## Amendment No. 3 BS 7671

## Wylex NM has the Answers

If you have attended any of the NIC Tech Talks, any Elex exhibitions, or seen the IET interview with London Fire Brigade on you-tube then you will be aware that Amendment 3 of the 17th Edition Wiring Regulations is due for publication in January 2015.

You will also be aware of one specific new regulation - ref 421.1.201 that will require consumer units and similar switchgear assemblies for use in **Domestic** (Household) Premises to have their enclosures manufactured from non combustible material or be enclosed in a cabinet manufactured from non combustible material.

This new requirement is to be introduced after London Fire Brigade recorded statistics that showed that the number of incidents of fire involving plastic consumer units as the source of ignition (since 2012/13) had increased rapidly to around 5 incidents per week. The majority of these incidents were due to poor workmanship e.g. poor quality connections.

The position of consumer units was also of concern to London Fire Brigade because they are often located on the escape route e.g. near an exit door, under the stairs, raising the possibility that any fire which started as a result of faulty wiring could spread to coats and other household items.

London Fire Brigade have been working with Electrical Safety First and other industry bodies to get a new regulation included within BS7671 (IET Wiring Regulations) to improve fire safety in the home and to reduce the risk of fire spread. The intention of this new regulation is considered to be, as far as is reasonably practicable, to contain any fire within the consumer unit enclosure and to minimise flames from being emitted.

## Watch the video



The first, and most obvious of many questions that arise from this new requirement would be :-

What is "non combustible"? The new regulation actually answers this question for us, it gives an example of non combustible material as ferrous metal, e.g. Steel.



But, **what is "an enclosure"?** For the purposes of this new regulation a non-combustible enclosure includes base, cover, door and any components (e.g. hinges, covers, screws, catches) necessary to maintain fire containment.

What is meant by a "Cabinet"? For domestic household premises the term cabinet should apply to the meter cabinet, because that type of cabinet is often used to house a skeleton consumer unit as well as the cut out and meter.



We also need to know **which products are considered to be "similar switchgear assemblies"** The wiring regulations give a definition of a consumer unit, and quite simply similar switchgear assemblies would be assemblies of a similar construction (Spine Unit, Garage Unit or Switch Fuse) that are used for the same fundamental application as consumer units.

Although many of these answers may seem obvious, we also need to ask the question as to **what exactly are** "domestic (household) premises"?

The scope of domestic (household) premises includes the main building, its land and any integral/attached or detached garages and outbuildings or those in close proximity, typically Houses, Bungalows, Flats, Apartments, Sheltered Accommodation, Farmhouse, etc. but not commercial premises such as Hotels.

Wylex - market leaders in domestic household circuit protection have responded to this new requirement by introducing a range of "All Metal" consumer units and a range of accessories that further aid compliance with this important new safety requirement.

The new NM range from Wylex has its enclosures manufactured entirely from non combustible materials i.e. metal back box, metal cover, metal hinges metal door, and all have cable entry knockouts on 5 sides. This is the largest selection of knockout options available and suits almost all cabling requirements, the rear entry knockouts are large enough to cater for full installation of concealed cables.

Since the purpose of the new regulation is to contain any fire within the enclosure it makes sense to maintain the enclosure as complete as possible with non combustible materials. Wylex offers a non combustible metal blank for use in unused ways in the cover, as an alternative to a plastic membrane.



Wylex NM all metal consumer units also feature a top hinged "stay shut" door that cannot be left in the open position. The door is now required to act as a fire barrier & the Wylex NM assembly provides a second non combustible barrier over the metal blank and a barrier over the devices.

For TT applications the long established Wylex EIU mains tails entry gland can be used to provide supplementary insulation (similar to class ii) to the incoming supply and to prevent potential hazards from an earth fault on the incoming cables.





Wylex NM all metal units are available with either a fixed "no miss connection" busbar or a flexible version. The "no miss" balcony terminals will not permit devices to be incorrectly fitted, and this system also caters for additions and upgrades without disturbing the connections on any adjacent devices, thereby reducing risk of loose connections, and maintaining connection quality. Wylex NM all metal consumer units have a raised DIN rail & bus bar assembly. The 30mm of space beneath the pan assembly provides generous wiring room between the strengthened DIN rail and the back of the enclosure so that cables can easily be routed to the point of termination regardless of the point of entry into the enclosure, while the extra height of 255mm also makes life simple for RCBO cabling & connection.

Amendment 3 requires consumer units to comply with BS EN 61439-3. The only way to be sure that consumer units comply with this standard is to obtain a test certificate from a high quality recognised provider such as a UKAS laboratory.



Wylex NM all metal consumer units are designed manufactured and tested in ISO 9001 accredited facilities in accordance with BS EN 61439-3. These new all metal consumer units are UKAS certified to BS EN 61439-3 and use Low Smoke & Fume Paint.

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