

## Final Countdown for CPR Cable Classification – View from a Notified Body

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### ABSTRACT

The European Construction Products Regulation (CPR) goes along with a number of new rules and requirements for products incorporated in construction works. Even if for cables, these rules are not yet in force, because the relevant product standard EN 50575 is not yet published in the Official Journal of the European Union, both manufacturers and so-called Notified Bodies (being involved in product classification under the CPR), should prepare themselves for implementation.

This paper gives an overview of these new rules and requirements, especially for manufacturers, to pass the last steps of preparation during the “final countdown for CPR cable classification”.

### KEYWORDS

Accreditation, Acidity, AVCP, CE marking, Classification, Construction Products Regulation, CPR, Declaration of Performance, DoP, EXAP, Factory Production Control, FPC, Fire Class, Fire Test, Harmonized Standard, Heat Release, Initial Inspection, Notification, Notified Body, Official Journal of the European Union, Reaction to Fire, Sample Testing, Smoke Density, Type Testing

### INTRODUCTION

With the ongoing growth and establishment of the European Union, more and more different kinds of “rules” are developed and published on the European level. European Directives like the Low Voltage Directive 2014/35/EU or the Construction Products Directive (CPD) 89/106/EEC are examples of such rules. As they are directives, they are binding concerning their objectives and have to be transferred into national law by each member state.

Beside directives, also regulations are issued. These are the *true* laws within the European Union and have to be applied by each member state „as is“, meaning they are binding in a direct way. The European Regulation 305/2011, Construction Products Regulation (CPR) [1] is an example of this. It follows the CPD mentioned above and got effective in April 2011, finally replacing the CPD in July 2013. The goal is to ensure an effective and efficient European Community domestic market by definition of performance requirements for construction products.

Which products are covered by the CPR? According to the regulation, construction products may be placed on the market only if they are made in such a way that – considering proper planning and construction work – they meet specific requirements. Within this definition, a construction product is any product or kit...for incorporation in a permanent manner in construction works...and the performance of which has an effect on the performance of the construction works with respect to the basic requirements for construction works (construction works = buildings and civil engineering work like tunnels, bridges etc.).

Power, control and communication cables are explicitly mentioned in the CPR, unlike the CPD. They are therefore concerned by this kind of regulation for the first time.

It was mentioned above that the products shall meet specific requirements. These are listed in Annex I of the CPR. The main categories (called *essential characteristics*) are:

- Mechanical resistance and stability
- Safety in case of fire
- Hygiene, health and the environment
- Safety and accessibility in use
- Protection against noise
- Energy economy and heat retention
- Sustainable use of natural resources

For cables, only **safety in case of fire** is relevant, covering:

- Reaction to fire
  - Flammability
  - Fire propagation
  - Emissions in case of fire
- Resistance to fire
  - Functional endurance



### OBLIGATIONS OF THE MANUFACTURER

There are several obligations on the manufacturers under the CPR. The prime obligation is to provide a DoP, which means *Declaration of Performance* for the product. The DoP describes the performance of the product concerning the *essential characteristics*, so for cables the reaction to fire and/or resistance to fire as described above. The DoP is based on the applicable harmonized standard, which will be introduced later on.

In addition to the DoP, the manufacturer has to CE-mark the product. The details of the CE label are also described in the accordant harmonized standard. Further obligations of the manufacturers are [1]:

- **No inconsistent data or information** concerning the performance of a construction product (e.g. in promotion material).
- **10 years period of retention** after product placement on the market for technical documentation of performance assessment.
- **Provision of the DoP** (as paper or electronic version) on demand of customers.
- **Assurance of specified performance** of the construction product during its entire life-cycle, realized by application of suitable procedures.
- **Management of recall actions and corrective measures** in case of performance deviations. On deficiencies leading to hazard or danger, the manufacturer has to inform the national administrations.