Construction Products Regulation (CPR)

All communication cables intended for permanent installation in building structures must be manufactured and evaluated in accordance with the harmonized European standard EN 50575 and labelled with a CE marking pursuant to the EU Construction Products Regulation 305/2011 since 1 July 2017.

What does CPR imply?

- Cables placed on the market as construction products must comply with Regulation No. 305/2011 [1] of the European Union
- CPR regulates the requirements on cables in terms of their reaction to fire
- The regulations pertain to cables that are permanently installed in construction works (both above and below ground level)

What countries require CPR?

- All countries in the European Union are requested to convert the new requirements into national regulations
- Other countries will adopt the regulations (For example, Switzerland)

Why is CPR required?

- CPR provides a harmonized set of standards so customers can easily confirm that cables meet the more stringent fire safety requirements in European standard EN 50575.
- The LSZH certification is no longer consider adequately comprehensive to measure the fire safety performance of cables in the EU. However, all RFS CELLFLEX and RADIAFLEX cables with flame retardant jacket are still compliant to all applicable IEC fire safety standards that are used outside the EU countries

RFS flame retardant CELLFLEX® coaxial cables and RFS RADIAFLEX® radiating cables closely follow all legal and regulatory requirements notably with regard to fire safety aspects including the requirements defined by the European Construction Product Regulation (CPR) 305/2017.

The directive defines that both, coaxial feeder and radiating cables manufactured at RFS Hannover, in stationary in-building installations are subject to EU construction product regulation regarding CPR fire safety requirements according to EN50575 and classification according to EN13501-6. CPR covers the following test standards and test criteria:

CPR Classification

B2ca Cca Dca Eca

IEC 60332-1-2	Flame Spread	≤ 425 mm	≤ 425 mm	≤ 425 mm	≤ 425 mm
EN50399	Flame Spread [m]	≤ 4.5 m	≤2.0 m	-	-
EN50399	Total Heat Release [MJ]	≤ 15 MJ	≤ 30 MJ	≤ 70 MJ	-
EN50399	Peak Heat Release [kW]	≤ 30 kW	≤ 40 kW	≤ 400 kW	-
EN50399	Fire Grow Rate [W/s]	≤ 150 Ws-1	≤ 3000 Ws-1	≤ 1300 Ws-1	-
		Additional Classification			
EN50399	Smoke Emission	s1, s2, s3	s1, s2, s3	s1, s2, s3	n.a.
EN61034	Smoke Density	s1a, s1b	s1a, s1b	s1a, s1b	n.a.
EN60754-2	Corrosivity	a1, a2, a3	a1, a2, a3	a1, a2, a3	n.a.
EN50399	Burning Droplets	d0, d1, d2	d0, d1, d2	d0, d1, d2	n.a.

Particularly, the individual subclasses d0, d1 and d2 describe the level of droplets in case of a fire. Burning particles might ignite other cables or construction elements. Only class d0 avoids any kind of burning particles to ensure the highest level of safety – particularly important for installation in buildings and tunnels.

CELLFLEX Feeder Cable CPR Class

CPR-Compliant Cables and Their CPR Class

Download the complete list

Declaration of Performance (DOP)

Declarations of Performance plant Hanover

Declarations of Performance plant Suzhou

Product Datasheets

CELLFLEX® Feeder JFN

CELLFLEX® Feeder CPR

Brochures and Press Releases

RFS Passive DAS Selection Guide - High-Performance Indoor Solutions

Product Release 08/2017

Press release 06/2017

My e-catalog

CPR feeder types	
LCFS114-50CPR	B2ca s1a d1 a1
LCFS114-50CPR+	B2ca s1a d0 a1
LCF158-50CPR	B2ca s1a d0 a1
JFN feeder types	
LCF14-50JFN	B2ca s1a d1 a1
SCF38-50JFN	B2ca s1a d0 a1
SCF12-50JFN	B2ca s1a d1 a1
LCF12-50JFN	B2ca s1a d1 a1
LCF78-50JFNA	B2ca s1a d1 a1
LCFS114-50JFNA	B2ca s1b d2 a1
LCF158-50JFNA	Cca s1a d2 a1
J feeder types	
All SCF/LCF jacket option «J»	F, not classified since none of the CPR classes «A» to «E» will be met

RADIAFLEX Radiating Cables	CPR Class
CPR radiating cables	
RLK, ALF types 1/2"	B2ca s1a d0 a1
RLK, RLF, RAY types 7/8"	B2ca s1a d0 a1
RLK, RLF, RAY types 1-1/4"	B2ca s1b d0 a1
RLK, RLF, RAY types 1-5/8"	B2ca s1a d0 a1
JFL radiating cables	
RLK, ALF types 1/2"	Cca s1a d0 a1
RSF12-50JFL	Cca s1a d2 a1
RLK, RLF, RAY types 7/8"	Dca s1b d2 a1

RLK, RLF, RAY types 1-1/4"	Dca s1b d2 a1
RLK, RLF, RAY types 1-5/8"	Cca s1b d1 a1
JFN radiating cables	
RE60 radiating waveguide	Cca s1 d2 a1
RLK, ALF types 1/2"	Cca s1a d2 a1
RCF12-50JFN	Cca s1b d2 a1
RCF78-50JFNA	Cca s2 d1 a1
RLK, RLF, RAY types 7/8"	Dca s1b d2 a1
RLK, RLF, RAY types 1-1/4"	Dca s1b d2 a1
RLK, RLF, RAY types 1-5/8"	Dca s2 d2 a1

RFS produces cables at different locations. Depending on the production site, there are different declaration of performance documents. Please check the folder DOP plant Hanover and DOP plant Suzhou.