FLASH

HUBER+SUHNER AG
BU FO Cable
Robert Sporn
Telephone +41 71 353 4814
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www.hubersuhner.com

TRANSPOSITION OF THE CONSTRUCTION PRODUCTS REGULATION AT HUBER+SUHNER

Approval of HUBER+SUHNER fiber optic cables as construction products

As of 01.07.2017, cables placed on the market as construction products must comply with Regulation No. 305/2011 [1] of the European Union. This Construction Products Regulation regulates the requirements imposed on cables in terms of their reaction to fire. The cables concerned are those that are permanently installed in construction works (constructions above and below ground level).
Switzerland has on account of bilateral relations adopted this European Regulation and written it into national law and national regulations. As a manufacturer of fiber optic cables, HUBER+SUHNER started to work on the testing and classification of all relevant cables as early as 2015. Detailed hereafter are the key corner points of the Regulation, together with an explanation of its transposition at HUBER+SUHNER.

Placing of cables on the market

The transition phase, the so-called coexistence period, for power cables, control cables and communications cables has been running since 10 June 2016. In the transition phase, the provision of a performance declaration and CE marking is an optional means for placing cables on the market (cf. figure 1). On 1 July 2017, the coexistence period ends, and the provision of a performance declaration and CE marking becomes mandatory.

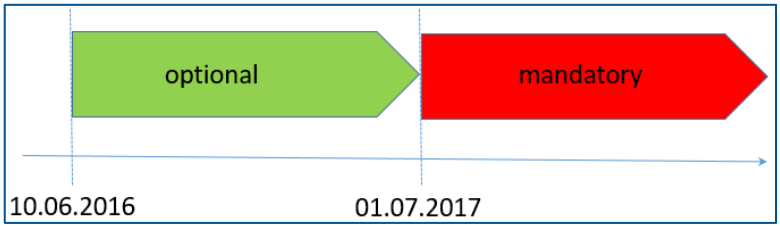

Figure1: Coexistence period for cables pursuant to the Construction Products Regulation

Placing on the market versus use

The Construction Products Regulation regulates the placing of the product on the market (making it available on the market for the first time) and each further instance of making the product available on the market in the European Union, and not its use.
The European countries concerned are tasked with deciding which product may be deployed with which classification and for which use. Therefore it is possible that in the various different countries, in the same case of use, products with a different classification might have to be deployed. An article from the working group CPR-cable on the use of particular classes of cables in Switzerland is due to appear in a bulletin issued by Electrosuisse in the spring of 2017 [4].

Classification

The objective of the Construction Products Regulation is to increase safety in buildings and to ensure the protection of people's health. In terms of the fire reaction of cables, the product standard EN 50575 [2] defines the testing methods to be applied and standard EN 13501-6 [3] sets out the criteria for classification (cf. figure 2).

Main class		Additional class		
A_{ca}	Heat release	-		
$B1_{ca}$	Heat release Flame propagation	s1a s1b	d0	a1
$B2_{ca}$		s1	d1	a2
C_{ca}		s2		
D_{ca}		s3	d2	a3
E_{ca}	Flame propagation	-		
F_{ca}	-	-		

Smoke generation | Flaming drops | Acidity of gases

Increasing requirements

Figure 2: Classification of fire reaction; Source: Bulletin 11/2016 [4]

Each cable is divided into the corresponding class based on the results obtained.
D_{ca}-s2,d2,a2 is an example of a complete classification.

Performance declaration

For every construction product that is placed on or made available on the market, a performance declaration must be provided. The performance declaration for cables must contain the following:

- manufacturer and address
- clear identification number of the product
- the system for the assessment process
- the harmonised standard, together with the date of issue
- the declared performance in the form of classification
- intended use foreseen
- where applicable. identification number of the notified body
- manufacturer's legally valid signature

HUBER+SUHNER plans to make the performance declarations available online. Detailed information on the implementation of this process will be provided at a later date.

CE marking

No CE marking is required for placing construction products on the market in Switzerland. Since HUBER+SUHNER supplies cables to various different EU countries, all fiber optic cables will have a CE marking. EN 50575 [2] sets out the terms of reference for the marking that must be placed on the cable, or on the packaging, or on the label, or on a combination of these.
Constituents of the marking on the cable:

- manufacturer's name
- clear identification number of the product
- fire reaction class

Constituents of the marking on the packaging and/or on the label:

- CE mark
- manufacturer's name
- clear identification number of the product
- fire reaction performance class
- year of manufacture
- further information

HUBER+SUHNER cables with certification

The following families of fiber optic cables are intended to be certified as construction products

- Optipack cables (simplex and breakout cables)
- FTTH cables
- patch cables and breakout cables
- multi-fiber loose-tube cables
- riser cables
- simplex and duplex cables

Our aim is to offer cables certified in accordance with the Construction Products Regulation as of the 2nd quarter 2017.

More information

More information on the content of the Construction Products Regulation can be found in the January 2016 Construction Products Regulation "Application Note" via the following link:
http://www.hubersuhner.com/en/Special-Pages-Visible/Construction-Products-Regulation-(CPR)
Reference [4] provides comprehensive information on placing cables on the market in Switzerland under the Construction Products Regulation.

References

[1] Regulation (EU) No. 305/2011 of the European Parliament and Council of 9March 2011.
[2] EN 50575:2014, power cables and electric power lines, control and communications cables – cables and lines for general use in construction works as far as concerns the requirements in terms of fire reaction.
[3] EN 13501-6:2014, Classification of construction products and building elements according to their fire reaction - Part 6: Classification using data from reaction to fire tests on electric cables.
[4] Placing of power, control and communications cables on the market, Bulletin 11/2016 from Electrosuisse, http://www.bulletin-online.ch/de/themen/artikel-detailansicht/news/17167-inverkehrbringen-von-energie-steuer-und-kommunikationskabeln.html