wired

your quarterly cable newsletter

FROM FS cables

THE CONSTRUCTION PRODUCTS REGULATION

INDEPENDENTLY VERIFIED

HOW DOES IT AFFECT YOU?

Most cables designed for use within domestic, residential and commercial buildings are now subject to the Construction Products Regulation (CPR), covered by EN50575. This became a legal requirement in July 2017 so it is important you understand how to stay compliant.

EN50575 enables designers and installers to consider the contribution that cables make to the spread of fire. Cables are a particular concern as they run between rooms and floors, above ceilings and are often made from flammable materials. They can also be a source of ignition if badly installed, damaged or faulty.

THE CLASSES

The regulation classifies products into one of seven classes, but realistically only five classes will apply to cables. Classes Fca and Eca undertake a basic vertical flame test to EN60332-1-2. If there is a high level of flammability, it would be classified to Class Fca. However, for the cable to meet the requirements of Class Eca, the same test has to be conducted with limited flammability by an authorised test house, known as a Notified Body (NB). Tests by NB's carry a significant cost. FS Cables have invested in a test rig to EN60332-1-2 to enable us to understand how cables will perform and where appropriate, classify to Class Fca.

Some cables have many different core combinations and each size may have to be tested individually. Costs can quickly add up therefore many products may only be classified to Class Eca for economic reasons.

Classes Dca, Cca and B2ca also apply to cables. Like Class Eca, the tests are conducted by a Notified Body but could cost tens of thousands of pounds to classify per group of cables. At Classes Cca and above, the factories manufacturing the cable will be regularly audited and cables retested by an approved third party at an additional cost.

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01727 840 841 01727 840 842 sales@fscables.com

...CONTINUED FROM COVER

It is unlikely that many, if any, cables will meet the requirements of Class B1ca and Aca, simply due to the materials they are made of.

It is important to note that at the moment, CPR-recognised products can be used, whatever their classification. However it is up to the designer, specifier or installer to satisfy themselves that the products chosen are appropriate for the application. When specifying cable, take care to assess the risk of fire within a building and the potential ease of evacuation. Airports, hospitals, prisons, tunnels and high-rise buildings all offer their own unique challenges and should be assessed individually.

In some parts of Europe, the local regulatory body is defining which class should be used in a specific application, however in the UK this is yet to happen. The publication of BS 6701:2016+A1:2017 gives specifiers and consultants a set of guidelines for telecommunications cables and could be used to form the basis of a commercial contract, although this is completely optional at this stage.

The publication of the 18th Edition of the IET Wiring Regulations later this year may give more guidance, but for now specifiers and installers need to ensure the cables they select are appropriate for the fire risks in the building or application.

STAY COMPLIANT

So what can you do to stay compliant? If the cable you purchase is intended for permanent installation within a domestic, residential or commercial building, or any other civil structure, a Declaration of Performance (DoP) should be available if the product has been classified. This document shows critical information such as manufacturer's name, product type and class met.

Full scale fire test to EN50575

By law, manufacturers or anyone importing cables from outside the EU need to keep records of CPR compliant cables sold and be able to provide DoP documentation for up to 10 years after it was first sold. If purchasing FS Cables' own label CPR compliant cable from us, you can easily download your CPR documentation straight to your mobile, tablet or desktop through our website:
www.fscables.com/cpr-downloads

The cable itself does not have to be printed or embossed to show CPR compliance, however the regulation is very clear that the packaging (usually a drum, spool or box) must carry specific information, almost certainly on a label. This will include the CE mark, DoP reference and unique product type. All FSC-marked cables will carry a batch number to give full traceability about when and where the cable was made and also the materials used to manufacture that specific batch.

As part of the commitment to meet current regulations, FS Cables list hundreds of CPR-compliant cables online, such as Alternative to Belden, structured wiring, fibre, coax, signal & control and power cables. All products are held in stock for next working-day delivery.

MYTHS & **FAQs**

1. SOME CABLES WILL BE BANNED
False. Class F covers cables that burn too much to meet Class E, however they can still be used if the building owner or specifier accepts the performance.

2. BREXIT MEANS CPR WONT APPLY TO US
False, the British government has made it law and it is very unlikely it will be repealed in view of recent fire disasters.

3. FIRE ALARM CABLES ARE NOT COVERED
Currently no fire-resistant cables are covered by CPR, this will come in a later amendment or standard over the next few years. This includes fire alarm cables such as the FP100, FP200, FP400 etc. and all look-a-like products.

FOR MORE INFORMATION, VISIT:
WWW.FSCABLES.COM/CPR

NEWS

- ✓ ORDER ONLINE
- ✓ ACCESS PRICING
- ✓ IMPROVED SEARCH

NEW WEBSITE LAUNCH

FS Cables has launched its brand new website www.fscables.com

Following extensive redesign, the new site allows users to place orders online and access live pricing, the all-important Declaration of Performance (DoP) for CPR compliance and technical data for over 4,000 products.

The site's refreshed and simplified look combines enhanced product data, improved usability with new search options and optimisation for mobile and tablet devices, making it easier to find the cable you need - even when out on site.

Many of the unusual or specialist cables are available online, including data, coaxial, signal and control, industrial automation, high temperature cables and more. Many cables have been independently tested for CPR compliance and DoP documents can be quickly and easily downloaded using the dedicated CPR search tool.

Finding the right cable has never been easier with the site's highly-improved search function. Search results can be refined in a few simple clicks by filtering certain cable characteristics such as number of cores or pairs, conductor size, sheath material, screening, armouring and more.

By signing up for an online account, users can access live pricing, account information and order history even

out of office hours. This resource can also be used to better manage ongoing and future projects by building and saving online quotes.

Place an order by 4:30pm for next working-day delivery to most of the mainland UK, free on orders over £100. Take advantage of these benefits today by registering your details at: **www.fscables.com/signup**

REGISTER YOUR DETAILS TODAY:
WWW.FSCABLES.COM/SIGNUP

EDITORIAL

Welcome to the Spring edition of Wired. The year has got off to an interesting start with a steady rise in the price of copper. Since January 2016, it has risen over $900 each year to reach a 4 year high with signs it could go even higher. This is partly due to world economic growth and partly due to the increase in electric vehicles.

Other raw materials are also increasing, with plastics seeing some significant increases as oil, having doubled since its low in January 2016, is likely to rise further rather than fall back - pushing plastics higher still.

The confusion and ignorance surrounding CPR is frustrating to say the least. It is fair to say that not enough information was available at launch and not enough time has been allowed for the introduction. Here at FSC, we have been busy testing products in our own lab to better understand how they behave in a fire situation. Where appropriate, they are then sent to an independent UK test house for official testing. We have also audited significant production facilities to ensure compliance, as CPR is far more than just a test - it's an entire process. It's great to see we now have stock of over 550 compliant products to Class Eca or above and are busy adding more.

The warehouse has seen an investment of around £250,000 to improve the cutting and packing space with better staff facilities and a much nicer collections area for customers. If you need cable in a hurry or are passing by, please drop in and we'll be happy to show you around.

Best wishes,

Jon Herbert
jon@fscables.com

FEATURE

THE ANTENNAX™ RANGE

Telecommunications tower

The Antennax™ range of coaxial cables are high quality alternatives to Times Microwave Systems LMR® and Andrew Cinta®.

HIGH PERFORMANCE

Antennax cables are sweep tested to 5.8 GHz to ensure competitive performance across the operating spectrum. These cables are used where ultra-low loss and superior performance is required, replacing traditional corrugated coax and 'RG' types such as RG58, RG8, RG223 and RG214.

Antennax is available from stock with a polyethylene (PE) waterproof jacket or a Low Smoke Halogen Free (LSHF) jacket to provide increased fire safety.

DEMANDING APPLICATIONS

Antennax provides ultra-low loss performance from transceiver to aerial or dish. Developed for LMR (Land Mobile Radio), microwave, satellite, VSAT and communications, these cables are manufactured to ensure optimum levels of performance. 50 Ohm & 75 Ohm versions are stocked to cover a wide range of needs.

INTERNATIONAL STANDARDS

The Low Smoke Halogen Free (LSHF or LSZH) versions conform to European fire safety standards, are flame retardant and tested to IEC standards - making them ideal for use on rigs, ships, in tunnels or public buildings, where safety is of prime importance. The UV stabilised sheath allows for cables to be run outside or inside - avoiding the need for cable joints that increase signal loss and add costs.

For the perfect installation, high performance connectors are available, including N-Type, TNC, BNC, F-Type, SMA, Right Angle and Reverse Polarity connectors, as well as termination tools. Held in stock and available for immediate dispatch.

WIDE RANGE OF APPLICATIONS

The flexible braided design allows Antennax cables to be used throughout the installation, removing the need for jumper cables which are traditionally used to connect corrugated coax cables. Antennax cables are designed to be used within a wide range of installations, including mobile phone transmitters, broadband services, satellite antennas, marine satellite systems, Wi-Fi, military traffic control, terrestrial microwave, medical and land mobile radio.

GREAT STOCKS - FAST DELIVERY

Antennax is a competitive alternative to Times Microwave Systems LMR® and the Andrew Cinta® range. Available cut to length for next working day delivery and supplied with a full range of EZ fit connectivity to make your installation simple.

GET YOUR ANTENNAX BROCHURE AT:
FSCABLES.COM/CATALOGUE

Antennax

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FEATURE

KNOW THE DIFFERENCE

LOW SMOKE HALOGEN FREE

There is still confusion in the market around the difference between LSF (Low Smoke and Fume) and LSHF (Low Smoke Halogen Free) data & signal cable

LOW SMOKE & FUME (LSF)

Made from modified PVC

Gives off large amounts of smoke & toxic fumes when burnt

Ideal for:

- ✓ Installations where there is a low risk of fire
- ✓ Areas which are easy to evacuate in event of fire
- ✓ Low rise residential buildings

Not suitable for:

- ✗ Public or commercial buildings
- ✗ Near sensitive electronic equipment
- ✗ Where LSHF, LSOH, OHLS or LSZH has been specified

LSF gives off up to

28%

hydrogen chloride gas when burnt

LOW SMOKE HALOGEN FREE (LSHF)

Slow to burn

Gives off negligible smoke or toxic fumes when burnt

LSHF gives off less than

0.5%

hydrogen chloride gas when burnt

Ideal for:

- ✓ Public buildings
- ✓ Areas where fire evacuation could be slowed
- ✓ Data centres, hospitals, schools, prisons or airports

Not ideal for:

- ✗ Where impact resistance or high flexibility is required
- ✗ Exposure to harsh weather conditions

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NEW

NEW PRODUCT
WEATHERPROOF SPEAKER CABLES

To complement the range of TruSound high performance speaker cables, FS Cables have added a weatherproof 16AWG speaker cable.

Ideal for external applications, this cable has been designed to prevent water and moisture from damaging equipment.

Available in 16/2 and 16/4 configurations, the weatherproof speaker cable features a water blocking tape which, when in contact with water, turns into a jelly-like material and swells up. This is the ideal solution to stop water from travelling down the cable, avoiding changes in electrical characteristics and protects speakers and audio equipment.

The tape is lightweight and easy to handle in its standard form. Replacing standard PVC, the weatherproof version features a UV stable, black PE jacket.

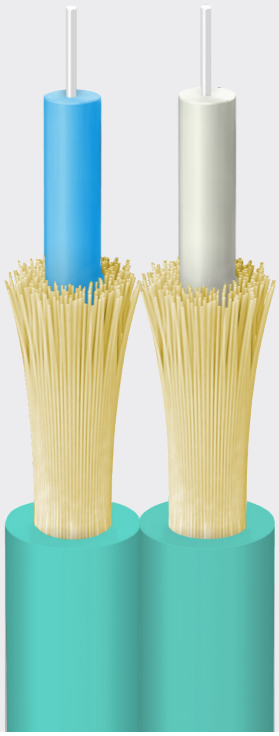
These high performance cables use oxygen-free copper (OFC) conductors - the highest purity copper that has been refined to minimise the oxygen content and optimise performance.

Stocked on 100m, 200m, 500m reels or cut-to-length, meaning you only buy what you need, reducing both your costs and wastage.

www.trucables.com/trusound

The weatherproof speaker cable features a clever water blocking tape

NEW PRODUCT
DRAKA DUPLEX FIBRE OPTIC CABLE



As part of its growing Tru Cables range, FS Cables now stock a tight buffered OM3 Draka Duplex fibre optic cable.

This lightweight fibre cable features a built-in zip cord for easy installation and termination, making it ideal for use in patch panels. The fibre can also be used for short distance data, control and video transmission to the home.

Duplex fibre is manufactured to the highest quality by world leader Prysmian Draka. The cable is Low Smoke Halogen Free (LSHF) throughout and its outer sheath is flame resistant - ideal for installation in public buildings.

With added BendBright™ technology, the Duplex fibre can maintain performance levels even when exposed to tight bends or if the cable is put under pressure.

Stocked in 100m, 200m and 500m reels, this cable is available for next working-day delivery to most of the mainland UK.

Manufactured by:

PRYSMIAN Draka

www.trucables.com/truoptic

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NEWS

Appointed Stockist NEK SEALINE

FS Cables are now the appointed UK stockist of the Norwegian NEK Sealine range of marine grade data, bus, coax and fibre cables, manufactured by NEK Kabel.

Designed for demanding offshore and marine installations, the NEK Sealine range incorporates the highest quality compounds. SHF1 sheaths are featured as standard for use on yachts, boats and larger commercial ships. Heavy duty SHF2 sheaths are also available where the risk of oil & chemical exposure is high. For the ultimate solution, SHF2-MUD NEK 606 sheaths are offered. These are ideal for use on oil rigs and drilling ships and provide exceptional resistance to chemicals, UV oils, cold temperatures and high pressures.

The range is third party approved by DNV-GL & ABS (American Bureau of Shipping) and is fully compliant with IEC standards, so you can be certain the quality, safety and performance requirements are met. Certificates are available on request.

Stocked on bulk reels 500m, 1000m or offered cut-to-length and delivered next working-day to most of mainland UK - free on orders over £100.

www.fscables.com/NEK

DRAKA FIRE RESISTANT FIBRE

FS Cables has increased stocks of Draka Firetuf fire resistant fibre optic cable in response to the demand to improve fire safety in public buildings.

Available in OM1, OM3 & OM4 multimode, OS2 singlemode and in 8, 12 or 24 loose tube fibre configurations with a LSHF (Low Smoke Halogen Free) sheath, Firetuf fibre works to maintain network performance during a fire.

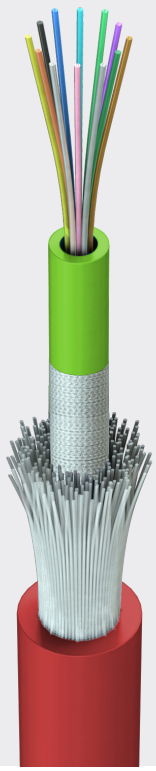
Ideal for installation in tunnels, stations, airports and high rise buildings, these cables allow critical systems to continue to operate in the event of fire and can withstand temperatures up to 830°C for 120 minutes (EN 50200 PH120). Meeting requirements of both IEC 60331-25 (fire resistance) and IEC 60332-3-24C (fire retardance).

A key feature of the Draka Firetuf OM3 & OM4 fibre cables is the BendBright™ technology. This allows for microbending to tight bends or placing the cable under pressure without compromising performance levels.

For applications where mechanical protection is required, a corrugated steel tape armoured version is also stocked alongside the unarmoured version. The added armour provides physical protection to the cable against vandalism or rodent damage.

Stocked in standard reel sizes up to 2000m or available cut-to-length, Draka Firetuf fibre is delivered next working-day as standard to most of mainland UK.

www.fscables.com/ftfibre



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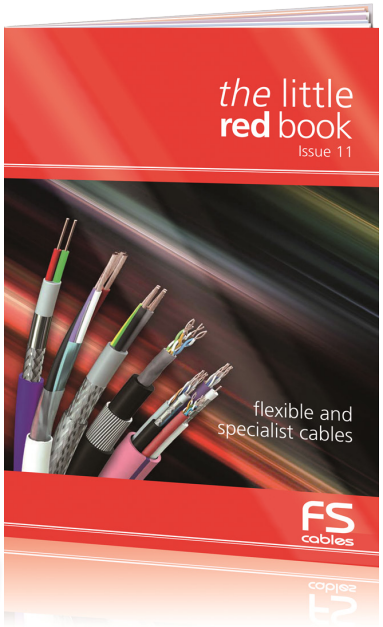

OVER
3,000
Products in stock for next working day delivery

Or you can visit our new website:
www.fscables.com