



The Regulatory Reform (Fire Safety) Order 2005, BS 7671: 2008 and requirements for firefighters' switches

by Jon Elliott



As a result of the introduction of the 17th Edition of the Wiring Regulations, it has been necessary to revise the series of Guidance Notes published by the IEE to accompany the Wiring Regulations so that their content relates to the current requirements of both BS 7671 and relevant statutory legislation.

Since BS 7671 was last amended (in March 2004) significant changes have occurred in a number of Statutory Instruments which have a direct influence on its content. One such change was the introduction of the Regulatory Reform (Fire Safety) Order in 2005.

This article briefly introduces this Order and summarizes some of the requirements therein which have an influence on those involved in electrical installation and maintenance. It also looks at

in particular the requirements for firefighters' switches contained in both the Order and BS 7671: 2008 to highlight the relationship between the statutory and non-statutory requirements they contain respectively relating to this topic.

THE REGULATORY REFORM (FIRE SAFETY) ORDER 2005

The Regulatory Reform (Fire Safety) Order 2005 (henceforth referred to as the Order) has a direct influence on many other pieces of primary and secondary statutory legislation, requiring modifications and, in some cases, partial or full revocation of the requirements therein. It replaces fire certification under the Fire Precautions Act 1971 with a general duty to ensure, so far as is reasonably practicable, the safety of employees and a general duty, in relation to

non-employees to take such fire precautions as may reasonably be required to ensure that premises are safe.

The Order came into effect fully in October 2006 and has an effect on over 70 pieces of fire safety legislation. It applies to non-domestic premises in England and Wales, including any communal areas of blocks of flats or houses in multiple occupation and places a number of legal obligations and responsibilities upon the individual identified therein as the *responsible* person.

The responsible person has duties placed upon them to:

- carry out a risk assessment to confirm that any fire safety precautions in place within the premises are adequate (article 9). It also requires this risk assessment to be

regularly updated

- take the necessary general fire precautions (article 10)
- make arrangements for planning, organisation, control, monitoring and review of preventative and protective measures (article 11)
- ensure that premises under their control are adequately equipped with fire-fighting and fire detection / alarm equipment (article 13)
- maintain the accessibility of escape routes to emergency exits at all times; confirm that emergency exits lead as directly as possible to a place of safety; ensure that emergency doors open outwards; and confirm the adequacy of provision of indication signs and emergency lighting arrangements (article 14)
- put in place and keep up



a suitable maintenance regime to ensure any equipment provided for the purposes of fire safety remains functional (article 17)

- appoint competent persons to assist them to comply with their duties under this Order (article 18)
- put in place and provide adequate safety training (article 21)

Of course, the Order also places a duty on employees to take reasonable care and to co-operate with their employer in relation to the duties placed upon them. Article 23 requires employees to:

- take reasonable care for the safety of themselves and of other persons who may be affected by their acts or omissions at work;

- co-operate with their employer as regards any duty or requirement imposed by or under any provision of the Order, so far as is necessary to enable that duty or requirement to be performed or complied with; and

- inform their employer or any other employee with specific responsibility for the safety of fellow employees—

(i) of any work situation which they would reasonably consider represented a serious and immediate danger to safety; and

(ii) of any matter they would reasonably consider represented a shortcoming in the employer's protection arrangements for safety, in so far as that situation or matter either affects the

safety of the employee or arises out of or in connection with their activities at work, that has not previously been reported to the employer.

PROVISION OF FIREFIGHTERS' SWITCHES

The Order contains a number of statutory requirements relating to firefighters' switches for luminous tube signs, etc. We shall consider these in conjunction with the non-statutory requirements of 537.6 of BS 7671: 2008. Note, provision of firefighters' switches is also considered in IEE Guidance Note 2 - *Isolation & switching* and Guidance Note 4 - *Protection against fire*.

Article 37 (4) of the Order states that a firefighters' switch must be so placed and coloured or marked as

to satisfy such reasonable requirements that a fire and rescue authority may impose so that it is readily recognisable by and accessible to firefighters. However, article 37 (5) states that if a firefighters' switch complies in position, colour and marking with the current edition of the IEE Wiring Regulations, fire and rescue authorities should not impose any further requirements pursuant to paragraph (4).

BS 7671:2008 contains a number of requirements relating to firefighters' switches which are summarized below.

1. A firefighters' switch should be provided on the low-voltage side of a circuit that supplies

- any exterior electrical installation, or
- an interior discharge lighting installation (not including a portable luminaire of rating not exceeding 100 W) that operates at a voltage in excess of low voltage (537.6.1 refers).

It should be noted at this point that in relation to the provision of firefighters' switches, installations in covered markets, arcades or shopping malls are considered to be exterior installations, while a temporary installation in a permanent building intended for hosting exhibitions is not.

2. Wherever practically possible, every exterior installation covered by the

requirements of 537.6.1 above within a single premises such as, for example, a covered market, should be controlled by a single firefighters' switch to simplify the process of making dead all circuits therein operating a voltage exceeding low voltage. Further, any internal installation subject to the requirements of 537.6.1 in each single premises should be controlled by a single firefighters' switch, this switch being independent of a firefighters' switch for any exterior installation of the same premises; 537.6.2 refers.

3. Any firefighters' switch provided should:

- in the case of an exterior installation, be outside the building and be placed adjacent to the equipment it controls. Alternatively where switch and equipment are not adjacent to each other, notices should be placed adjacent to both the switch, indicating what it controls and the equipment controlled, indicating the location of the appropriate switch
- for an interior installation, the switch should be placed in the main entrance of the building or other location agreed to by the local fire authority

- in all cases, the switch should be in a conspicuous position that remains accessible to firefighters. The switch should be mounted at a height not more than 2.75 m from the ground or the standing beneath the switch
- where more than one switch is provided on any building, notices are required clearly describing the installation or part thereof which each switch controls (537.6.3 refers)

4. Any firefighters' switch provided should be so placed to facilitate operation by a fire-fighter and:

- be coloured red
- be accompanied by a durable notice with the wording as shown below. The lettering should be in 36 point
- have its ON and OFF positions clearly marked such that it is legible to a person standing in a position to operate the switch
- have its OFF position uppermost
- be so constructed such that it cannot be inadvertently switched to the OFF position

It is worth mentioning at this point that the topic of firefighters' switches is a good example of the

simplified structure of the Wiring Regulations. Whilst all requirements relating specifically to such switches can now be found in 537.6, previously in the 16th Edition it would have been necessary to have consulted regulations 476-03-05, 476-03-06 and 476-03-07 to determine in which installations such switches were required, how they should be arranged and where they should be located and Regulation 537-04-06 for requirements relating to the switch itself and its identification and labelling.

SUMMARY

The Fire Safety (Regulatory Reform) Order 2005 is

probably the single most influential statutory instrument in the field of protection against fire. Its introduction has consolidated the general fire safety precautions of a large number of pieces of legislation, many of which have been modified by the Order and some of which have been partially or fully revoked. It has introduced a risk assessment driven approach to considering whether fire precautions which have been provided are adequate and it has placed far greater emphasis on the need to plan, organize, control, monitor and review any preventative

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or protective measures relating to the fire safety of a building.

Article 37 of the Order contains a number of specific requirements relating to the selection and installation of firefighters' switches. These were considered in conjunction with the requirements for firefighters' switches in 537.6 of BS 7671: 2008.

The relationship between the statutory requirements of the Order and the non-statutory requirements of the 17th Edition relating to firefighters' switches should be noted. The Order contains the broad and non-

specific requirement that such a switch *"must be so placed and coloured or marked as to satisfy such reasonable requirements that a fire and rescue authority may impose so that it is readily recognisable by and accessible to firefighters"*.

In contrast, 537.6 of BS 7671 contains a number of clear and specific requirements on when such switches are required, where the switches should be installed, at what height they should be installed, what colour they should be, how they should be identified, in what position the switch should be when

OFF and indeed contains a requirement to provide a means to prevent inadvertent re-closing.

Although the detailed requirements of BS 7671 are of themselves non-statutory, article 37 (5) of the Order makes it clear that *"if a firefighters' switch complies in position, colour and marking with the current edition of the IEE Wiring Regulations, fire and rescue authorities should not impose any further requirements..."* on such matters. It can be seen therefore that meeting the requirements of BS 7671 for the selection and

installation of firefighters' switches will in itself meet the relevant statutory requirements of the relevant fire safety legislation.

As a result of the simplified structure of the 17th Edition, all requirements relating to firefighters' switches can now be found in 537.6.

The newly revised Guidance Note 2 *Isolation and Switching* and Guidance Note 4 *Protection against fire* will be available shortly.

More information can be found here: <http://www.opsi.gov.uk/si/si2005/20051541.htm> ■

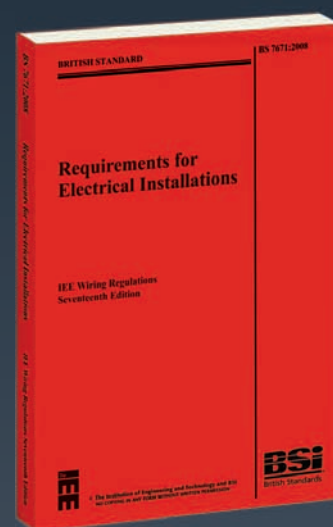


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