

Enhanced Fire Safety from Consumer Units

Amendment 3 to BS7671:2008 Requirements for Electrical Installations (IET Wiring Regulations) will be published on 5th January 2015. These new and changed regulations will apply to all Electrical Installations designed after 1st July 2015*. Whilst there are many additions and changes being introduced through this Amendment, it is expected that there will be specific new regulations relating to the enhancement of Fire Safety.

One particular regulation, 421.1.201, is expected to address the selection of Consumer Units in domestic (household) premises and, as such, introduces a new enhanced functionality to this equipment. The regulation is expected to state:

“Within domestic (household) premises, consumer units and similar switchgear assemblies shall comply with BS EN 61439-3 and shall:

- I. Have their enclosures manufactured from non-combustible material, or
- II. Be enclosed in a cabinet or enclosure constructed of non-combustible material and complying with regulation 132.12.

Note 1: Ferrous metal e.g. steel is deemed to be an example of a non-combustible material.

Note 2: *The implementation date for this regulation is the 1st January 2016. This does not preclude compliance with this regulation prior to this date.”

The intent of regulation 421.1.201 is considered to be, as far as is reasonably practicable, to contain any fire within the enclosure and to minimise flames from escaping, caused mainly as a result of poorly installed connections. The following Q&A's cover the key points:

1. What is a definition of “non-combustible”?

There is no published definition for “non-combustible” that aligns with the intent of regulation 421.1.201. Ferrous metal, e.g. steel, is deemed to be one example of a non-combustible material that meets the intent of the regulation.

2. What constitutes a “non-combustible enclosure”?

A non-combustible enclosure includes base, cover, door and any components, e.g. hinges, covers, screws and catches, necessary to maintain fire containment; see Diagram 1. Blanks and devices are contained within the non-combustible enclosure.

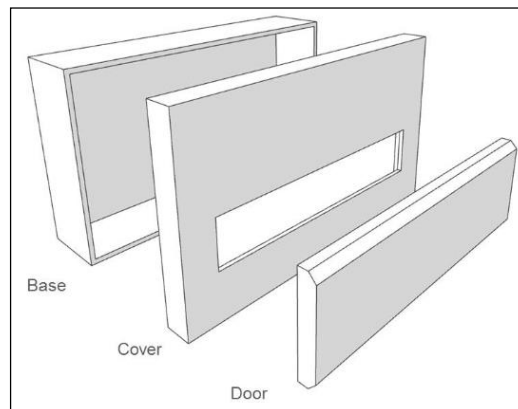


Diagram 1. Example of non-combustible enclosure components

3. How is account taken of cable entries into a “non-combustible enclosure” with respect to containment of internal fire and escape of flames?

Good workmanship and proper materials must be applied by the installer. The cable installation entry method shall, as far as is reasonably practicable, maintain the fire containment of the enclosure. Account shall be taken of the manufacturer’s instructions, if any.

4. What is meant by “Similar switchgear assemblies”?

“Similar switchgear assemblies” are assemblies used for the same fundamental application as consumer units.

5. Does regulation 421.1.201 apply to consumer units and similar switchgear assemblies installed in domestic (household) garages and outbuildings?

Yes, the intent of regulation 421.1.201 is that it applies to consumer units and similar switchgear assemblies to BS EN 61439-3 inside all domestic (household) premises including their integral/attached garages and outbuildings or those in close proximity.

It is important to note that this change in product specification will require changes and increased vigilance to installation practices and ongoing attention to reducing the root causes of the risk of fire. In this respect,

installation by a skilled person competent in electrical installations in households remains absolutely vital.

A single point of reference for consumers seeking an electrical contractor is now available in England and Wales in the form of the 'Registered Competent Person - Electrical' register www.electricalcompetentperson.co.uk and in Scotland in the form of the Scottish Government's Certification Register <http://www.certificationregister.co.uk/>

If you require any further information on this subject, please do not hesitate to contact our members as listed in the directory of Members on the BEAMA website www.beama.org.uk/en/our-members

(Navigation: Members Directory >> Circuit Protection & Control >> Consumer Units)

If this Technical Bulletin was of interest, you may also be interested to read other BEAMA publications that can be accessed and downloaded via the BEAMA website:

- Part P FAQ's for multi-row consumer unit installation height
- Safe selection of devices used in assemblies
- Surge Protection device guide

The content of this Technical Bulletin is fully endorsed by the following organisations:

