

Construction Products Regulations (CPR) Statement

What is CPR?

The Construction Products Regulations define the fire performance of all construction products. Under these regulations, all construction products and building materials installed in the European Union (EU) must contain the CE mark that provides proof of compliance.

From 1st July 2017, all communications cables that are intended to be installed in a "permanent" manner inside buildings and other structures have to be certified, by law, as conforming to a specific EuroClass in relation to "reaction to fire".

There are seven EuroClasses with which communications cables are graded - A, B1, B2, C, D, E, and F. 'A' is the most flame retardant and 'F' is the least.

In the UK, the standards that will define the EuroClass applied are:

- BS 7671- Requirements for electrical installations. IET Wiring Regulations. Seventeenth edition.
- BS 6701 - telecommunications equipment and telecommunications cabling, specification for installation, operation and maintenance.

Both documents are currently under review and will give guidance to CPR when amended.

Direction for the UK

BS 7671 (18th Edition) is due to be published in July 2018 and will come into effect on the 1st January 2019. Until the 18th edition is published there will be no direction on how to apply a EuroClass. The 18th Edition will defer to BS 6701 for confirmation of where to install telecommunications cables.

BS 6701 Amendment 1 will be published this month (October). The Standard is being amended to empower the reference proposed in the 18th Edition. This means that the EuroClass direction for telecommunications cables within BS 6701 will precede the reference to BS 6701 from BS 7671.

BS 6701 Amendment 1:2017

It is expected that the requirement for installers will be as detailed below:

"For **new installations** and the refurbishment or **extension of existing installations** within the external fire barrier of buildings and other structures, **installation cables** which are subject to the Construction Products Regulations shall, as a minimum, meet the requirements of **EuroClass Cca-s1b, d2, a2**, in accordance with BS EN 13501-6."

"**All other cables** within the external fire barrier shall meet the minimum recommended requirements of **BS EN 60332-1-2**."

And finally:

"The installation of cables **penetrating the external fire barrier of buildings** shall conform to the **BS EN 50174 series of standards**."

In summary, BS 6701 requires all installation cables to be EuroClass Cca-s1b, d2, a2. This is the UK position which builds upon, but does not conflict with, BS EN 50174 standards.

(The above paragraph takes reference from The Fibreoptic Industry Association)

Commercial Impact

It is expected that on publication, the BS 6701 Amendment 1:2017 will state that EuroClass Cca is required. Even if Dca is the minimum requirement we still expect a change from the current requirement of BS EN 60332-1-2 (which is equivalent to Eca).

New EuroClass Dca and Cca cables will incur uplifts in cost to cover the testing and redesign/reconstruction cost the manufacturer has endured. The exact uplift in costs will differ from each manufacturer. However, early evidence from manufacturers suggests potential cost rises of between 20% and 60%.

As unshielded telecommunication cables are the most difficult to construct to meet Cca criteria, these solutions will likely display the greatest uplift. It is therefore expected that following the release of the new standards, the telecommunications cabling market will show a shift in trend towards shielded solutions.

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Revision 1: October 2017