Electrical Safety First

The UK's electrical safety experts

Best Practice Guide 6

Portable and stationary appliance testing in **private rented accommodation**

Best Practice Guide

Electrical Safety First is indebted to the following organisations for their contribution and/or support to the development and revision of this Guide:

BEAMA
www.beama.org.uk

British Gas
www.britishgas.co.uk

BSI Product Services
www.bsigroup.com

Certsure
www.certsure.com

City & Guilds
www.cityandguilds.com

ECA
www.eca.uk

Institution of Engineering and Technology
www.theiet.org

NAPIT
www.napit.org.uk

SELECT
www.select.org.uk

SPACES
www.thespaces.org.uk

This is one of a series of Best Practice Guides produced by Electrical Safety First in association with leading industry bodies for the benefit of electrical contractors and installers, and their customers.

This Guide is intended to be made available free of charge to all interested parties. The version of this Guide on the Electrical Safety First website will always be the latest. (**www.electricalsafetyfirst.org.uk/electrical-professionals/best-practice-guides**)

Copies may also be downloaded from the websites of some of the contributing organisations.

Feedback on any of the Best Practice Guides is always welcome – **bpg@electricalsafetyfirst.org.uk**

Electrical Safety First is supported by all sectors of the electrical industry, approvals and research bodies, consumer interest organisations, the electrical distribution industry, professional institutes and institutions, regulatory bodies, trade and industry associations and federations, trade unions, and local and central government.

Electrical Safety First (formerly the Electrical Safety Council and before that, the National Inspection Council for Electrical Installation Contracting) is a charitable non-profit making organisation set up in 1956 to protect users of electricity against the hazards of unsafe and unsound electrical installations.

Electrical Safety First
The UK's electrical safety experts

Published by:

Electrical Safety First
45 Great Guildford Street
London
SE1 0ES

Email: **bpg@electricalsafetyfirst.org.uk**

Website: **www.electricalsafetyfirst.org.uk**

Portable and stationary appliance testing in **private rented accommodation**

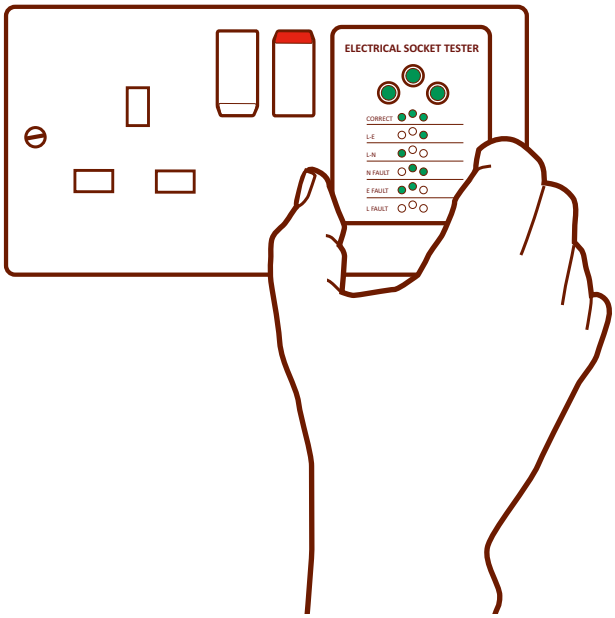
Introduction, scope and assumptions

This guide is aimed at landlords and those such as agents who act on their behalf. Tenants may also find the information in this guide useful.

If you provide electrical equipment or appliances for use by your tenants as part of a tenancy agreement you have a responsibility to maintain them in a safe condition throughout the tenancy.

Just as with a fixed electrical installation, electrical equipment and appliances can deteriorate and suffer damage over time. This guide discusses the points that need to be taken into consideration when deciding how best to manage the on-going safety of the electrical equipment and appliances that are provided for use by tenants.

For the purposes of this guidance, any items supplied via 13 A plugs and socket-outlets to BS 1363 (such as kettles) are considered to be portable or stationary dependent on the physical size and weight whereas items supplied via fused connection units- often referred to as fused spurs - and flex outlet plates (such as central heating systems, heated towel rails and immersion heaters or even small household appliances connected in this way to prevent their unauthorised removal) are not and so should be inspected/tested as part of the fixed installation.



For the avoidance of doubt, all portable / stationary appliances and fixed equipment including built-in kitchen appliances provided by a landlord should be inspected and, if required, tested. If any fixtures are not specifically included in the remit of the inspection and testing of the fixed electrical, installation they should be included in the appliance testing and/or inspection.

1. The law

The law requires that you must maintain electrical equipment if it can cause danger.

In England and Wales, the Landlord and Tenant Act 1985 requires, amongst other things, in Section 8. *Implied terms as to fitness for human habitation* that:

- The property should be fit for people to live in at the beginning of the tenancy (subsection (1)(a)).
- The property should be kept in a fit state for people to live in during the tenancy (subsection (1)(b)).

In Scotland, the Housing (Scotland) Act 2006 requires amongst other things, in Section 13 The repairing standard that a house or flat meets the repairing standard if any fixtures, fittings and appliances provided by the landlord under the tenancy are in a reasonable state of repair and in proper working order (subsection (1)(d)). Section 14. *Landlord's duty to repair and maintain* states that the landlord must ensure that the house or flat meets the repairing standard (of section 13).

This means that landlords must keep in repair and proper working order the fixed electrical installation and any electrical equipment that they provide:

- At the start of the tenancy, and
- At all times during the tenancy.

In England and Wales currently, the law does not say how you must do this or how often. Since 1st December 2015, landlords in Scotland are required under sections 13(4A) and 19B(4) of the Housing (Scotland) Act 2006 to:

- Ensure that regular electrical safety inspections are carried out by a competent person at a maximum interval of 5 years, and
- Have regard to the guidance issued by Scottish Ministers on electrical safety standards and competent persons.

Regardless of where a rented property is situated within the United Kingdom, it is necessary for a landlord or an agent acting on their behalf to implement means of regularly inspecting and, where appropriate testing, and where required maintaining any supplied electrical equipment.

In order to devise and implement a suitable and sufficient approach to meet this requirement, it is necessary to take into consideration all relevant factors, including:

- The type, or more specifically Class, of electrical equipment provided,
- The nature of the equipment, in the most part in relation to its physical size,
- How it is used in terms of the task carried out,
- Frequency of use.

2. Types of electrical equipment

2.1 Equipment class

Persons carrying out inspection and testing of portable or stationary electrical equipment must be able to identify the construction class of the equipment to determine what electrical testing, if any, is appropriate.

There are four recognised construction classes for electrical equipment: Class 0, Class I, Class II and Class III [1].

The use of Class 0 equipment, which has no protective earth connection and only a single level of insulation, is not permitted in the UK on safety grounds and so it is not discussed further in this guide.

Protection against electric shock in Class III equipment, such as mobile phones, laptops, and cordless telephones and their bases/docks, is provided by limiting the maximum nominal voltage to 50 V a.c. or 120 V ripple-free d.c. Class III equipment does not require any electrical testing to determine its continued safety and so is not discussed any further in this guide. It should be noted, however, that where the source of supply for Class III equipment is taken from a mains adaptor; which may be of either Class I or Class II construction; the adaptor must be tested as appropriate to its equipment class.

2.1.1 Class I equipment

For equipment of Class I construction, protection against electric shock is provided by limiting the duration of a current passing through the human body.

In practice, this is achieved by the construction of the equipment and by connection of the exposed-conductive-parts of the equipment which may become live under fault conditions, such as a metallic outer casing, to the earthing arrangements of the electrical installation via a protective conductor.

In short, in the event of an earth fault, the safety of Class I equipment is reliant upon the protective device and protective conductor arrangements of the electrical installation to which it is connected.

The earthing terminal of Class I equipment, which is connected to the exposed-conductive-parts of that equipment, is normally designated with the symbol shown in Fig 1.

Fig 1. Symbol for an earthing terminal

Examples of Class I equipment include domestic white goods, home laundry equipment and some kitchen appliances.

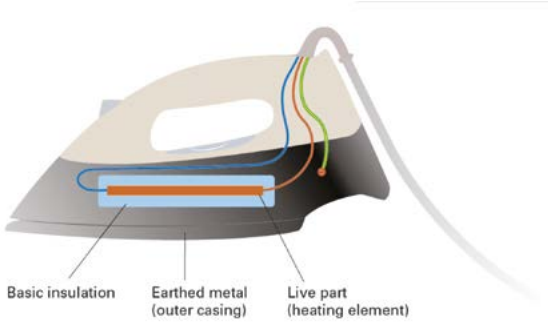


Fig 2. Class I equipment construction

2.1.2 Class II equipment

For equipment of Class II construction, protection against electric shock is provided by preventing current from passing through the human body.

This is achieved either by the provision of both basic and supplementary insulation, or of reinforced insulation around live parts (see Fig 3).

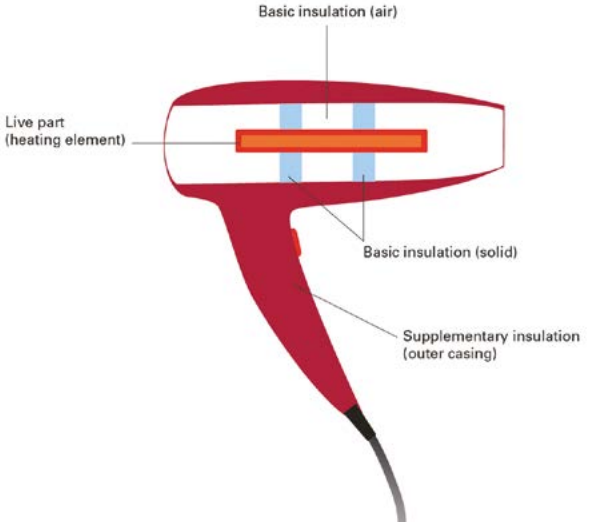


Fig 3. Class II equipment construction

[1] See Technical Report PD 2754-2: 1993 *Classification of electrical and electronic equipment with regard to protection against electric shock – Guide to requirements for protection against electric shock* published by British Standards Institution.

Reinforced insulation may be a single layer of insulation offering an equivalent degree of protection to that provided by basic and supplementary insulation, or may comprise several layers that cannot be tested singly as basic insulation or supplementary insulation.

For Class II equipment, protection against electric shock does not rely on the fault protection arrangements of the electrical installation to which it is connected, and so a protective conductor is not required.

Examples of Class II equipment include power supply units for telephones, home internet equipment, hairdryers and some table lamps.

Class II equipment should be identified by the construction symbol shown in Fig 4.

Fig 4. Class II equipment construction mark

Some items of Class II equipment have a metallic casing either to provide mechanical protection or in some cases, for purely aesthetic reasons (Class IIc equipment). The metallic casing of such equipment does not need to be earthed as the insulation prevents it from becoming live under fault conditions.

When considering what, if any, tests should be performed, any equipment that is not marked with a Class II symbol should be regarded as Class I equipment.

This applies also to extension leads because, under fault conditions, any items of Class I equipment connected to them will be reliant for safety upon the effectiveness of the protective conductor in the lead.

2.2 Method of use

In workplace environments, where electrical equipment is provided for use by employees, the most important factor when determining the interval between inspections/ testing is how an item of equipment is used. In the simplest terms, those items which are handheld when in use such as hairdryers or power tools, or which are not handheld but are regularly handled such as kettles and toasters need to be looked at more frequently than large ‘white goods’ such as fridge-freezers and home laundry equipment.

However, because of the limited quantity of electrical equipment supplied for the use of tenants in private rented accommodation, it is not practicable to inspect and/or test items of different equipment class or method of usage at differing intervals (see also Section 6 of this guide). As a result it is recommended that all appliances provided for use by tenants in a single property are tested and/or inspected at the same time.

3. Verification methods

The Health and Safety Executive publication INDG236 (rev 3) *Maintaining portable electric equipment in low-risk environments* recognises the following methodologies for verifying the continued safety of portable electrical equipment and appliances:

- User checks
- Visual inspection
- Inspection and testing.

Whilst user checks can be useful in a workplace environment, their efficacy as a safety measure in the private rental sector is doubtful. Some tenants may take their safety extremely seriously whilst others will not even think of carrying out some basic checks before using – and handling – electrical equipment. As this guide is not aimed at tenants, user checks are not discussed any further in this guide. This is not to say however that tenants should not be expected to have a care for the safety of themselves and others.

3.1 Visual inspection

A properly conducted visual inspection, sometimes referred to as a formal inspection, carried out by a suitably competent person is the most important factor in determining whether (or not) an item of portable equipment remains safe for continued use. A visual inspection is a thorough check of the equipment.

For example, if the plug is of a type having a removable cover, an internal inspection of the plug should be carried out and, regardless of the type of plug, a check should be made to confirm that the fuse is of the correct type and current rating for the particular appliance.

The competent person carrying out the inspection should look to see whether:

- the plug casing has not sustained damage sufficient to permit access to live parts
- the flex is secured adequately at its point of entry to the plug
- the flex is secured adequately at its point of entry to equipment

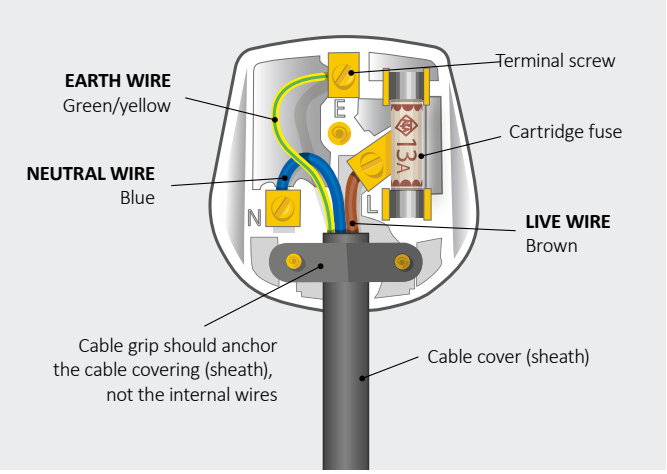


Fig 5. BS 1363 plug with lid removed for visual inspection

- the flex has not sustained damage sufficient to expose insulation
- the body/casing of the equipment is not missing or sustained damage sufficient to permit access to live parts.

Electrical Safety First has produced a Landlords Interim Checklist to help guide a landlord or their representative to carry out an effective assessment of the safety of the fixed electrical installation and electrical appliances where necessary between more formal inspections and at change of tenancy. The checklist is reproduced in Annex B of this guide and may be downloaded from the Electrical Safety First website:

www.electricalsafetyfirst.org.uk/guides-and-advice/for-landlords

3.2 Inspection and (where appropriate) testing

When deciding what form of testing is appropriate or necessary to check the continued safety of an item of equipment, the most important factor to consider is the equipment class.

For Class I equipment it is necessary to perform only a few basic tests to confirm the suitability or otherwise of an item of equipment for continued safe use.

As Class I equipment is reliant on the connection of exposed-conductive-parts to the means of earthing, it is important that the continued integrity of the protective conductor between the safety earthing terminal of the equipment and the earth pin in the plug is verified. This can be achieved by carrying out a continuity test.

An insulation resistance test should be carried out between live (line and neutral) conductors connected together and the protective conductor. If there is any likelihood that a test at 500 V d.c. might damage the equipment, the test should be performed at 250 V d.c.

Where items of Class I equipment, extension leads or three-core lead sets do not have plugs permanently moulded onto the flexible cable, correct polarity should be confirmed by testing.

In most private rented accommodation, it should not usually be necessary to carry out any further testing, subject to satisfactory results having been obtained from the visual inspection of the equipment, flexible cable and plug, and from the basic testing outlined above. However, where unsatisfactory results have been recorded further testing will be necessary

As with visual inspection, the testing of portable equipment should be performed by a suitably competent person.

3.3 Product recalls and safety notices

It is recommended that the person carrying the inspection checks that the portable appliances within the property are not subject to a product recall or safety notice. Electrical Safety First maintains a product recall database on its website:

www.electricalsafetyfirst.org.uk/product-recalls

4. Competency of persons carrying out appliance inspection and testing

There are a number of examination bodies including City and Guilds and EAL who offer qualifications addressed at both those carrying out the inspection and testing of appliances and those responsible for overseeing such activities.

Many further education colleges and private training providers offer these qualifications in courses combining classroom and ‘hands-on’ practical sessions followed by some form of formal assessment.

Although portable appliance testing is not part of electrical installation craft training it is highly likely that most electricians will be capable of performing the relevant inspection and testing. However, this does not mean that some electricians would not gain something from successful completion of portable appliance testing training.

5. Frequency for inspection and testing

Any item of portable equipment deemed to require inspection and, where necessary, testing (as discussed in sub-section 3.2 of this guide), should be subjected to such processes at appropriate intervals throughout its life.

In general, the frequency should be determined according to the risk that the use of an item of equipment presents in a particular environment – the greater the risk, the shorter should be the interval between inspections.

Table 1 of the HSE publication INDG236 suggests initial intervals for checking portable equipment from first use.

However, private rented accommodation falls outside of the scope of INDG236 and by its nature introduces its own set of unique circumstances. For example:

- Typically a property in the private rental sector will contain only a small number of electrical appliances.
- Due to the limited number of appliances, it will only be cost-effective for all of them to be inspected and/or tested at the same interval regardless of class and method of usage.
- It would seem logical for such inspection and/or testing to be carried out at the same time that the periodic inspection and testing of the fixed installation is being carried out, possibly by the same person.

The following recommendations are made with respect to the periodic inspection and, where appropriate, testing of portable appliances provided for use by tenants in private rented accommodation.

It is not necessary to carry out inspection and/or testing of any appliance that was purchased new less than one year before the date of appliance testing being carried out at the premises. However, any appliance newly introduced into a property should be visually inspected before use and checked for correct operation. It should be included in the appliance testing records for that premises with the date that its first test is recommended clearly recorded.

An appliance that was purchased second-hand should be inspected and, where appropriate, tested prior to being made available for use by tenants.

If there is any doubt about the age or condition of an appliance or the date of purchase it too should be inspected / tested prior to being made available for use by tenants.

Equipment class	Visual inspection	Testing
I	1 year or at a change of tenancy (whichever is the shortest)	Up to 5 years
II	1 year or at a change of tenancy (whichever is the shortest)	Not required

6. Test instruments

Portable appliance testing can be completed with either a:

- portable appliance tester, or
- continuity/insulation resistance instrument, or
- the relevant ranges of a professional multi-function tester

Where a continuity/insulation resistance or multi-function tester is to be used, adaptors are now readily available to make their use for portable appliance testing easier.

Fig 6. Proprietary adaptor to allow the use of continuity/insulation resistance or multi-function tester to test portable appliances

Where there are any concerns with respect to compatibility between such adaptors and the test instrument advice should be sought from the instrument manufacturer.

7. Record keeping

To provide a simple user-friendly means of recording such information, this guide includes, in Annex A, a simplified schedule that combines the necessary data relating to:

- The equipment details
- Details and results of any inspection and/or testing carried out
- Whether an item of equipment that was found to be defective has been repaired or removed from service
- Recommended date for the next inspection/testing of the supplied equipment detailed in the schedule.

8. Labelling

It is strongly recommended that any items of equipment that have been deemed safe for continued use by inspection or inspection/testing should be labelled to indicate this.

Any such label should include:

- the item's unique identification number
- the date on which the inspection/testing took place
- details of the person who carried out the inspection and testing.

It is NOT necessary to state a date recommending when the next testing and/or inspection should be performed.

Fig 7. Example of PASS label

It is also strongly recommended that any item provided for use by tenants that is found to be unsuitable for continued use is removed from service immediately and either repaired or replaced. It is not necessary to apply labels which indicate that an item has failed testing/ inspection.

9. Repair or replace?

Some items of equipment provided for use by tenants in a private rental sector (PRS) property such as toasters or kettles are of, relatively speaking, low value.

So, perhaps more than in other types of property, it might be more cost-effective to discard such items of equipment that fail testing and/or inspection rather than have them repaired; especially as they must be tested post-repair to confirm their suitability for use and functionality.

Indeed, replacement parts may not be readily available for certain 'budget' household appliances and so repair will not be possible in any case.

Where an item has been deemed to be at the end of its useful service life, steps should be taken to make its continued use impossible. This could be achieved for example by the following means:

With the permission of the owner of the equipment

- discard the item at a local recycling facility
- where the item has an integral flex, cut it off close to the body of the equipment; remove it from the property and dispose of it safely
- take steps to make it impossible for any removed plug to be inserted into a socket-outlet.

The landlord or his representatives will need to consider the requirements of the Waste Electrical & Electronic Equipment Regulations 2006 when disposing of electrical equipment.

Annex A.

Portable appliance asset register and test record for Private Rental Sector (PRS) properties

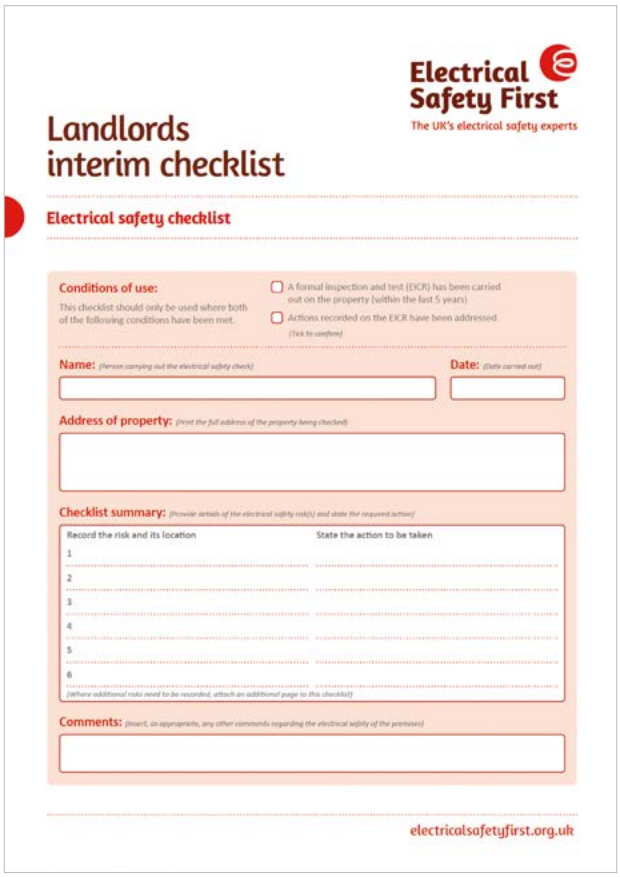
LANDLORD OR AGENT DETAILS Name ..... Address	**RENTAL PROPERTY ADDRESS**	**DATE OF INSPECTION** ... / ... / ..... **DETAILS OF INSPECTOR/TESTER** Name ..... Signature	**DETAILS OF TEST INSTRUMENTS USED** **Type** (Delete as appropriate) Portable Appliance tester Continuity/IR tester MFT **Serial number(s)** .....

Details of supplied equipment					**Visual inspection** For all items in this section, outcome either (✓ or *X*)					**Testing**			**Overall Outcome**	**Remedial actions**		
															If equipment is repaired	
Item description	ID number	Equipment class (I or II)	Current rating (A or W)	Fuse rating (A)	Plug condition (External)	Flex secured adequately at entry to plug	Flex secured adequately at entry to equipment	Flex condition	Body/casing condition	Continuity (Ω)	Insulation Resistance (MΩ)	Polarity correct (Inside plug) (✓ or *X*)	Pass or Fail?	If fail, withdrawn or repaired? (W or R)	Name of repairer	Date of repair

Any items listed above that remain in service should re-inspected by .... / .... / .....
(Subject to satisfactory outcome of the inspection and/or testing performed, or suitable repair by suitably competent person)

Annex B.

Landlords interim checklist



Electrical Safety First
The UK's electrical safety experts

Landlords interim checklist

Electrical safety checklist

Conditions of use:
This checklist should only be used where both of the following conditions have been met.

- ☐ A formal inspection and test (EICR) has been carried out on the property (within the last 5 years)
- ☐ Actions recorded on the EICR have been addressed

(Tick to confirm)

Name: *(Person carrying out the electrical safety check)*

Date: *(Date carried out)*

Address of property: *(Print the full address of the property being checked)*

Checklist summary: *(Provide details of the electrical safety risk(s) and state the required action)*

Record the risk and its location	State the action to be taken
1	
2	
3	
4	
5	
6	

(Where additional risks need to be recorded, attach an additional page to this checklist)

Comments: *(Insert, as appropriate, any other comments regarding the electrical safety of the premises)*

electricalsafetyfirst.org.uk

Electrical safety checklist:

Use the items listed below as a guide for carrying out the electrical safety check. Where a safety risk is identified record the details on the checklist summary, overleaf.

(Please note: this list is not exhaustive.)

Fusebox (Consumer unit)

1) All covers are in place and fitted correctly (a damaged cover could lead to a shock or fire risk) ☐
2) Residual Current Device (RCD)* trips when the test (or 'T') button is pressed ☐
3) Combustible materials are not stored on or near the Fusebox (e.g. paint, newspapers, cleaning fluids) ☐

Sockets and lighting

1) Sockets, lights and switches are securely fixed and in good condition (e.g. not broken or cracked) ☐
2) Sockets, lights and switches show no signs of overheating (e.g. blackening, scorch marks) ☐
3) Flexible cables are not in a position where they are likely to suffer damage (e.g. under carpets or rugs, passing through door/window openings) ☐
4) Sockets are not overloaded with too many appliances (e.g. inappropriate use of adaptors and/or extension leads) ☐

Electrical appliances

1) Appliances are not subject to a product recall (visit electricalsafetyfirst.org.uk/recall to check the appliances in your property) ☐
2) All covers are in place and in a satisfactory condition (a damaged casing could lead to a shock or fire risk) ☐
3) Flexible cables are in a satisfactory condition and show no signs of deterioration (e.g. fraying/ splitting) ☐
4) Flexible cables are securely attached to the appliance and plug ☐

Additional safety checks

1) Smoke alarm sounds when the test button is operated ☐
2) Carbon monoxide alarm sounds when the test button is operated ☐

Electrical Safety First is the UK charity dedicated to reducing deaths and injuries caused by electrical accidents. Our aim is to ensure everyone in the UK can use electricity safely.
electricalsafetyfirst.org.uk
© Electrical Safety First, March 2014

Unit 331, Metal Box factory
30 Great Guildford Street
London SE1 0HS
Helpline 020 3463 5100
Email enquiries@electricalsafetyfirst.org.uk
Registered Charity (England and Wales) No. 257376
(Scotland) No. SC039993

Electrical Safety First
The UK's electrical safety experts

*An RCD is designed to protect against the risks of electrocution and fire caused by earth faults.

electricalsafetyfirst.org.uk

The latest versions of all the **BestPracticeGuides** are available to download from **www.electricalsafetyfirst.org.uk**

Electrical Safety First
45 Great Guildford Street, London SE1 0ES
Email: enquiries@electricalsafetyfirst.org.uk Web: www.electricalsafetyfirst.org.uk
Registered Charity (England and Wales) No.257376 (Scotland) No. SCO39990

Electrical Safety First is the UK charity dedicated to reducing deaths and injuries caused by electrical accidents. Our aim is to ensure everyone in the UK can use electricity safely

Electrical Safety First
The UK's electrical safety experts