

Frequently asked questions: Construction Products Regulation (CPR) wire and cable requirements in the EU and the U.K.

The Construction Products Regulation (CPR) provides reaction-to-fire performance requirements for power, telecommunications, data and control and fiber-optic cables manufactured for or imported into the European Union (EU) or the United Kingdom and to be permanently installed in buildings. To comply with the regulation, cables must meet strict testing and quality assessment requirements before they can bear the European CE marking or Great Britain's U.K. Conformity Assessed (UKCA) marking and be used in buildings. To help you understand the CPR, we have compiled the answers to the following frequently asked questions.

Q: What is the CPR?

Regulation (EU) 305/2011 (Construction Products Regulation or CPR) is intended to provide reliable information on construction products' performance and outline harmonized conditions for their marketing and free movement across the EU. The regulation applies to all mandated building products made available or offered in the marketplace for permanent installation in buildings and civil engineering projects. It uses a common approach to the testing and certification of all construction products subject to the regulations of safety in case of fire.

Regulation 305/2011 requirements and mandates are also applicable in Britain.

Q: Which cables are included in the CPR?

Under "Product Type 31 – Power, control and communication cable," the CPR covers all cables, irrespective of their size, shape, design, construction, material, rated voltage, or end-use, intended for permanent installation in buildings and civil engineering works. The CPR includes any cables used to supply electricity and communications in buildings and other civil engineering works. The CPR also covers cable fire reaction performance requirements. Since July 1, 2017, this regulation mandates that cables be CE marked. Beginning Jan. 1, 2023, UKCA marking will also require these exact performance requirements.

Cable performance covered by the CPR includes reaction to fire and the release of dangerous substances in normal operation, dismantling and recycling. The requirements for resistance to fire (circuit integrity cables) are to follow.

Resistance to fire cables (circuit integrity cables) fall under the scope of the CPR but cannot be certified under the CPR until the dedicated harmonized standard has been published in the Official Journal of the European Union (OJ). Therefore, it is not possible to apply a CE marking or issue a Declaration of Performance (DoP) for fire-resistant cables at this time.



Cables not currently included in the scope of harmonized standard EN 50575, and therefore the CPR, are intended for temporary installations and lift cables as well as cables essential for the continuity of power and/or signal supply of safety installations (circuit integrity cables).

In Great Britain, CPR requires all construction products, including wire and cable, to have the UKCA marking.

Q: What are a manufacturer's responsibilities under the CPR in the EU and Britain?

As set out in Article 11 of the CPR, manufacturers shall apply the CE or UKCA markings, generate the DoP, build the product technical file, ensure the stability of the product through documented factory production controls and processes, and undertake routine sample testing, such as annual fire testing.

Application of the CE or UKCA marking follows the drafting of the DoP. It indicates that the manufacturer strictly adhered to all the applicable procedures for creating an accurate and reliable DoP. By applying these markings, the manufacturer also declares that the cable meets all applicable regulations and directives under the CE and UKCA marking systems. However, the CE or UKCA marking on the CPR label would also cover LVD.

Manufacturers must identify the cables, ranges, or families that need to comply with the CPR. They also must engage with the appropriate Notified Body to generate the classification documentation or product certification to issue a DoP and apply the CE marking. The Notified Body types for cable are as follows:

- **AVCP System 1+ (Classes A_{ca}, B1_{ca}, B2_{ca}, C_{ca})** – Notified Product Certification Body
- **AVCP System 3 (Classes D_{ca}, E_{ca})** – Notified Test Laboratory
- **AVCP System 4 (Class F_{ca})** – Manufactured Declaration only, no Notified Body activities

The higher the class, the more complex the testing and the greater the Notified Body's involvement.

Q: What is a Declaration of Performance?

The Declaration of Performance (DoP) is a document drawn up by the manufacturer for every product following regulatory guidelines covered by the CPR. It identifies the product, the contact details of the declaration's entity, the Notified Bodies involved in the process, assessment and verification of constancy of performance (AVCP) and the product's intended use and declared essential performance characteristics. For cables, these include the reaction to fire class and release of dangerous substances. When applicable, it would also contain the resistance to fire classification. By drafting the DoP, the manufacturer assumes responsibility for the conformity and stability of the construction product with the declared performance.

All the information in the DoP is obtained by the manufacturer's strict application of the methods and criteria outlined in harmonized standard EN 50575, as well as by the appropriate involvement of a Notified Body. The manufacturer shall publish the DoP on their website and provide a copy upon request.

Q: Will manufacturers supplying products to the U.K. and EU be required to issue two Declarations of Performance for the same product?

You will need separate declarations since there are two different regulatory markings (CE and UKCA): DoP for the EU and the Declaration of Conformity (DoC) for Great Britain.



Q: What is a Notified Body?

Notified Bodies are entities designated by the European Commission to undertake third-party activities supporting the regulation. The Commission lists Notified Bodies on their New Approach Notified and Designated Organizations (NANDO) Information System website. Manufacturers shall engage with the appropriate Notified Body to provide the product certification, testing, and classification necessary to support a DoP and apply the CE marking.

Q: What is a U.K. Approved Body?

An Approved Body can undertake conformity assessment activities for designated standards in the U.K. UL is an Approved Body for CPR in Great Britain. This allows UL to provide uninterrupted support for customers needing UKCA marking and other global market access services.

Q: What tests are included within the CPR for cables?

EN 50575 defines the appropriate tests for each classification. The classifications are ranked Aca (highest fire performance classification) through Fca (lowest fire performance classification). Tests that define the main classes are mandatory. Tests for secondary classifications (e.g., smoke and acid/corrosive gas emission) are undertaken at the manufacturer's request and, in the case of smoke emission, only if the cable performance in the EN 50399 testing enables it.

The tests are as follows:

- EN ISO 1716 – total calorific content
- EN 50399 – large scale flame propagation – heat release, flame propagation, smoke production, flaming drops
- EN 60332-1-2 – small scale flame propagation – flame propagation on a single vertical cable
- EN 61034-2 (optional secondary class) – smoke emission
- EN 60754-2 (optional secondary class) – acid and corrosive gas emission

All cables must be tested unless their designs are included in TS 50576, Electric cables – Extended application of test results for reaction to fire (EXAP), or Notified Body approved guidance. For EXAP families, TS 50576 or Notified Body guidance informs which samples will be tested to represent the entire EXAP family.

These tests are required for both CE and UKCA markings.

Q: How are cables classified?

Test data generated in the initial type of testing is compared to the performance criteria published in classification standard EN 13501-6 after applying the rules for EXAP families in TS 50576, where appropriate.

The classification can only be obtained by undertaking all the tests for a particular cable or cable family, as stated in EN 50575 and EN 13501-6. Cables are classified in descending order — Aca, B1ca, B2ca, Cca, Dca, Eca, Fca. When considering EXAP families, classification is based on the least good result for each parameter and, when necessary, applying safety margins. Products classified in each class satisfy the requirements of any lower class. A manufacturer may wish to declare a lower performance depending on the market conditions or AVCP system level.

These classification rules apply to both CE and UKCA markings.



Q: What product classifications are required?

The manufacturer determines product classification, based on cable design and materials, national or local regulatory requirements, end-user specifications and market demand. The CPR does not inform what product classifications are required — it only pertains to the CE marking needed for entry into the European market and to the UKCA marking required for entry into the U.K. market.

Q: Are any ongoing or follow-up requirements required for cables under the CPR?

The better the reaction to fire performance, the higher the AVCP system level and the more intensive the manufacturer's responsibilities and Notified Body involvement.

- **System 1+**
 - Manufacturer – factory production control, routine manufacturing testing and annual fire testing.
 - Notified Body – semiannual factory production control assessments, review of annual testing and three-year audit fire testing to reconfirm the certificated performance.
- **System 3**
 - Manufacturer – factory production control, routine manufacturing testing, annual fire testing.
 - Notified Body – no follow-up.
- **System 4**
 - Manufacturer – factory production control and routine manufacturing testing.
 - Notified Body – no follow-up.

These requirements apply to both CE and UKCA markings.

Q: How are cable classifications used?

Usage of the reaction to fire classification can vary by nation, but simplistically, two main approaches to the use of classifications have been adopted:

- Minimum performance requirements for the entire building
- Risk-based approach for specific applications or areas; these requirements may form part of the fire safety engineered solution for the entire building or civil engineering works.

Q: Does the CPR affect any voluntary quality marking or certification schemes?

CE and/or UKCA marking are preconditions to placing cable for construction works on the European and/or U.K. market. They are separate from any voluntary quality marking or certification scheme. A manufacturer may wish to change the cable design to achieve a better fire performance and class, but this may impact compliance with the voluntary certifications.

Q: Does the new U.K. Conformity Assessment vary significantly from the one in place in the EU?

The basic approach to conformity assessment remains the same. The EU and the U.K. use similar essential requirements and conformity modules for the design and production phase. Technical files and standards requirements also remain unchanged, and there are many common steps between the two conformity assessment systems.

The U.K. adopted new directives and regulations, and modified them to introduce:

- A unique marking – United Kingdom Conformity Assessed (UKCA) marking
- References to legislation
- Conformity assessment bodies approved by the U.K.

Q: Can my business rely on a single-source provider to obtain both the UKCA marking and the CE marking?

UL International (Netherlands) (UL NL) is a Notified Body for wire and cable products, and UL U.K. is an Approved Body for wire and cable products, allowing UL to provide uninterrupted support for customers requiring both CE and UKCA markings.

Q: How will products already circulating in the U.K. market be affected, and how do I manage our transition?

The UKCA marking came into effect on Jan. 1, 2021, but companies were given additional time to adjust to the new requirements. Companies are allowed to use the CE marking until the end of 2022. After Jan. 1, 2023, a U.K. Approved Body needs to carry out the required conformity assessment before a UKCA marking may be affixed.

For products that have already been sold and invoiced into the U.K. market before Dec. 31, 2022, the deadline will not be affected, and no further action is required. The U.K. market will recognize a certificate issued by an EU Notified Body up to the deadline.

The CE marking remains the only required mark of conformity for placing wire and cable products in the EU market. A Notified Body can help you to certify your product. Great Britain will accept CE marking in its markets until Dec. 31, 2022.

Q: Will the UKCA marking apply in the Republic of Ireland and Northern Ireland?

In Northern Ireland, the CE marking continues to be used for self-assessed goods and goods which are conformity assessed by an EU Notified Body. The CE plus United Kingdom Northern Ireland (UKNI) marking is used for goods that are conformity assessed by a U.K. Approved Body.

The Republic of Ireland will continue to use the CE marking.

Q: Where can I find additional information to answer my UKCA marking questions?

Construction Products Regulation in Great Britain -

<https://www.gov.uk/guidance/construction-products-regulation-in-great-britain#frequently-asked-questions>

Learn more at <https://www.ul.com/services/cpr-evaluation-services-cables>.



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