



ALSECURE®

**Add value to your offer with
advanced fire safety cables**

Fire safety begins with cables

Cables represent less than 0.5 percent of a building's cost. Nevertheless, they can play an important role in ensuring public safety, protecting vital infrastructure, and allowing efficient evacuation and fire-fighting.

Tragic fires in Düsseldorf airport, London's King's Cross station, Moscow University, the Mont Blanc Tunnel, and the Kaprun funicular in Austria dramatically underscored the devastating effects of fire and smoke propagation. Unfortunately, cables may sometimes be a contributing factor, carrying flames, fumes and gases at high velocity far beyond the fire area.

As shown in a number of infernos across Europe and around the world, cables are a potential source of danger. They are also the **key to protection**: first, by supporting surveillance and warning systems, and secondly, by supplying vital energy for emergency lighting, elevators, smoke extractors and fire-fighting equipment.

Because they recognize that safer energy and control cables can protect lives and buildings, European fire regulators are now striving to set new safety requirements via the upcoming Construction Products Directive (CPD).

CPD: protecting the public while harmonizing the European construction market

Half of the planet's 6 billion people now live in cities, making public safety and shared international standards a top priority

for the building industry.

The construction sector is the largest single economic activity in Europe and the leading employer, providing some 35 million jobs. To meet the public demand for greater safety and remove technical barriers to trade, the European Commission is drawing up the Construction Products Directive (CPD). Along with 80% of other construction materials, cables will soon be included within the CPD and will have to meet new levels of performance in terms of **reaction and resistance to fire.**



ALSECURE®: a range of fire-safety cables to meet today's and tomorrow's challenges

For years now, Nexans has been developing and supplying Halogen-Free, Flame and Fire-Retardant (HFFR) energy and control cables for advanced fire safety. We have constantly improved cable performance in the event of a fire, and significantly reduced smoke, gas and flame propagation. Our new range of **ALSECURE®** cables include the latest technological advances in terms of reaction and resistance to fire.

Not only do these cables protect both the public and infrastructure, they also allow

you to comply in advance with the forthcoming Construction Products Directive (CPD) requirements. For engineering and construction firms, this means improving public safety while reducing corrosive danger to equipment and structure. For wholesalers and installers, it allows you to rationalise your product offer and expand your business across Europe and beyond. These cables have specific features adapted to any building type and safety constraints, from schools and theatres to hospitals, banks, high-rises and public transport facilities,

etc. Moreover, they protect critical equipment in computer rooms, data storage centers, and other sensitive facilities.

Nexans ALSECURE® cables provide you with:

- a wide choice of low-voltage energy, control and communications cables for residential, industrial and public buildings
- superior reaction to fire, thus limiting fire growth in sensitive public areas such as subways, tunnels and high-rises
- exceptional resistance to fire, allowing security systems like video surveillance, smoke evacuation, and security alarms to keep on operating during a fire
- low smoke emission due to non-halogenated materials, meaning better visibility during evacuation and fire-fighting operations
- minimal corrosive damage to equipment and steel/concrete structures, thus reducing expensive replacement, cleaning and secondary pollution

ALSECURE® cables vastly improve public safety and protect buildings



ALSECURE®: a range of fire safety cables to protect lives and buildings

PVC (Polyvinyl Chloride) cables are still widely used in the construction industry. They do provide acceptable thermal behavior. However, in the case of fire, their chloride content is released as a gas (chlorine) which can burn lungs and corrode reinforced concrete and metals. It also generates a dense smoke that can cause dizziness and panic, while seriously hampering rescue operations.

Nexans **ALSECURE®** BS 6724 and BS 7211 Halogen-Free, Fire Reaction cables produce

little corrosive gas. They burn without producing large amounts of carbon monoxide, or dense/opaque smoke.

ALSECURE® NX 100 / NX 200 / NX 400 Fire-Resistant cables continue to operate under extreme fire conditions. They fully meet the most stringent requirements in terms of reaction and resistance to fire.

In addition, a new Fire Resistant cable **ALSECURE** NX 200 PLUS is being introduced which fulfils BS 5839-1:2002 clause 26.2 (BS 8434-2).

This enhanced and easy-to-install cable is compliant with BS 7629-1 (BS 6387 CWZ) and with EN 50200 classification. It provides the final user with advantages of flexibility and ease of termination.

Fire reaction

Reaction to fire relates to the combustibility and ignitability of a cable, i.e. its contribution to fire growth. Because they are Halogen-Free, Nexans **ALSECURE®** Fire Reaction cables have two strong advantages over PVC cables:

- they significantly delay the propagation of a fire, thus gaining precious time for evacuation and fire-fighting
- they reduce to a minimum opaque smoke and gases, the prime cause of fire-related deaths, and damage to equipment and structural elements.

Fire resistance

In the new European classification system (under CPD), fire resistance is expressed in terms of performance over time. Cables are classified into five categories according to how long they can continue to operate during a fire: 15, 30, 60, 90 or 120 minutes. By functioning for periods far beyond traditional cables, Nexans **ALSECURE®** NX 100 / NX 200 / NX 200 PLUS / NX 400 Fire-Resistant cables ensure that critical systems will continue operating during evacuation and fire-fighting operations. This equipment includes video cameras, emergency lighting, public address systems, alarms, elevators, sprinklers, smoke evacuators, fire-fighting equipment.





Global expert in cables and cabling systems

Nexans is the worldwide leader in the cable industry, with an industrial presence in 29 countries and commercial activities in 65. The Group employs 20,000 people. Its sales amount to 4.9 billion Euros. Nexans brings an extensive range of advanced copper and optical fiber cable solutions to the infrastructure, industry and building markets. Its cables and systems can be found in every area of people's lives, from telecommunications and energy networks, to aeronautics, aerospace, automobiles, railways, buildings, petrochemicals, medical applications, etc.

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