



CPR (Construction Product Regulation)

¿What is CPR?

CPR is an European Regulation which harmonizes requirements for commercializing construction products in the EU, providing a common technical framework for all member states, ensuring that professionals, public authorities, and consumer have reliable information available.

In the case of fiber optic cable, the CPR regulation provides a classification (Euroclasses) associated with the performance of the cable against fire, and determines the harmonized tests the cables have to pass, as well as the bodies which can certify the cable performance.

Defining the performance level (Euroclass) depending on the type of installation is responsibility of each member state.

Euroclasses

Euroclasses go from A_{ca} (higher performance) to F_{ca} (lower performance). On top, for classes B1_{ca}, B2_{ca}, C_{ca} y D_{ca}, additional subclasses are defined according to the following requirements: amount of smoke produced, fall of droplets and flamed particles during combustion, and acid content of toxicity of smoke produced.

The following chart shows the Euroclasses, and the additional ones defined for fiber optic cable, as well as the applicable tests for its classification.

Euroclasses	Classifier				Additional		
	Gross heat of combustion	Flame propagation	Fire propagation	Heat Release	Smoke	Droplets	Acidity
	EN 1716	EN 60332-1-2	EN 50399	EN 50399	EN 50399 y EN 61034-2	EN 50399	EN 60754-2
A _{ca}	X						
B1 _{ca}		X	- X	- X	- s1	- d0	- a1
B2 _{ca}		X	X	X	s1a	d1	a2
C _{ca}		X	X	X	s2	d2	a3
D _{ca}		X	+ X	+ X	+ s3		
E _{ca}		X					
F _{ca}							

AVCP system (Assessment and Verification of Constancy of Performance)

The regulation enforces to follow an evaluation system which depends of the Euroclass declared, and appoints a series of notified bodies and laboratories approved at European level for product certification.

The AVCP System is divided in types 1+, 3 and 4, and the control points that involve are summarized in the following table



AVCP	1+	3	4
Euroclass	A _{ca} , B1 _{ca} , B2 _{ca} , C _{ca} , D _{ca}	E _{ca}	F _{ca}
Factory production control (FPC)	Manufacturer	Manufacturer	Manufacturer
Additional tests on samples taken in the Factory	Manufacturer	-	-
Determination of product-type	Notified body	Notified laboratory	Manufacturer
Initial FPC System inspection	Notified body	-	-
Continuous surveillance of the FPC System	Notified body	-	-
Tests on samples taken before market introduction	Notified body	-	-

Declaration of Performance (DoP)

Once the notified body provides the certification, and as a strict requirement for commercializing a cable, the manufacturer must issue a Declaration of Performance, which specifies the Euroclass and additional subclasses, as well as manufacturer data. The content of the DoP is defined in the CPR regulation, and must be available without additional cost for the client for a period of ten years.

CE Marking

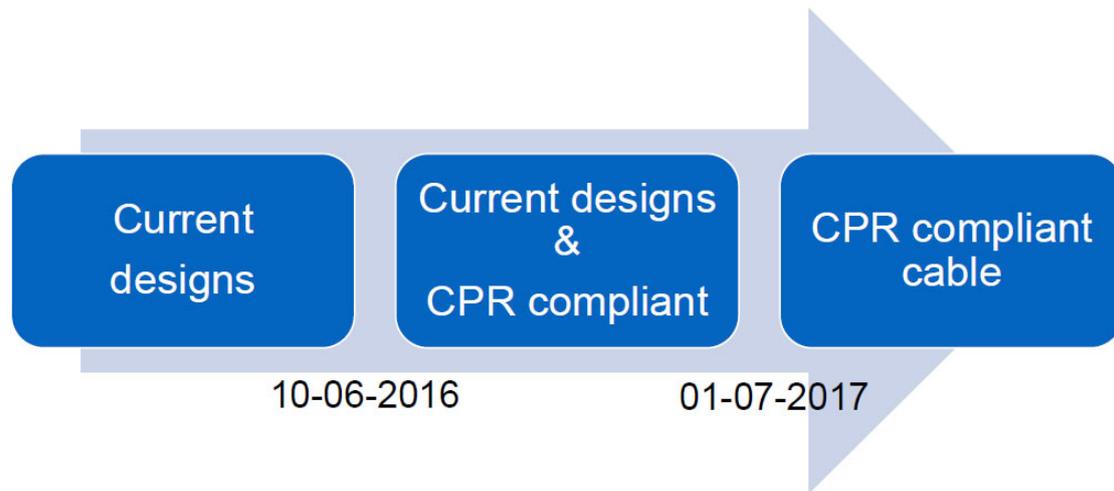
The manufacturer can place the CE marking only in the products for which it has issued a declaration of performance, and therefore have been categorized.

CE marking consists, in the case of fiber optic cable, in a label containing information regarding the product, the manufacturer, and the Euroclass, and has to be placed in the packaging.

Dates

CPR regulation can be applied starting June 10th 2016, and is mandatory to follow starting from July 1st 2017. From that date, only fiber optic cables with CE marking can be placed in the market

In the Spanish market, effective October 4, 2020 the minimum requirement for indoor fiber optic cables will be Dca, s2-d2-a2 according to ECE/983/2019.



TELNET and CPR

TELNET is working in all necessary changes to adapt its cables to the new regulation. For any question, do not hesitate to contact us at: telnet@telnet-ri.es