

# Electricity at Work Regulations, Amendment 1 to BS 7671 and the in-service inspection and testing of electrical equipment

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# Electricity at Work Regulations 1989

# Health and safety legislation

Health and Safety at Work Etc Act 1974

Management of Health  
and Safety at Work  
Regulations

Workplace (Health,  
Safety and Welfare)  
Regulations

Provision and Use of  
Work Equipment  
Regulations

Electricity at Work  
Regulations

# Electricity at Work Regulations

## Regulation 3

### Persons on whom duties are imposed by these Regulations

*(1) Except where otherwise expressly provided in these Regulations, it shall be the duty of every employer and self-employed person to comply with the provisions of these Regulations in so far as **they relate to matters which are within his control;***

# Electricity at Work Regulations

## Dutyholder

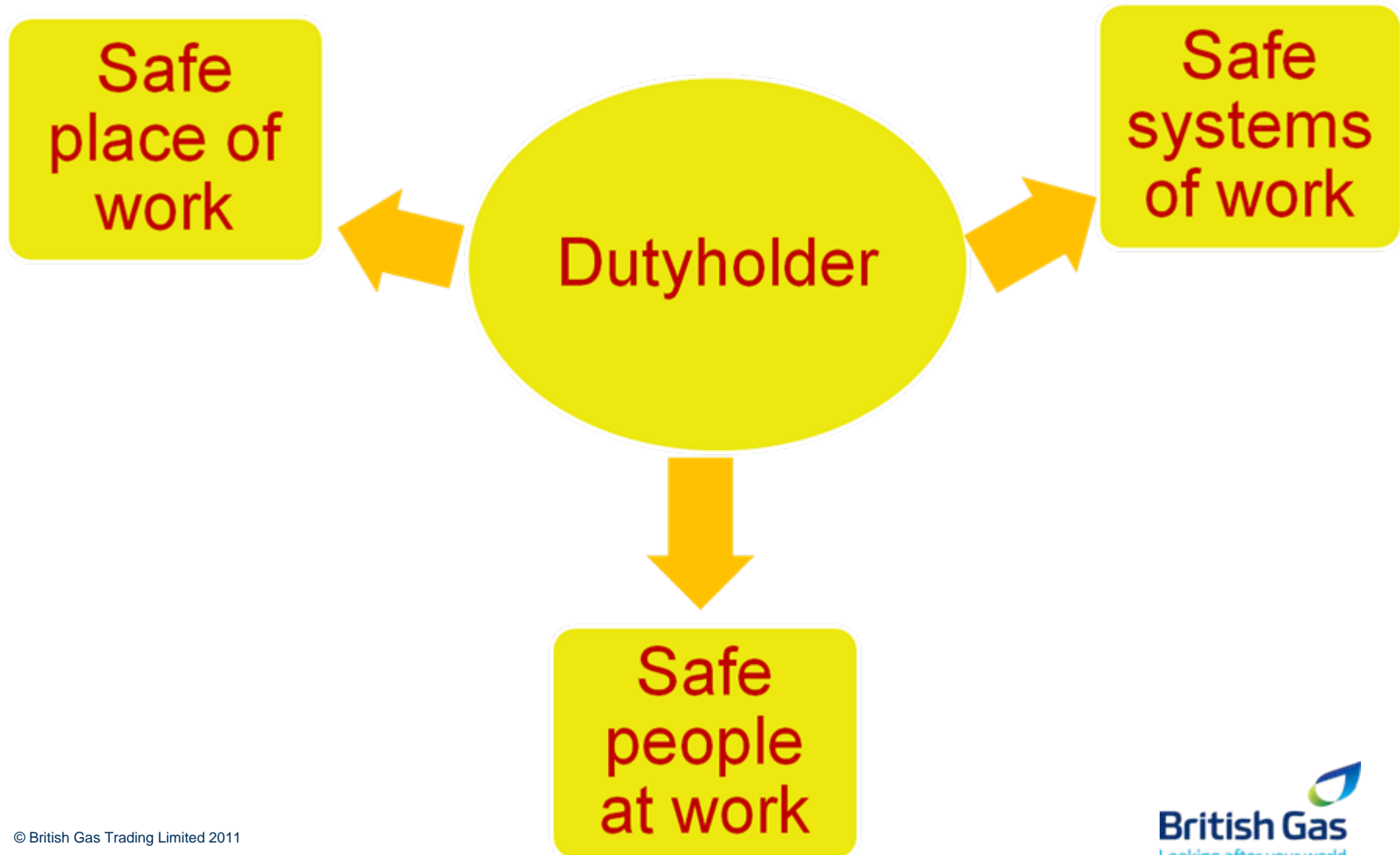
**A person who has particular responsibilities under health and safety legislation due to their management position or work activity**

# Electricity at Work Regulations

## Dutyholder

**If the employer has “control”, then the employer has a duty to comply with relevant health and safety legislation, and hence is a “Dutyholder”.**

# Dutyholder Responsibilities



# Electricity at Work Regulations

## Regulation 4

### Systems, work activities and protective equipment

*(1) All **systems** shall at **all times** be of such construction as to prevent, so far as is reasonably practicable, **danger**.*

*(2) As may be necessary to prevent **danger**, **all systems** shall be maintained so as to prevent, so far as is reasonably practicable, such **danger**.*



# Electricity at Work Regulations

*(3) Every work activity, including operation, use and maintenance of a **system** and work near a **system**, shall be carried out in such a manner as not to give rise, so far as is reasonably practicable, to **danger**.*

*(4) Any equipment provided under these Regulations for the purpose of protecting persons at work on or near **electrical equipment** shall be suitable for the use for which it is provided, be maintained in a condition suitable for use, and be properly used.*

# Safe place of work



# Safe place of work

## ***Electricity at Work Regulations – Regulation 5***

***No electrical equipment shall be put into use where its strength and capability may be exceeded in such a way as to give rise to danger***



# Safe place of work



## Electricity at Work Regulations - Regulation 15

There should be adequate access and egress to electrical switchgear and equipment for operation, maintenance and emergency procedures

# Safe place of work

IP breach – Tape is not an acceptable barrier



# Safe place of work

## Keeping an electrical installation safe

This can be achieved by:

### 1. Regular maintenance

This is often employed in production areas

Make sure all work is certified (Minor Electrical Installation Works Certificate or Electrical Installation Certificate)

# Safe place of work

## Keeping an electrical installation safe

This can be achieved by:

### 2. Periodic inspection and testing

Use a company you can trust, a company that understands your needs.

Remember that after they have left your premises you are still responsible for the installation.

Make sure you consider the fixed wiring **and** the electrical equipment

**Act on recommendations!**

# Electricity at Work Regulations

## Regulation 16

### Persons to be competent to prevent danger and injury

*No person shall be engaged in any work activity where technical knowledge or experience is necessary to prevent **danger** or, where appropriate, **injury**, unless he possesses such knowledge or experience, or is under such degree of supervision as may be appropriate having regard to the nature of the work.*



**BS 7671:2008  
Amended 2011**

**IET Wiring  
Regulations –  
Seventeenth  
Edition**



# IET Wiring Regulations Seventeenth Edition

The first amendment to BS 7671:2008 was issued on 1<sup>st</sup> July 2011 and came into effect on 1<sup>st</sup> January 2012.

Electrical installations designed after December 2011 must comply with the new document.

# IET Wiring Regulations Seventeenth Edition

The IET Regulations are not applied retrospectively. They only apply to new work.

Periodic inspection and test of an electrical installation may highlight a non-compliance with the latest edition of the Regulations but only if the inspector is recommending an improvement.

# Part 6 – Inspection and Testing

## Chapter 62 – Periodic Inspection and Testing

The purpose of periodic inspection and testing is to provide the Dutyholder with sufficient information so they can meet their legal obligations under The Electricity at Work Regulations

# Part 6 – Inspection and Testing

## Chapter 62 – Periodic Inspection and Testing

It is essential that the Dutyholder has confidence in the quality of the Report.

Sample testing may reduce costs but the Dutyholder must ensure that the complete installation meets the legal requirements. (*so far as is reasonably practicable*)

The inspection and testing company has a duty to inform the client of the condition of the installation, within the “extent and limitations”, as agreed with the client.

# Part 6 – Inspection and Testing

## Chapter 63 – Certification and Reporting

Regulation 631.2 requires an **Electrical Installation Condition Report** to be completed as part of a periodic inspection.

It is not just a name change. Appendix 6 contains new and amended documentation.

# Part 6 – Inspection and Testing

## Appendix 6 – Model Forms for Certification and Reporting

The Electrical Installation Certificate remains the same, apart from a couple of minor word changes.

The Schedule of Inspections to be attached to **this** certificate is also not changed in any significant way.

# Part 6 – Inspection and Testing

## Appendix 6 – Model Forms for Certification and Reporting

The **Electrical Installation Condition Report** is an edited version of the previous Periodic Inspection Report. The main difference being the *Observations* section.



# Part 6 – Inspection and Testing

## Appendix 6 – Model Forms for Certification and Reporting

### Reporting codes:

**C1 – Danger present. Risk of injury. Immediate action required**

**C2 – Potentially dangerous. Urgent remedial action required**

**C3 – Improvement recommended**

# Part 6 – Inspection and Testing

## Appendix 6 – Model Forms for Certification and Reporting

### Reporting codes:

There is no code for “Does not comply with BS 7671”.

There is no code for “Requires further investigation” but this is addressed by the introduction of an additional column on the Schedule of Inspections and on the EICR.

# Part 6 – Inspection and Testing

## Appendix 6 – Model Forms for Certification and Reporting

The overall condition of an installation can only be regarded as “satisfactory” if no C1 and C2 codes have been reported.

# Part 6 – Inspection and Testing

## Appendix 6 – Model Forms for Certification and Reporting

There is a new Schedule of Inspections for periodic inspections of *Domestic and similar premises with up to a 100 A Supply.*

# Part 6 – Inspection and Testing

## Appendix 6 – Model Forms for Certification and Reporting

There is **no** specific “Schedule of Inspections” for larger installations but a check list is provided giving examples of what may be included in the report.

***There is no need to change the format of the report as long as it already includes all relevant information.***

# In-service Inspection and Testing of Electrical Equipment *(4<sup>th</sup> Edition)*

# In-Service Inspection and Testing of Electrical Equipment – PAT Testing

The Electricity at Work Regulations – Regulation 4 requires the electrical system to be constructed and maintained, so as not to give rise to danger, as far as is reasonably practicable.

Any electrical equipment which is connected to the fixed wiring is part of the electrical system and therefore comes under the requirements of Regulation 4.

It makes no difference who owns the equipment, all that matters is that once it is “*plugged*” into the fixed wiring, it becomes the responsibility of the employer. (***Regulation 3 – matter within his control***)

# In-Service Inspection and Testing of Electrical Equipment – PAT Testing

The IET Code of Practice for In-service Inspection and Testing of Electrical Equipment makes recommendations on the nature of inspections and the types of tests to be carried out on electrical equipment and the intervals between inspection and tests.

The code indicates that users, inspectors and testers and Dutyholders all have responsibilities regarding the safe use of electrical equipment.



# In-Service Inspection and Testing of Electrical Equipment – PAT Testing

## The Dutyholder must ensure that:

The user has sufficient training to be able to recognise when electrical equipment is unsafe to use and that they know the correct procedure to follow in such circumstances

The electrical equipment is inspected and tested at regular intervals to ensure, as far as is reasonably practicable, that the equipment does not give rise to danger.

# In-Service Inspection and Testing of Electrical Equipment – PAT Testing

## User Checks

The Code of practice recommends that the user carries out simple checks on the electrical equipment before use.

Most users are not competent in electrical inspection. The code does not expect them to be, but does expect them to be able to make some basic checks.

This may require some training to be given to staff so that they can carry out some simple checks.

# In-Service Inspection and Testing of Electrical Equipment – PAT Testing

## Records

The Dutyholder must keep records of all inspections, inspections and tests, failures and repairs throughout the life of the electrical equipment.

**Thank you for  
your attention**

**Any further  
questions?**

