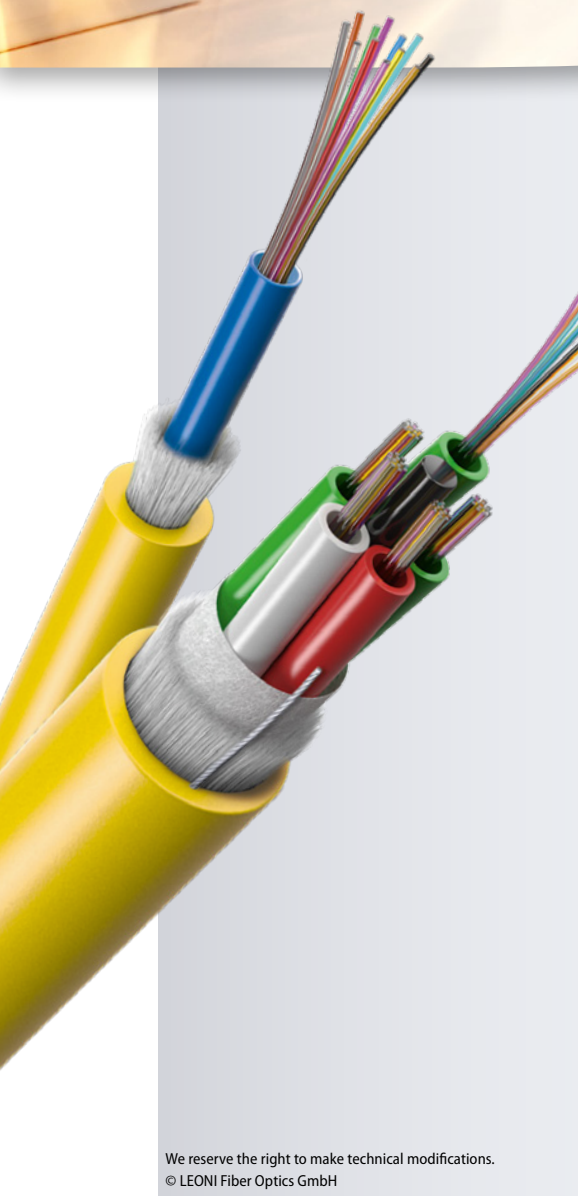




# Fireproof cables for use in buildings

in accordance with the  
EU Construction Products Regulation



## On the safe side with LEONI

The Construction Products Regulation was introduced for the purpose of saving lives, inhibiting fires and minimising consequential damages.

Since 1 July 2016, all cables permanently installed in the building are also subject to the Construction Products Regulation.

The regulation prescribes a new classification of cable according to different criteria that has been in effect since then. Based on these criteria, organisations like ZVEI have issued recommendations for the cables and fire classifications to be used.

For instance, the installation of cables in fire class B2<sub>ca</sub> s1 d1 a1 is recommended for buildings with **very high** safety requirements and cables in fire class C<sub>ca</sub> s1d1a1 for buildings with **high** safety requirements.

LEONIs' FiberConnect® product portfolio has been classified for the wiring of buildings depending on the cable type. Furthermore, we extended our offer by a line of new cables classified B2<sub>ca</sub> and C<sub>ca</sub> to meet demand.

You will find more information about EU Construction Products Regulation as well as declarations of performance for according LEONI products on our website: <https://www.leoni.com/en/cpr/>

# Fire classes and the according product portfolio

The European Union did not break down yet the legal requirements for new building projects, based on the new fire classes of the Construction Products Regulation.

In the absence of binding legal requirements organisations like ZVEI (German Electrical and Electronic Manufacturers' Association) prepared a recommendation, combining the new fire classes with the additional properties and assigning these to the safety requirements of the building.

## Recommendation of the ZVEI for the fire classes to be applied for cable under the Construction Products Regulation

Fire classes				Safety requirement in the building
Flame propagation heat development	Smoke production/ smoke density	Flaming droplets	Acid production/ corrosivity	
A <sub>ca</sub>	–	–	–	Very high
B1 <sub>ca</sub>	–	–	–	Very high
B2 <sub>ca</sub>	s1	d1	a1	Very high
C <sub>ca</sub>	s1	d1	a1	High
D <sub>ca</sub>	s2	d2	a1	Moderate
E <sub>ca</sub>	–	–	–	Low
F <sub>ca</sub>	–	–	–	None

The Business Unit Fiber Optics offers a wide range of cable types for the different safety requirements in buildings

Below you will find a selection of the most important cable types and their declared fire properties

Class	Smoke	Acidity	Droplets	Type	Composition	No. of fibers	LEONI order no.
B2 <sub>ca</sub>	S1A	A1	D0	I-B(ZN)BH NN JF	Dry core multifiber loose tube cable	2-24	84111
	S1A	A1	D1	I-B(ZN)BH NX12 1.6 JF	Twisted dry core multifiber loose tube cable	12-144	84180
	S1A	A2	D1	I-F(ZN)H(ZN)H 12... 3.0/4.5	Multifiber connectors cable with double cladding	12	84182
C <sub>ca</sub>	S1A	A1	D1	I-B(ZN)H NX12 1.6 JF	Twisted dry core multifiber loose tube cable "slim line"	12-144	84181
	S1A	A1	D1	I-F(ZN)H(ZN)H 24... 3.8/5.4	Multifiber connectors cable with double cladding	24	84182
	S1A	A1	D1	I-F(ZN)H NN UV	Multifiber connectors cable	8-24	84171
D <sub>ca</sub>	S1A	A1	D1	I-B(ZN)H JF GFK UV	Robust multifiber connectors cable with dry core loose tube	12, 24	84126
	S2	A1	D2	I-F(ZN)HH NNXMM 3.0	Twisted multifiber connectors cable	16-144	84021
	S2	A2	D2	I-V(ZN)HH 2X 1F STB900 2.1	Breakout cable flat	2	84017
	S2	A2	D2	I-V(ZN)H NN STB900	Mini breakout cable	2-24	84026
	S2	A1	D2	U-DQ(ZN)BH NN 1750 N	Multifiber loose tube cable	2-24	84025
	S2	A1	D2	U-DQ(ZN)BH NN 2500 N	Multifiber loose tube cable	2-24	84095
	S2	A1	D2	U-D(ZN)BH NN FS ZB	Multifiber loose tube cable with functional integrity	2-24	84040
E <sub>ca</sub>	S2	A1	D2	U-DQ(ZN)H(SR)H NN FS UV	Multifiber loose tube cable with corrugated steel jacket and functional integrity	2-24	84047
	NPD	NPD	NPD	I-V(ZN)HH 2X 1F STB900 2.5	Breakout cable flat	2	84011
	NPD	NPD	NPD	I-V(ZN)HH 2X 1F STB900 2.8	Breakout cable flat	2	84012
	NPD	NPD	NPD	I-V(ZN)HH NN STB900 2.1	Breakout cable	2-24	84013
	NPD	NPD	NPD	U-DQ(ZN)BH NN 1000 N UV	Multifiber loose tube cable	2-24	84022
	NPD	NPD	NPD	U-DQ(ZN)BH NNXMM 4000 N	Twisted multifiber loose tube cable	24-144	84116
	NPD	NPD	NPD	U-DQ(ZN)BH NNXMM 6000 N	Twisted multifiber loose tube cable	4-144	84033

Classification of further cable types on request.

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