



**Innovative building cable solutions
to ensure safety, performance, and environmental-friendliness**

The dynamic building market...

New residential housing is often stimulated by lower mortgage rates, cheaper materials and the availability of labor, while the construction of new offices, public buildings and industrial plants is often influenced by strategic corporate investment and government economic policy. The dynamism of emerging countries may soon account for 48% of the building market worldwide.

Cabling trends

Whatever the rate of construction, a number of trends are clearly emerging among our cable customers, often expressed in new expectations and demands.

As a builder, promoter, designer, installer, or system integrator of residential, public and office buildings, or industrial plants, you would like to see:

- Safety: especially in terms of fire-performance to protect people and the building, itself
- Sustainability: energy-efficiency, health and comfort, low environmental impact
- Fast installation: pre-assembled systems, convenient reels, and smart packaging
- More bandwidth: for home entertainment, business and factory applications
- Integrated solutions: for technologies (energy/data, copper/fiber) and systems



...calls for safer and greener cable solutions

Nexans offers a comprehensive range of innovative cable solutions to ensure the safety and environmental-friendliness of today's buildings.

- **Residential:** In addition to standard cables, Nexans provides a full choice of specialized cables and network solutions to meet the growing demands of the information-rich modern home, while providing new levels of security and comfort.

- **Public and Office Buildings:** Nexans works closely with builders and installers to identify needs for specific building types, and new functions, like Data Centers, Security Services and Storage Area Networks (SANs). In some cases, this involves upgrading to higher grade copper and optical fiber cables and active and passive equipment, and in others, the merging of multifunctional applications (e.g. Voice and Video-Over-IP) on an enhanced LAN system.

- **Industrial Buildings:**

With Ethernet rapidly becoming a common factory platform, connecting machines, robots and equipment on the factory floor with the front/back office, Nexans has developed a number of industrial solutions, including open standards and architectures and Industrial Ethernet. Fire-safety cables protect both people and plant infrastructure. Industrial cables are environmentally-friendly (lead-free, low EMI) and are fully recyclable.



High performance cables and cabling solutions...

ENERGY CABLES

LV energy cables

A full range of standard cables up to 1 kV for lighting, heating, air conditioning, etc. in residential and public buildings, with special sheathing designed to survive in harsh conditions.

Specific rubber cable designs for construction sites

LV fire-reaction cables

Up to 1kV, these halogen-free cables prevent fire propagation and dramatically reduce the emission of smoke and hazardous, acidic, and irritant gases, thus allowing people time to exit safely.

EMC cables for Oslo Opera

LV fire-resistant cables

Used in residential, public and industrial buildings, fire-resistant cables allow fire alarms, smoke evacuation, lighting, sprinklers, etc. to continue operating during a fire.

Rewiring of Duchess Anna Amalia Library (Germany)

Pre-wired conduits

These 16 mm or 20 mm diameter corrugated flexible tubes can either accommodate all-energy cables, or telephone, coaxial and LAN cables. A color scheme simplifies installation: white for power, green for telecom, red for alarm, blue for data, and orange for control cables.

Used in Norway and Sweden

Radiant heating cables

A variety of mats and cables are manufactured for indoor comfort, snow and ice melting on sidewalks, driveways, roofs and drains, and frost protection of water pipes. A recent innovation: self-adhesive mats with safe, integrated splices.

Beijing "Bird's Nest Stadium" car park

Solar panel cables

Nexans photovoltaic cables provide reliable, durable links between solar panels and the "inverter" which transforms solar energy into usable AC electricity. Their halogen-free compounds assure optimum fire protection for rooftop installation.

TÜV approved and fully recyclable

Elevator cables

Flat, continuous-length energy and control cables in PVC or halogen-free versions, these cables are delivered in easy-to-install kits, much appreciated by OEMs and repair companies.

Supplier to Thyssen-Krupp for Dubai Airport

LV flat cables

240-600 V cables provide a backbone into which junction boxes can be attached for quick, flexible and easy installation.

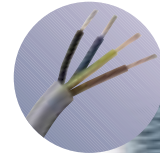
Strasbourg hospital for emergency accommodation

MV cables

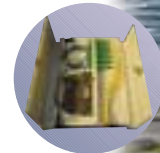
For large collective buildings and those with high energy needs, these 12-20 kV and 20-30 kV PVC cables also come in HFFR versions for fire-protection, and chemically-reticulated polyethylene versions to resist chemical attack and high temperatures.

For automotive plants, ironworks, heavy industry

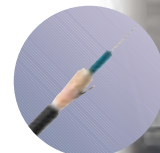
LV energy cables



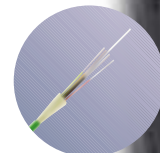
LV fire-cab



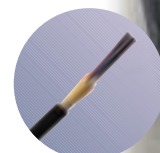
Fiber-to-the-Home, multi-dwelling solutions



Fiber-to-the-Home solutions



Fiber-to-the-Building solutions



Industrial Ethernet and LANs



LAN cabling solutions

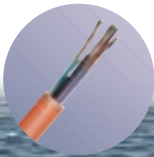


Active system access

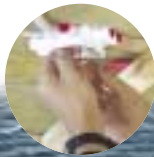
Reaction cables



LV fire-resistant cables



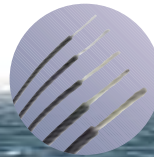
Pre-wired conduits



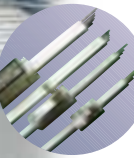
Radiant heating cables



Solar panel cables



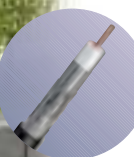
Elevator cables



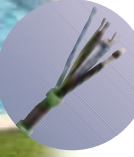
LV flat cables



MV cables



CATV cables



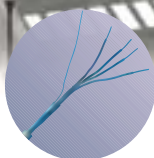
CCTV cables



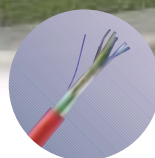
Network switches and series



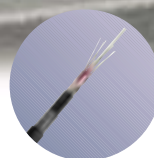
LAN Intelligent Infrastructure Management



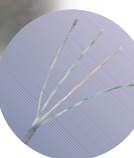
Teleport cables



Anti-intrusion cables



LAN fiber cables



LAN copper cables

...for residential, public and industrial buildings

COMMUNICATION CABLES

CATV cables

These coaxial cables are used to deliver television and Internet to apartment blocks, hotels and clusters of small homes. A hybrid version combines coax with Cat 5 copper.

Nexans supplies Norway's two largest Cable TV companies

CCTV cables

Developed for surveillance and security, can be delivered as a hybrid cable with a coaxial cable for video, plus two conductors for camera command.

Also, video over cost-efficient LAN webcams

LAN copper cables

Nexans provides Cat 5e, 6, 6a, 7 and 7a copper cables for horizontal LAN structures, along with connectors, cords, patch panels and all accessories.

IKEA (Kuwait); Brann Bergen Stadium (Norway); Eurolines (Austria)

LAN fiber cables

Used for vertical backbone and campus cabling, Nexans fiber cables can deliver 1 Gbit/s up to 800 m, and 10 Gbit/s up to 550 m with high density and integration of diverse applications. All inside LANs are Low-Smoke, Zero-Halogen (LSZH), while outside fiber is protected against humidity, rodents, extreme cold, etc.

AZ Sint-Jan AV hospital (Belgium); Ministry of Defense (UK)

Anti-intrusion cables

Standard cables that give a simple on/off signal for doors, window frames, etc.

Also, sensor cables for motion detectors

Telereport cables

A two-pair telephonic cable makes it possible to read an electricity counter from a distance. A new version is twinned with the LV drop cable. *Widely used by EDF (France)*

LAN Intelligent Infrastructure Management

For Data Centers and building applications, Nexans LANsense IIM enhances visibility of LANs by automatically mapping, locating, reporting and alerting on any event.

HSBC's London headquarters; Incheon Airport (Korea)

Active network systems and accessories

Intelligent switches and converters for installation in residential (Customer Premises Equipment), public, office and industrial buildings provide Fast Ethernet and Gigabit Ethernet capacity, as well as Power over Ethernet (PoE) functionalities for fiber and copper-based network infrastructures.

RG45 connectivity for IP phones/PCs for Vattenfall Group (Hamburg)

LAN cabling solutions

More than just supplying cables, Nexans takes a systems approach providing both copper and fiber, along with connectivity, accessories and infrastructure management.

TNK-BP (Moscow); Orange (Bucharest); Expo Zaragoza 2008

Industrial Ethernet and LANs

Nexans has developed a special category of copper and fiber LAN cables to bring Profinet and Industrial Ethernet solutions to the special plant environment.

Volvo automobile plant (Sweden)

Fiber-to-the-Building solutions

Various access solutions from low to high fiber count ($\leq 432+$), including duct cables, direct buried cables, mini-ducts and micro-blown cables, ribbon cables, aerial short span cables and sewer cables; and associated interconnect solutions. Also Nexans supplies modular Building Basement Terminals (BBTs) or Optical Distribution Frames (ODFs) as an interface to the Building Vertical Riser. *Stokab (Sweden) and Neuf Cegetel (France)*

Fiber-to-the-Home solutions

Singlemode fiber cable solution to interconnect the operator access network to individual homes, including drop cables and subscriber optical fiber wall outlets for home cabling networks.

Center Park detached-cottage tourist villages

Fiber-to-the-Home, multi-dwelling solutions

Beyond the Building Basement Terminal, Nexans provides extractable fiber-bundled FTTH vertical risers associated with its floor distribution outlets to interconnect to horizontal drop cables to the flat. This enables progressive deployment, in addition to subscriber optical fiber wall outlets and field installable connectors for spliceless option.

Neuf Cegetel (France); adds value to apartments and enables home office



Enhanced services for buildings..

GLOBAL EXPERTISE

For buildings, Nexans offers not only a wide variety of standards, quality cables and accessories, but a number of value-added products and systems to assure greater reliability, capacity, longevity, survivability, while at the same time assuring environmental protection and safety.

LOCAL PRESENCE

Because Nexans is present around the world, we have experts close at hand who are familiar with national construction standards and climatic conditions. They draw on local and company-wide resources to assure fast, reliable delivery and correct installation.

TECHNICAL LEADERSHIP

With an International Research Center based in Lyon and Nuremberg, Nexans is constantly improving cable performance in terms of: strippability, installation, fire safety, data capacity, and environmental friendliness. Special software is used to analyze building design and optimize cabling.



With energy as the basis of its development, Nexans, the worldwide leader in the cable industry, offers an extensive range of cables and cabling systems. The Group is a global player in the infrastructure, industry, building and Local Area Network markets. Nexans addresses a series of market segments: from energy, transport and telecom networks to shipbuilding, oil & gas, nuclear power, automotives, electronics, aeronautics, material handling and automation.

With an industrial presence in more than 30 countries and commercial activities worldwide, Nexans employs 22,000 people and had sales in 2007 of 7.4 billion euros. Nexans is listed on Euronext Paris, compartment A.