A guide to CPR
Construction Products Regulation

Tratos will help you become compliant
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What is the Construction Products Regulation?

THE CONSTRUCTION PRODUCTS REGULATION (CPR) details harmonised (consistent) rules for the marketing of construction products in the EU. It outlines a common technical language to assess the performance of construction products throughout the EU, making sure consistent information is available. With CPR, Industry professionals, public authorities and consumers can compare the performance of products from different manufacturers in different countries.

CPR does not say how or where a product should be used. Instead it deals with the way a product is placed on the market - the methods of assessment and testing, how the performance of a product should be declared and the conformance system of assessment for construction products.

Tratos, one of Europe’s largest independent cable manufacturers, has produced this booklet as a guide to CPR for those in the cable supply chain.
Why is CPR important?

On 1st July 2016, the process began to bring cables within the Construction Products Regulation and the application of the Regulation is presently within a transition period known as ‘co-existence’.

FROM 1ST JULY 2017
all electric cables used for the supply of electricity and for control and communication purposes, which are intended for use in construction works and subject to performance requirements on reaction to fire, must meet European Standard EN 50575 which specifies reaction to fire performance requirements, as well as the test and assessment methods to be used.

CPR affects all products that are intended to be used permanently in construction and civil engineering projects including power cables of all voltages, control cables and copper and optical fibre communication cables.
When will CPR take effect?

The 12-month transition period will end on 1st July 2017. After that date, only products which have a European Classification under the new standard (EN 50575:2014) will be acceptable for sale in the EU. Cables which do not have a European Classification cannot be legally sold in the European market.

From this date, relevant information about a product’s reaction to fire Classification must be printed on the cable packaging, which must also reference the Declaration of Performance. This must be based on the test results from a Notified Body such as BASEC.

A CE mark affixed on the basis of a self declaration is not sufficient evidence of compliance.
What are the changes with CPR?

This comprehensive, new Standard (EN 50575:2014) mandates numerous items of reaction to fire performance to be assessed including heat release, flame spread, smoke production, flaming droplets and acidity. The new requirements under the CPR mean that a cable’s level of performance in terms of reaction to fire must be defined using a common European Classification (Euro classes) system. Release of dangerous substances in normal operation is mentioned in the CPR but are covered by National regulations.

There are now seven Euro Classes determining the reaction to fire performance of cables:

[Diagram showing seven Euro Classes: A, B, C, D, E, F, G, with A being the highest performance and F the lowest]

**Higher performance**  
**Lower performance**

A ca - B1 ca - B2 ca - C ca - D ca - E ca and F ca - A ca being the highest performance (effectively non-flammable, for example bare Mineral Insulated Copper Cable) and F ca the lowest (easily flammable, for example cables having no measurable resistance to the spread of flames).

All Tratos cable subject to the CPR have been tested and meet the requirements of Class C ca or above (Most polymeric electrical cables will fall between classes B2 ca to E ca).

In addition, there are three further classification methods which relate to the amount of smoke produced when a cable burns, the level of acidity of the smoke and also, for particular applications, flaming droplets. Cables in Euro Class B1 ca - B2 ca and C will also deliver the best results regarding the release of smoke, acidity and flaming droplets.
With CPR, the EU has not mandated which classification of performance should be used in a particular application or type of building. This is the responsibility of the Regulator in each Member State – or building specifier, electrical contractor/installer or end user providing it is a higher classification than the Regulator defines. National Standards such as BS 7671 will also give guidance. If it is felt a higher classification is more appropriate for a particular application there is nothing to stop it being specifying as such.

<table>
<thead>
<tr>
<th>Before</th>
<th>From 1st July 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previously Construction Products Directive</td>
<td>Now Construction Products Regulation</td>
</tr>
<tr>
<td>No legal obligation</td>
<td>Legal obligation for cable manufacturers, distributors and importers when product placed on the market for sale</td>
</tr>
<tr>
<td>Previously no mandated testing</td>
<td>Mandatory testing by a Notified Body</td>
</tr>
<tr>
<td>CE Marking voluntary</td>
<td>CE Marking mandatory</td>
</tr>
<tr>
<td>Cable classified on flame spread only</td>
<td>7 classifications of fire performance including heat release and flame spread. 3 additional classifications covering smoke production, acidity and flaming droplets</td>
</tr>
<tr>
<td>No mention of Dangerous Substances</td>
<td>Release of dangerous substances in normal operation now included.</td>
</tr>
<tr>
<td>No AVCP requirement</td>
<td>manufacturer needs to implement a relevant system of AVCP (Assessment and Verification of Constancy of Performance) certification</td>
</tr>
</tbody>
</table>
QUICK QUESTION?

Are some public-sector buildings likely to require a more stringent class of cable than others?

Public-sector buildings for different uses and occupations already have different Reaction to Fire requirements, in principle nothing will change. Local Authorities, Consultants and Insurers can specify a Higher Classification than the legal minimum.

How will it affect you?

Under the CPR there is now a legal obligation placed upon cable manufacturers, distributors and importers at the point that these products are placed on the market. However, the CPR is important to everyone and has implications for the whole of the supply chain as well as the end customer or user. Designers, specifiers, contractors, installers, public authorities, insurers and end users should ensure they have a working knowledge and understanding of what the new Regulation means and how it will affect them. During the 12-month transition period for the application of CPR, those affected by CPR need to ensure that their cable stocks comply. From 1st July 2017, all newly installed cables must fulfil the requirements.

MANUFACTURERS

need to draw up a Declaration of Performance (DoP), in a standard format which must include:

- A unique ID for the specific product Intended uses
- Manufacturers information
- The AVCP (Assessment and Verification of Constancy of Performance) system applied
- A dated reference of the harmonised standard
- The Notified Body used
• The Declared Performance (or NPD if no performance is declared)
• The DoP must be published on the website for 10 years after the product was last sold.

Current Standards, Quality Marks and current National Regulations relating to reaction to fire will no longer apply at the end of the transition period. By that date all manufacturers must have issued their DoP and have attached the CE mark. Regulators and users must also start to define their reaction to fire requirements using the CPR classification system. The addition of the CE marking on the product label or packaging also requires accompanying information about the manufacturer and product. The CE mark is confirmation that the manufacturer takes responsibility for product conformity with performance covered by the DoP. It is not a quality mark. Only DoP-declared performance can be used in technical or commercial documentation.

EN 50575 says:

**CE MARKING AND LABELLING**
The CE marking symbol shall be in accordance with the general principles set out in Article 30 of Regulation (EC) No. 765/2008 and shall be affixed visibly, legibly and indelibly to the product labels affixed to the reels, coils or drums of the power, control and communication cables.

The CE marking shall be followed by:

• the last two digits of the year in which it was first affixed;
• the name and the registered address of the manufacturer, or the identifying mark allowing identification of the name and address of the manufacturer easily and without ambiguity;
• the unique identification code of the product-type;
• the reference number of the declaration of performance;
• the class of the performance declared;
• the dated reference to the harmonized technical specification applied;
• the identification number of the notified body;
• the intended use as laid down in the applied harmonized technical specification.
The CE marking shall be affixed before the construction product is placed on the market. It may be followed by a pictogram or any other mark notably indicating a special risk or use.

**QUICK QUESTION?**

*What does ‘placing on the market’ mean?*

*The term ‘placing on the market’ means the first making available of a construction product on the EU market. This is typically done by the manufacturer or importer.*

**IMPORTERS**

and distributors must ensure product labelling or packaging carries the correct marking and accompanying information. When they supply product under their own brand or name they become subject to the same legal obligations as the manufacturer.

**END USERS**

will be able to easily compare products from different manufacturers and different standards regardless of their country of origin. They should look for the CE mark and the DoP to check the Classification achieved.
QUICK QUESTION?

How can I make sure I am not being sold cable that doesn’t meet CPR?

*Make sure that you understand your legal obligations. check all the paperwork AND double check if YOU ARE unsure with the website of the Notified Body WHERE IT WILL list whose cable HAS BEEN Tested and which Classification it met. REMEMBER ONLY deal with reputable suppliers.*
Here to help

Tratos has always provided strong technical support to its customers, often working with them to create bespoke cable to tackle multiple tasks or cope with particularly hostile environments. Tratos will continue to champion consistently better and safer cable across the industry.

Tratos will keep its customers informed of any developments and is pleased to offer technical advice and assistance with any of its products as the date for compliance with the CPR approaches.

**Tratos is also running free workshops on CPR.** Please get in touch for information on relevant dates.

Speak with the expert

**Peter Waterworth**

will be available to answer any of your questions about Construction Products Regulation.

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_cprbyTratos_
For further information about Tratos visit our website:
www.tratosgroup.com