



Erse Kablo's Quality and Reliability is Getting Registered by Construction Products Regulation (CPR)

Increasing population in the world, developing technologies and industrialization sourced general public use trade centers, high buildings, hotels, schools, hospitals, subways bring risk of fire and pecuniary & non-pecuniary costs along with.

The first way of preventing and minimizing the loss of life and property costs, passes by eliminating or reducing facts that can cause fires. It shouldn't be forgotten that the golden rule of fire protection is preventing fire eruption rather than extinguishing it.

The reaction and resistance to fire characteristics of the materials which are used in cables in construction products and the one that is basic of electrical systems, came in to prominence. Cables keep operating at possible fire moment, providing continuity and minimizing the emission of harmful, poisonous gases which negatively affect human health as much as possible, producing the reaction and resistance to fire class with high grade materials which become even more important for safety of life and property.



**Your Life and Property Safety
is Important for Us**



For cable sector, **CPR (Construction Products Regulation)** contains the requirements of the harmful substances emission with reaction to fire and fire resistance performance of the power, control and communication cables used in any construction in fixed installations, including building and substructure. Besides, it necessities the declaration of performance against fire and CE marking of the cables used in constructions.

As only CE declaration is required in accordance with LVD (Low Voltage Directive) for cables for free movement in European Union and manufacturer's declaration is accepted for this directive, Declaration of Performance (DoP) has been obligatory for adding CE marking after CPR.

For cables, EN 50575 standard will be compulsory starting from the first of July, 2017 and the companies which will make cable sales or distribution, will legally be able to request from cable manufacturers to prepare Declaration of Performance (DoP) belonging to the product and putting CE marking on the product.

Basis necessities of CPR for cables:

- 1. Supporting safety requirements at fire condition**
 - Reaction to fire performance (EN 50575 and 13501-6)
 - Resistance to fire performance (P and PH classification)
- 2. Supporting hygiene, health and environment requirements**
 - Emission of dangerous substances

In 2015 July, EN 50575 standard has been published which determines CPR's control, communication and power cables' reaction to fire performance criterias and test methods of these criterias. This standard organises the performance classes without getting on a cable based performance limitation and competency criterias belonging to these performance classes.



Erse Kablo Shows Its Difference with New Construction Products Regulation (CPR)

EN 50575 standard refers to test standards below,

EN 13501-6: Fire classification of construction products and building elements - Part 6: Classification using data from reaction to fire tests on electric cables.

EN ISO 1716: Reaction to fire tests of products - Determination of the gross heat of combustion (calorific value).

EN 50399: Common test methods for cables under fire conditions - Heat release and smoke production measurement on cables during flame spread test - Test apparatus, procedures, results.

EN 60332-1: Tests on electric and optical fibre cables under fire conditions.

EN 60754-2: Tests on gases evolved during combustion of materials from cables.

EN 61034-2: Measurement of smoke density of cables burning under defined conditions.

Reaction to Fire Classification and Test Methods (EN 50575)

Reaction to Fire Performance Class	TEST METHODS				
	EN ISO 1716	EN 50399 ^a	EN 60332-1-2	EN 61034-2 ^c	EN 60754 ^{c,d}
A _{ca}	X	-	-	-	-
B1 _{ca}	-	X ^b	X	X	X
B2 _{ca}	-	X	X	X	X
C _{ca}	-	X	X	X	X
D _{ca}	-	X	X	X	X
E _{ca}	-	-	X	-	-
F _{ca}	No performance determined.				
INSTRUCTIONS					
a	EN 50399 contains all the information previously preferred to as FIPEC20 Scenario 1 and FIPEC20 Scenario 2.				
b	Special conditions of test apply in EN 50399 to Class B1 _{ca}				
c	Additional classification tests.				
d	EN 60754-2 contains all the information previously contained in EN 50267-2-3				
FIPEC	Fire Performance of Electric Cables				



In sum:

We conclude that;

- A_{ca} class cables are limited according to heat occurred as a result of combustion,
- B1_{ca}, B2_{ca}, C_{ca} ve D_{ca} classes are the various classes of cable types decreasing fire risks (in regard to heat propagation, flame propagation speed, smoke density, dripping characteristic during burning and corrosive gasses occurrence),
- E_{ca} class cables are classified according to only for flame propagation on one cable,
- For F_{ca} class cables, no fire performance are demanded.

Assessment and Verification of Constancy of Performance (AVCP)

In order to publish DoP concerning power, control and communication cables which was classified according to En 13501-6 and Reaction classification against fire tested according to test methods, Assessment and Verification of Constancy of Performance (AVCP) procedures (as System 1+, System 3 or System 4) have to be applied. After these procedures are fulfilled, CE marking could be enclosed on the product.

CE Marking

After providing the requirements in EN 50575 standard, CE marking and additional information is enclosed on cable label like the sample seen below.

The sample of CE marking on product label for products subjected to AVCP System 1+


CE
1783
ERSE KABLO SAN. ve TİC. A.Ş.
Ortaköy Sanayi Bölgesi Elif Sk. No:12
Selimpaşa - Silivri / İstanbul - TÜRKİYE
17
XXXX
EN 50575:2014+A1:2016
HALOGEN FREE SIGNAL CONTROL CABLES
LIHCH
Supply of electricity in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke
Reaction to Fire : C_{ca-s1,d1,a1}
Dangerous substances : None

Declaration of Performance (DoP)

Every company legally has to prepare a Declaration of Performance (DoP) for their product, comprising EN 50575 standard containing product code, purpose of use and reaction to fire performance information, before putting on related market.

DoP Sample:

Declaration of Performance


ersekablo.com.tr

DoP Number:XXXX

1. Identification of the product-type:
HALOGEN FREE SIGNAL CONTROL CABLES

2. Description of product type:
LIHCH

3. Intended uses:
Supply of electricity in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke

4. Contact address :
**ERSE KABLO SAN. ve TİC. A.Ş.
Halil Rifat Paşa Mh. Yüzer Havuz Sk. No:5-9
Şişli, İSTANBUL / TURKEY
Tel: +090 212 320 26 80
Fax: +090 212 320 35 83
e-mail: info@ersekablo.com.tr**

5. System or systems of assessment and verification of constancy of performance of the construction product :
System 1+

6. Notified product certification body no:
1783

7. Declared performance

Essential characteristics	Performance	Harmonized technical specification
Reaction to fire	C_{ca}-s1,d1,a1	EN 50575:2014
Dangerous substances	None	

8. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7. This declaration of performance is issued under the sole responsibility of the manufacturer identified of the manufacturer identified in point 4.

Signed for on behalf of the manufacturer by:

Name and function Date Signature

ERSE KABLO SAN. ve TİC. A.Ş.

Merkez Ofis / Head Office Halil Rifat Paşa Mh. Yüzer Havuz Sk. No: 5-9 Şişli / İstanbul - Türkiye T: +90 212 320 26 80 (pbx) F: +90 212 320 26 84 info@ersekablo.com.tr	Fabrika / Factory Ortaköy Sanayi Bölgesi Elif Sk. No: 12 Silivri / İstanbul - Türkiye T: +90 212 734 37 00 (pbx) F: +90 212 734 37 01 sales@ersekablo.com.tr
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Market Observation and Inspection

At different parts of the constructions, which cables are to be used providing reaction to fire performance, is being defined with regulations and laws. In our country, this job has been given to Ministry of Environment and Urbanisation. Within this scope, in the regulation about protection buildings from fires, in sections about electric installment and cables, the revisions have to be made as part of CPR. Also becoming conscious about this subject for individuals and companies who give engineering service, making right decisions about choosing material, will hinder loss of life and property that can occur in later periods and will avoid possible legal sanctions as well. By the ministry, actions will be taken about risky construction products by making market observation and inspection. If the manufacturer does not take necessary corrective precautions during the specified period, by the ministry, it is stated that all kind of precautions will be taken for prohibiting and delimiting the construction product kept in the country market, recalling or with drawing the construction product from the market.

Prefer Our Cables Having High Reaction to Fire Performance to Reduce the Risk to Minimum



CPR which will be necessarily implemented starting from 1 July 2017, if it brings CE marking on product labels and Declaration of Performance (DoP) for the manufacturers or the distributors who wants to sell or distribute cables to European Union countries, as Erse Kablo, this subject is being evaluated by us as importance of safety of life and property of our partners.





By evaluating CPR in the frame of our quality perspective to our products, with reaction and resistance to fire standards in the most comprehensive way, our mover and shaker leader company in weak current cable sector in this regard, we are honored to share with you valuable partners that, both the performance declaration tests of our cables in certified laboratories are proceeding at full steam and our laboratory investment, which came to a state of equipped with our international standards and latest technology devices, has been completed. Thus, by carrying out EN 50399, EN 60332-1-2 and additional classification tests (EN 61034-2 and EN 60754-2) in our laboratories, we will be able to both provide performance continuity and present you faster solutions. With our sustainable quality awareness, with caring standards, we will continue to inform our partners, domestic/foreign customers and our sector with technical bulletins and educations about CPR.



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