Although the lights may work when you take a look at your new prospective home, it does not by any means ensure it is safe.

How old is the property? Has it been altered in any way since new? Who carried out the work? Did they really understand what they were doing?—It's easy to make an electrical circuit work, it's far more demanding to make the circuit work safely. It would be useful to know of any underlying deficiencies prior to moving in. Rewiring a house is a messy and expensive operation.



If some remedial electrical work is required, budget for it and get the work done before you have the walls skimmed and a new kitchen or bathroom installed. Remember: rewire first—decorate later. Don't put your life or your investment at risk; get an electrical survey of your new home before you sign on the dotted line.

## Who should I contact to test my electrical installation?

Any full scope Part P registered electrician who holds the correct private indemnity insurance to carry out this type of work. The report is known as a Periodic Inspection Report.

## What should I expect to gain from a Periodic Inspection Report?

This type of testing can take anything up to a day to complete. It covers every element of the condition of the installation from the suppliers fuse to the light bulbs. It is primarily concerned with the general condition of the fuse box/consumer unit, fixed cables buried within the walls and floors, main earth bonding arrangements and accessories.

On completion you should be provided with a copy of the test certificate along with written advice explaining what work is required to bring the installation up to the required standard.

## Further Information

Part P registration schemes:  
<http://www.napit.org.uk/>

<http://www.niceic.com/>

Local authority building control:  
<http://www.labc.uk.com>

CLG website:  
<http://www.communities.gov.uk>

Planning portal website:  
[www.planningportal.gov.uk](http://www.planningportal.gov.uk)

© 2010 National Energy Services Ltd

Disclaimer regarding general information:

This fact sheet is one of a series, made available by the membership schemes owned and operated by National Energy Services Ltd. They are only intended as general guides to provide background information, and whilst all reasonable steps have been taken to ensure their accuracy, neither National Energy Services Ltd., nor the membership schemes operated by it, can be held liable for any errors or omissions contained herein, nor any loss or damage howsoever arising from the use of this fact sheet, or variants of it.