

# Respect for the environment



[www.unex.net/environment](http://www.unex.net/environment)







**Research as standard**

Specialist manufacturer  
since 1964



Printed on ecological paper

Unex

Respect for the



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# Respect for the

## Unex: Environmental management system according to ISO 14001:2004

Nowadays the idea of sustainable development has a big impact in all our professional activities.

The success of our actions towards promoting sustainable development entails the effort of all. And it is critical to measure the environmental track that we leave behind with our acts and take the necessary measures to reduce it as much as possible.

Starting from the project and during construction, one of the goals is to have long-lasting buildings while preserving the environment.



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As a reaction to this global concern, **Unex aparellaje eléctrico S.L.** develops all its activities under a sustainable use of natural resources, an efficient utilization of energy and with respect for the environment, for our clients and for its own team.

Therefore, we have implemented an environmental management system according to the requirements of ISO 14001:2004, certified by AENOR, for the design and commercialisation of all **Unex** systems.





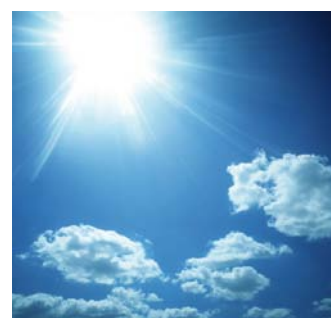
# Respect for the

## 1. Unex raw materials

### Own formulation

A close contact with our clients together with our 45 years experience in the electrical sector and the participation in international standard committees, allows us to discover the market needs and adjust to its requirements.

Therefore, **Unex**, faithful to its slogan “research as standard”, designs its own raw materials in order to obtain the most performing features regarding:



Exposure to the **UVs**



Respect for the **environment**



**Load capacity**



# environment



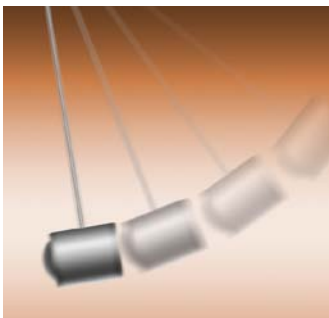
Resistance to **corrosion**



Reaction to **fire**



Resistance to **extreme temperatures**



**Impact** absorption



Safety and responsibility



Reliability






# Respect for the

## Own naming system

To properly identify the product's raw materials and outstand them from standard ones, **Unex** developed its own naming system.

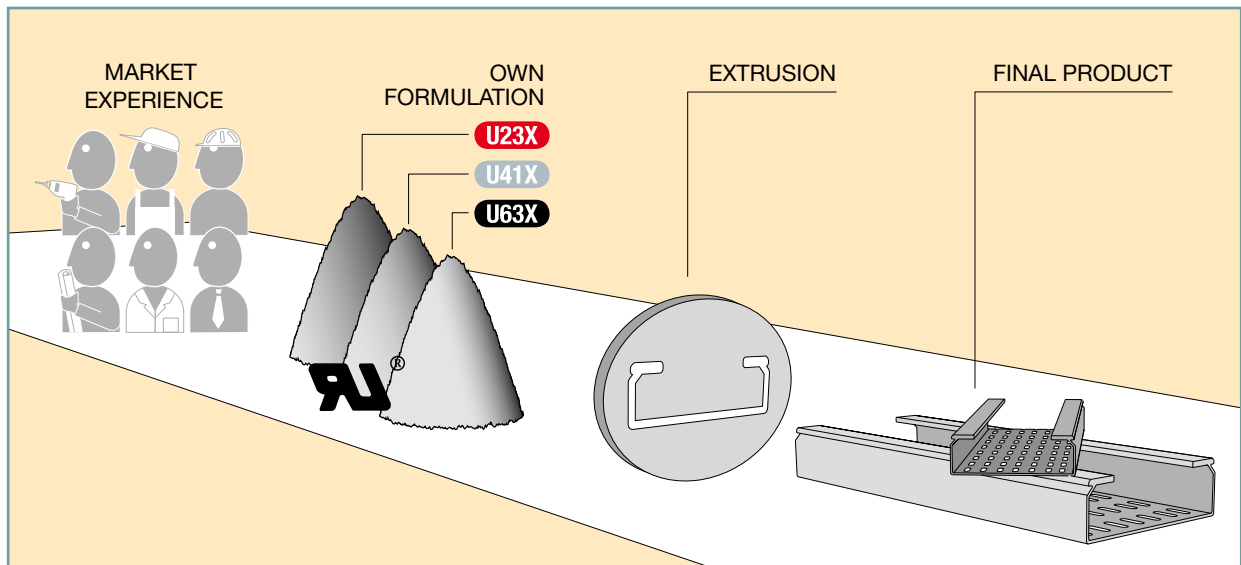
Each raw material is identified by its own logo

Base raw material

<b>U23X</b>	PVC 
<b>U41X</b>	Insulating halogen free 
<b>U63X</b>	Polyamide 6 



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**Unex** raw materials have been recognized, certified and approved by the control agency UL - Underwriters Laboratories (USA), which assures the compliance of all technical characteristics. **RU** approval for raw material U23X and U41X (grey colour).

([www.ul.com](http://www.ul.com)). UL approval for raw material U23X (grey) and U41X (grey).

One of the main benefits achieved by designing and developing our own raw materials is that **Unex** end products have a higher quality than the standard ones, due to a strict control on base materials and over the whole manufacturing process.

## 2. Environmental legislation

### European Directive 2002/95/EC RoHS



**Unex** is aware of the importance that sustainability is gaining in today's world and therefore was one of the first companies to integrate the European Directive 2002/95/EC RoHS in its environmental policy. This directive limits the utilization of certain substances used in industry which end-up in the atmosphere, causing serious health problems as well as high costs in toxic waste elimination process.

More precisely, some heavy metals and two flame-retardants (PBB and PBDE) are forbidden due to their detrimental effects on living and on the environment.

A revision of this Directive, renamed as **2011/65/UE RoHS II** has been recently approved and will come into force in 2013, setting the same forbidden substances than in the original Directive of 2002.







As a consequence, **Unex** will comply with the new Directive as soon as it becomes effective.

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## Forbidden substances

## Where can we find them?

 Lead	Polymers, galvanized metallic coatings
 Cadmium	Sensors, batteries, polymers
 Hexavalent chromium	Galvanized metallic coatings
 Mercury	Discharge lamps and fluorescent lighting
 Polybrominated biphenyl	Cable covers, polymers
 Polybrominated diphenyl ethers	Foam, polymers

## Why are they used?

Commonly used as stabilizers, as anti-corrosive coatings or as flame-retardants.



I.D. 84565

## Environmental certification VDE RoHS

The prestigious German certification agency VDE, one of the first in Europe in certifying RoHS Directive, assures an absolute control on the mentioned directive's compliance and guarantees to all users of **Unex** products our contribution to sustainable construction.

**Example:** The French region Rhône-Alpes demands compliance with RoHS Directive for all electrical equipment and items used in newly built and refurbished state secondary schools.

*“Normes: les installations et tout l'appareillage électrique devront être conformes aux normes et prescriptions en vigueur, particulièrement la « directive sur la limitations des substances dangereuses dans les équipements électriques et électroniques » dite encore RoHS (Restriction of the use of certain Hazardous Substances).”*

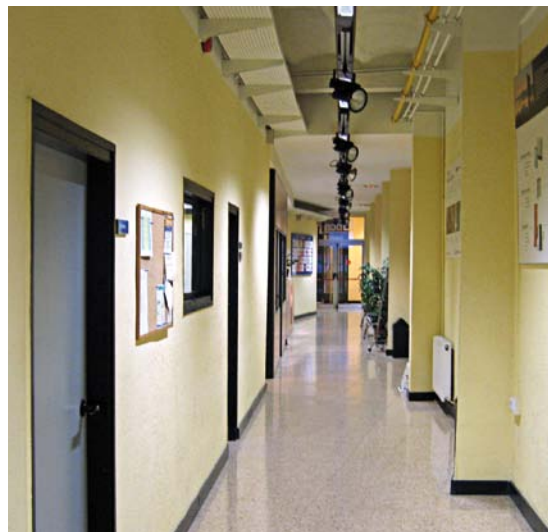


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## Reach regulation

The European Union updated the legislation on chemical substances by creating the REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) system, the strictest law to date regulating chemical substances, which will affect industries throughout the world.

According to REACH, **Unex** is a supplier of articles: we do not produce or import substances. **Unex** products do not contain substances subject to be released in normal or reasonably predictable use conditions.



## 3. Quality marks and product certification

### Quality marks

A quality mark is a product certification granted by an **independent organization** with regard to a particular national or international product standard.

For a product to obtain and maintain a quality mark, each control agency is making **periodical controls** both at manufacturing premises and on the finished product available on the market.





**Unex** products have obtained the most prestigious quality marks of international scope, assuring this way the fulfilment of the regulations in force regarding quality and durability.





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Choosing products with quality marks is the best guarantee that they comply with international standards and that all technical data are periodically checked by an independent control agency.

<b>AENOR</b>		Spain	EN 61537: 2007 EN 50085-2-1: 2006 EN 50085-2-3: 2010
<b>LCIE</b>		France	EN 61537: 2007 EN 50085-2-1: 2006 EN 50085-2-3: 2010
<b>VDE</b>		Germany	EN 61537: 2007 EN 50085-2-1: 2006 EN 50085-2-3: 2010
<b>GOST</b>		Russia	Gost R 52868: 2007 Gost R 50827: 1995

BS EN 61537 is the UK implementation of EN 61537 and IEC 61537  
BS EN 50085-2-1 is the UK implementation of EN 50085-2-1  
BS EN 50085-2-3 is the UK implementation of EN 50085-2-3



## Applicable rules and regulations

**Unex** participates actively in several work groups and international committees; our solutions comply with European and International regulations in force in what concerns electrical and IT installations.

### Electrical regulations

The use of protecting trunkings is recognised as a valid system for cable conduction and protection.

**Unex** insulating cable trays with cover can be installed in those locations where regulations require a protecting trunking.

### IT regulations

Using **Unex** solutions makes possible to respect the free market demands in what concerns the laying of several telecom operators' infrastructures and assures accessibility all along the network.

**Unex** trunkings permit cable enlargement and help to adjust to future residential needs with a minimum interference in the space subject to changes.

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Less risks arising from failures in the conductor's insulation: direct contacts, electrical arcs, wrong data transmission.

Safer installation for persons and for the equipment.





# Respect for the

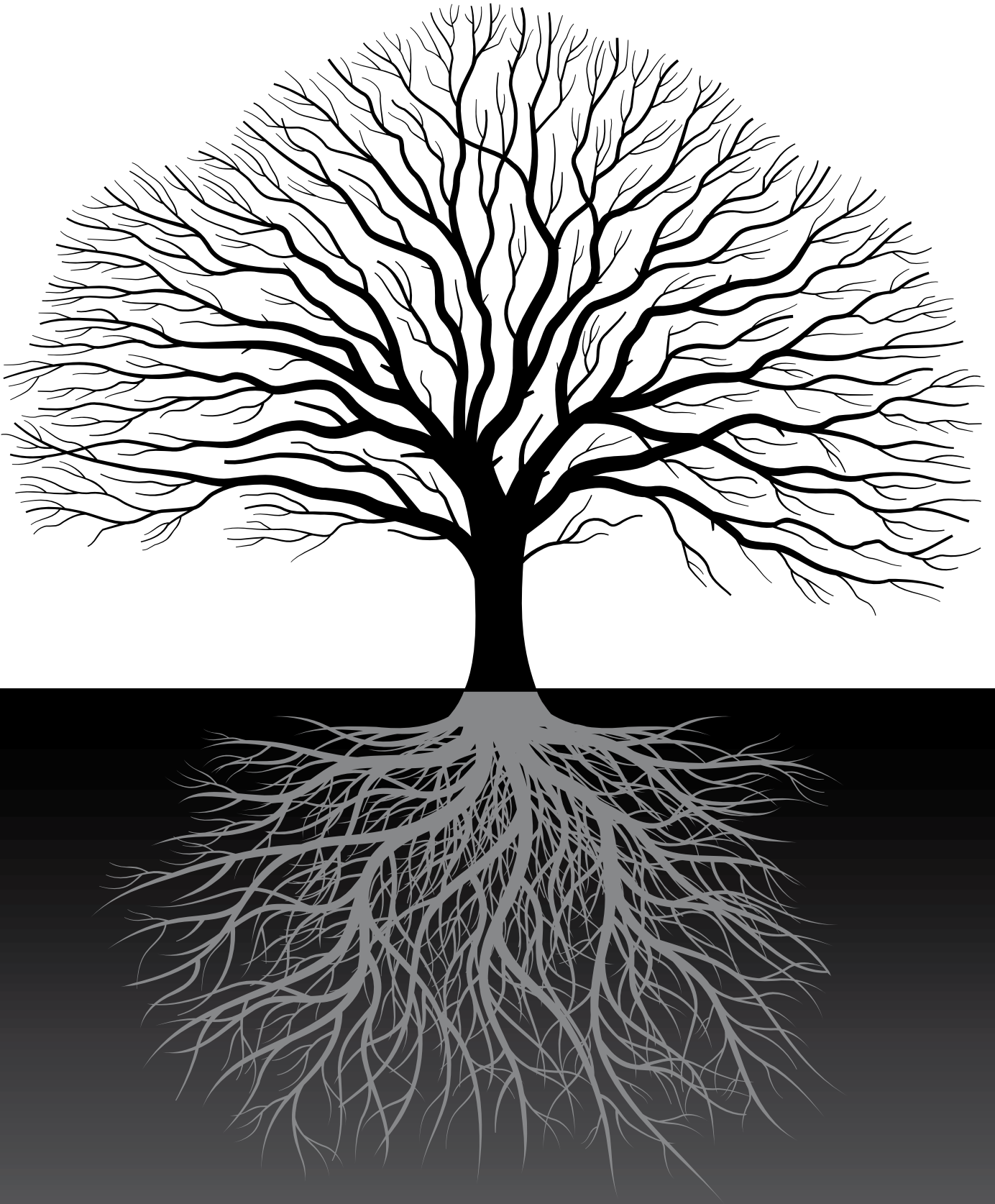
## 4. Unex solutions for sustainable construction

Real sustainability requires a deep transformation in the construction field since the impact of buildings on the environment and on healthiness must be controlled in a feasible way, both technically and economically.

Buildings consume from 30 to 50% of natural resources and contribute to the increase of emissions and pollution during their construction as well as during their life cycle. Therefore a building project must be conceived as an ecosystem in itself, making real and possible ideas like eco-construction, eco-management, de-construction and healthiness.

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Our goal is to have buildings with a long life cycle, redeemable in the maximum possible years and with recyclable components.





# Respect for the

In the field of cable management, choosing **Unex** solutions contributes to a sustainable construction during the building's life cycle:

## ECO-CONSTRUCTION PHASE

### Surface construction

The absence of cutting slits enables a quick and simple installation, without being a nuisance to users, and avoiding the wall's weakening or loss of resistance. Aggregative mounting permits a chained sequential process, therefore time and costs are reduced.

We may conclude **that a surface mounted cable conduction system is more sustainable than an embedded one.**



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## Adaptability

Installation trunkings provide flexibility, making easier to carry out the final design and minimize unforeseen incidents at the site. In the course of time, with **Unex** surface solutions, cabling enlargement or installations changes are simpler.



## Protection against noise and energy saving

### Being surface mounted, **Unex** solutions:

- Do not cause any constructive waste (cutting slits, noise, dust, dirt) during installation.
- Save energy resources (water, cement mortar, cleaning, etc).



# Respect for the

## ECO-MANAGEMENT PHASE

### **Flexibility**

**Unex** surface solutions offer the possibility to modify and enlarge the installation's cabling.

### **Evolution-adaptability**

Nowadays, wired installations are the ones which most changes suffer during a building's life cycle. Choosing **Unex** trunkings reflects the wish to anticipate future enlargements, preventing an early ageing of the building and, consequently, its loss of value.



### **Preserving insulation**

Surface mounted conductions do not damage the wall's thermal insulation or soundproofing qualities.

### **The products technical characteristics are maintained**

Our products' mechanical, electrical and fire features are not altered during the building's life cycle.



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## Maintenance-free material

Unex cable management systems are made of insulating material and do not require earthing.

Easier installation, savings in earthing execution and inspection; no maintenance.

## Excellent resistance to corrosion.

There is no need to upkeep the installation, as the product remains unalterable in the course of time.

## Higher durability

Unex products are unaffected by corrosion and assure good protection against outdoor exposure, the UVs and chemical agents.



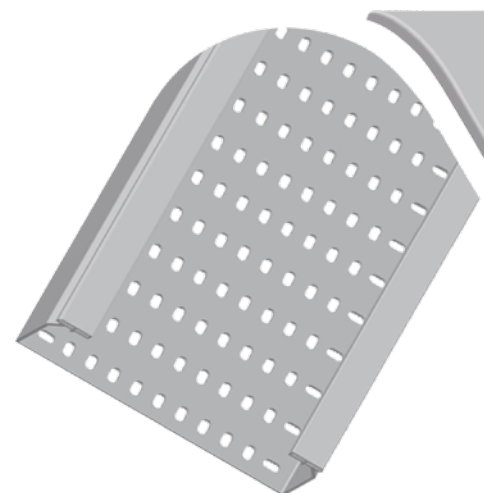


# Respect for the

## DECONSTRUCTION PHASE

### Recycling

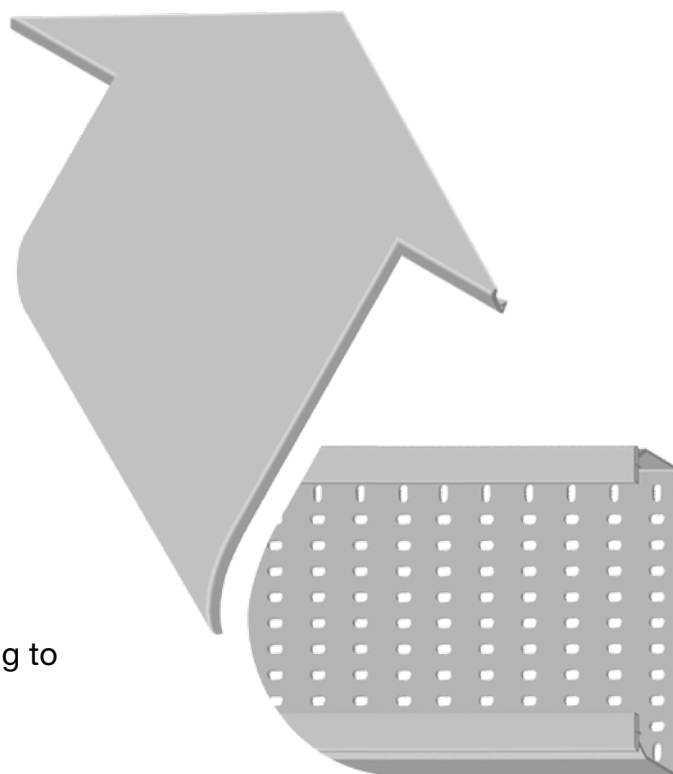
Another aspect to bear in mind when evaluating whether a certain product can be considered sustainable or not is its quality to be reused. **Unex** has made efforts to use mechanically and chemically recyclable materials. Nowadays, all internal pieces are made of recycled materials while keeping the same valued technical characteristics as always.



### Vinyl Plus



**Unex** collaborates with the European Foundation Vinyl Plus, voluntarily undertaking to improve production processes and promote recycling.



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## Waste reduction

During deconstruction process, our product is easily detachable from the rest of materials, therefore waste collection and management are simpler.

Moreover, **Unex** trunkings are entirely recyclable. That means, when they become waste, they can all be treated as urban solid waste and may be delivered to a waste management specialist for its subsequent processing, which usually consists of recycling.



# Respect for the

**COMFORT, SAFETY AND HEALTH:** our aim is to preserve the human being's healthiness and safety.

## COMFORT



### **Cost optimization**

The system permits a gradual evolution and adjustment of the installations to cover the building's future changes and requirements. This results in decreasing operating costs and problem-solving for the user, as it requires less time investment, material and human resources, therefore assuring a higher comfort level.



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## Integration




**Unex** insulating trunkings are a neutral element, easy to paint and offering a wide range of possible surface treatments: concrete, wood, etc. Their integration into the environment contributes to the comfort and well-being of the building's inhabitants.

# Respect for the

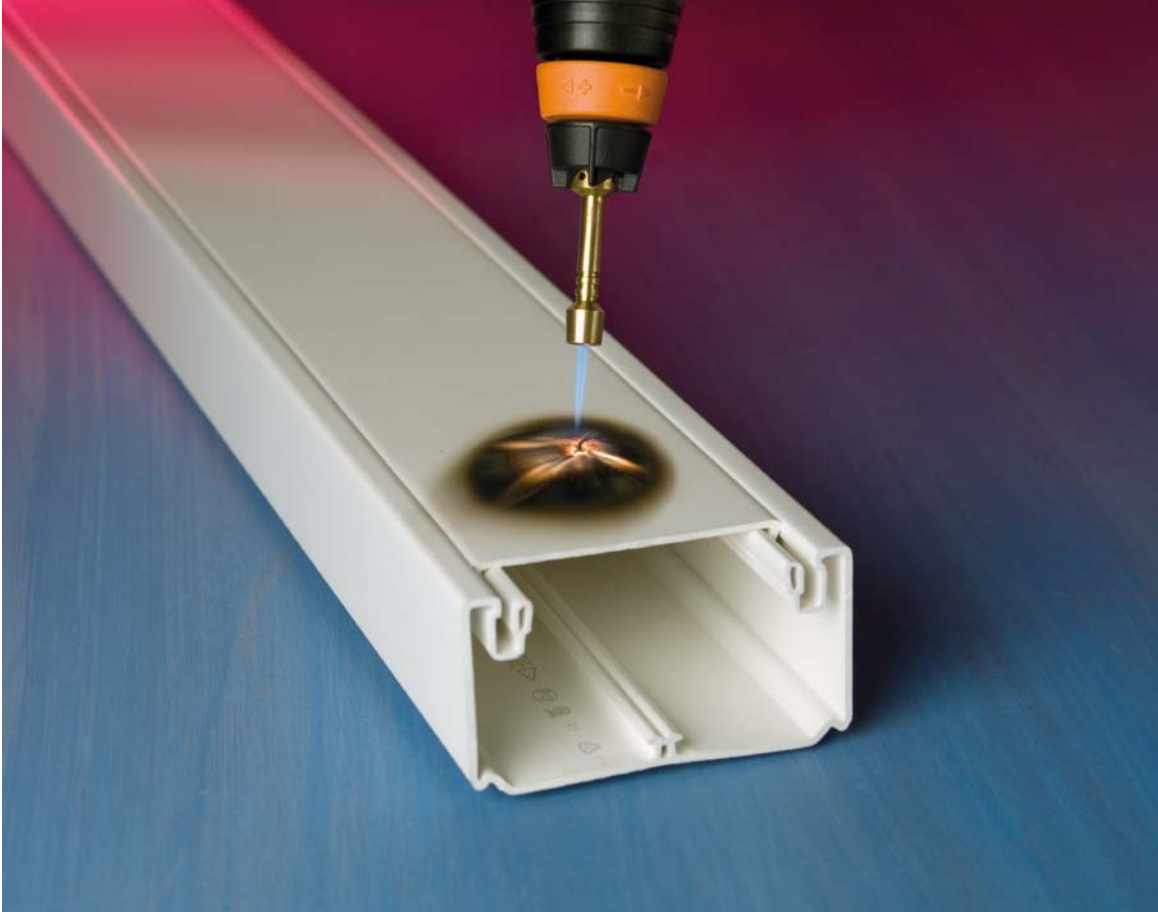
## SAFETY

### Electrical safety

Unex solutions provide an additional insulation to the installation, with the following benefits:

<p><b>Protection against indirect contacts</b></p>		<p>Insulating material contributes to people's safety.</p>
<p><b>Avoids creepage and short circuits</b></p>		<p>Lower electrical risk and reduction of possible fire sources.</p>
<p><b>Earthing not required</b></p>		<p>Savings in labour and maintenance costs, no need to periodically check the earthing of the conducting element.</p>

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## Reaction to fire

Our own-formulated raw materials allow us to outstand from the standard levels regarding fire safety.

All raw materials of **Unex** trunkings are a non-flame propagator element and provide enhanced electrical protection for people and for the installation in the event of fire. Additionally, they are UL94-V0.



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## HEALTH





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## Compliance with RoHS Directive

All **Unex** raw materials and final products comply with the European Directive RoHS.

The use of RoHS products adds a plus to sustainable construction by preserving human and environmental safety, as it involves the elimination of some substances considered as dangerous by the EU.

As a resume, all the above aspects make **Unex** solutions the most suitable with regards to sustainability, waste management and maintenance activities, assuring the maximum safety to people and equipment.

## 5. Green building certification systems

As a result of the importance and repercussion that sustainable construction is gaining, several private initiatives have undertaken the challenge to certify buildings taking into consideration environmental aspects.



The main international green building certification systems up to date are:

LEED (USA), U.S.GREENBUILDING COUNCIL (Europe)  
DGNB (Germany), HQE (France)

The above mentioned systems do not certify products but they establish some guidelines for buildings. Those criteria may as well be accomplished by their components.

LEED is an internationally recognized green building certification system, proving that a building was designed and built under sustainable parameters like energy savings, water efficiency, CO2 emissions reduction and improved indoor environmental quality.

Developed by the U.S. Green Building Council (USGBC), LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.

DGNB is a certification system for environmentally friendly, economically efficient and user-friendly buildings. As a leading cross-industry organization, it is the main driver for sustainable development in its sector in Germany.

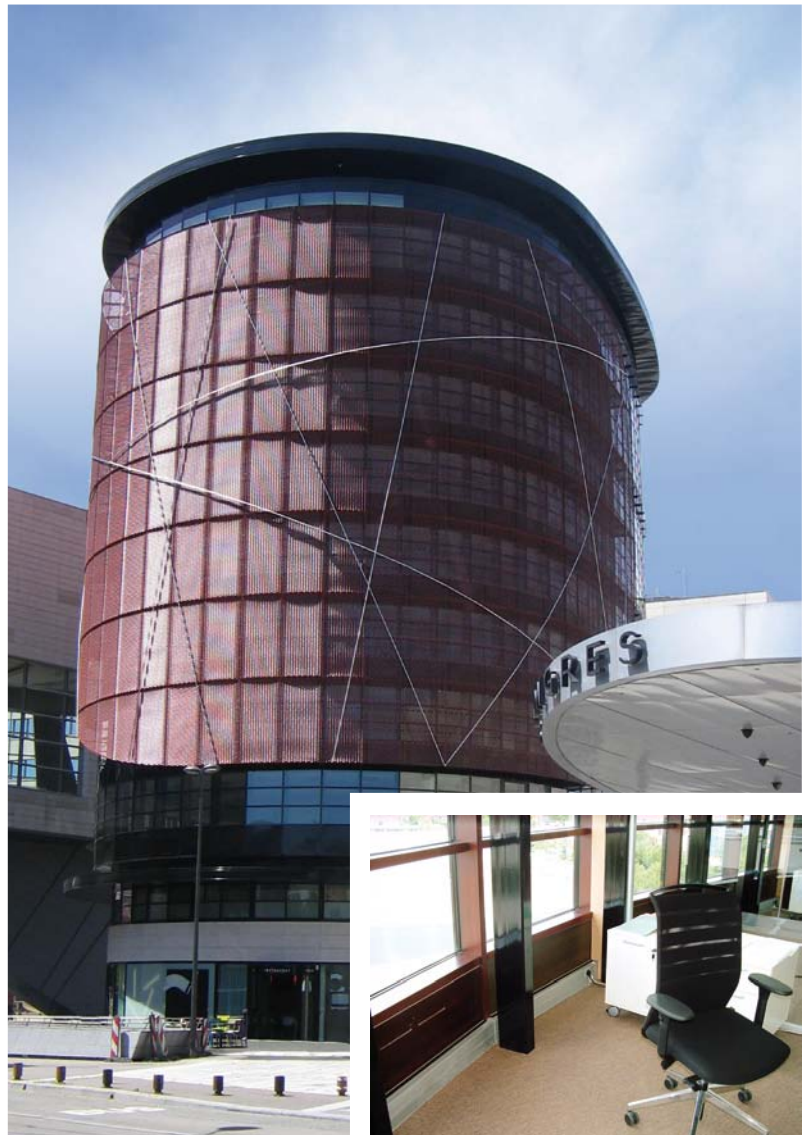
# environment

The HQE (Haute Qualité Environnementale) certification is being applied in France with the aim to increase the building's environmental quality through the implementation of sustainable and, most of all, health and comfort parameters.

One example of "HQE building" is the Elithis Tower in Dijon, "the first positive energy services building" where **Unex** solutions were chosen in:

- offices, for conduction of services and supply of workstations.
- the rooftop PV-installation, for cable conduction.

This choice was taken after a close evaluation of all the characteristics previously mentioned and mainly due to the compliance with RoHS Directive.



**Unex** global solutions in cable management and the advantages that our wide range of products offer in every type of installation are resulting in their application and growing recognition in several fields world-wide.



# Respect for the

## 6. Renewable energy: our solutions

The European Union aims at “smart, sustainable, inclusive growth” with greater coordination of national and European policy. Therefore it has committed itself to achieve, by 2020, a 20% of primary energy running on renewable energy. This shows that the use of RES (Renewable Energy Sources) is gaining ground in our society and, besides, improves sustainability.



# environment

RES can be divided into several groups:



Solar and photovoltaics energy



Biomass



Wind energy



Biofuel



Hydroelectricity

As a contribution to the “respect for the environment and constant improvement”, **Unex** strives to implement an efficient use of renewable energy in its different forms, and our own-formulated raw materials allow us to successfully apply our products in this field.

Additionally, **Unex** is member of the German associations BSW (Bundesverband Solarwirtschaft) for solar industry and BWE (Bundesverband WindEnergie e.V.) for wind industry, as well as of the Spanish AEE (Asociación Empresarial Eólica), which in turn is a member of international associations such as EWEA (European Wind Energy Association), AWEA (American Wind Energy Association) and GWEC (Global Wind Energy Council).





# Respect for the

## Company profile

### **Unex. "Research as standard"**

Founded in 1964, **Unex** is an independent European group with a world-wide presence, specializing in insulating cable management systems. Our firm's philosophy, expressed by the slogan "research as standard", helps us to offer adequate solutions adapted to all market demands.

**Unex**, specialist manufacturer with over 45 years experience is *"Your solution"*

### **Human team**

A close contact with our clients to discover their needs and adjust to their requirements is the aim of our more than 300 professionals.

### **Production**

**Unex** production capacity is assured by our 2 manufacturing plants located in Madrid, 15.000m<sup>2</sup> and Barcelona, 3.300m<sup>2</sup>. Made in Europe, state-of-the-art technology!

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## Service

We guarantee a reliable delivery, assured by **complete stock** of all items in our logistic centre in Barcelona (Spain), 21.000 m<sup>2</sup>, helping to reduce costs all along the supply chain.

Standard products. Immediate availability through our world-wide distribution network.

## Technical assistance

Personal consulting through our own team of sales engineers. Technical visits, seminars and project follow-up: side by side actions with end users and specifiers.



[www.unex.net](http://www.unex.net)



# Respect for the

## International presence

Our 14 offices in Spain, together with our branches in France, Germany, Portugal and Chile, and our world-wide activity prove our vocation for international expansion.

### **SPAIN (Since 1964)**

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#### **Unex aparellaje eléctrico, S.L.**

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### **FRANCE (Since 1979)**

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#### **Unex systèmes et éléments, S.A.S.**

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Phone: +33 4 78 43 69 55  
Fax: +33 4 78 43 71 99  
e-mail: [unex@unex.fr](mailto:unex@unex.fr)  
Branch offices: Aix en Provence, Lyon, Nantes,  
Paris, Strasbourg, Toulouse

### **PORTUGAL (Since 1995)**

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#### **Retrica Aparelhagem Eléctrica, Lda.**

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Branch office: Porto

### **GERMANY (Since 1998)**

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Branch office: Ratingen

### **CHILE (Since 2008)**

---

#### **Unex aparellaje eléctrico Chile, Ltda.**

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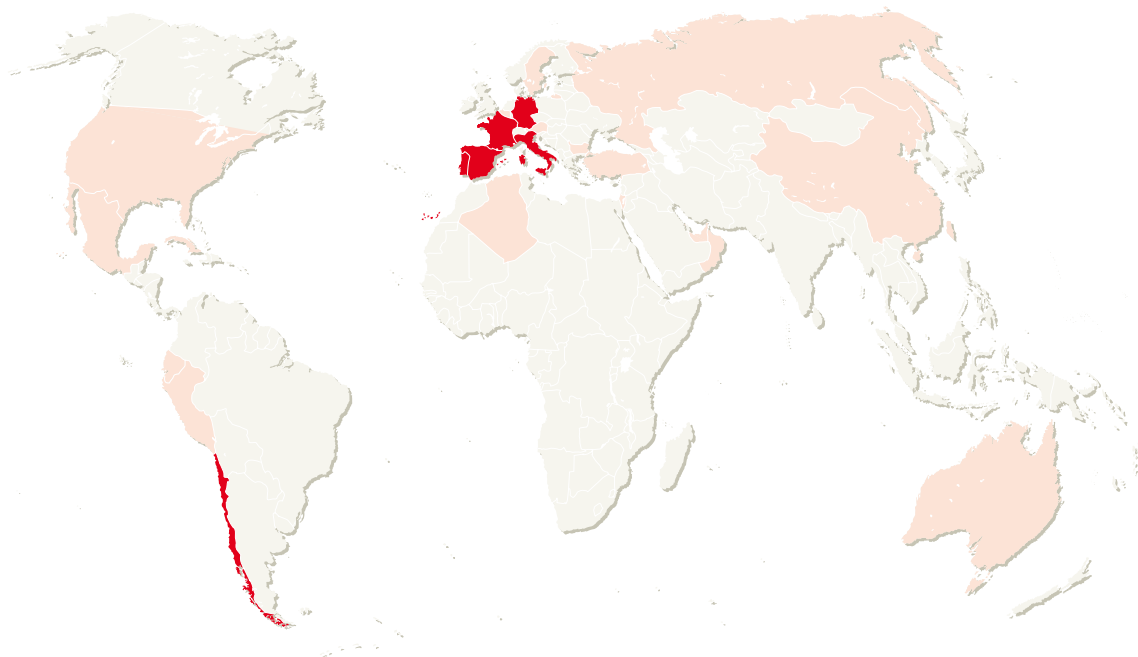


# environment

## Distribution in:

Algeria	Cuba	Peru
Australia	Czech Republic	Russia
Austria	Ecuador	Sweden
Bahrain	Hong Kong	Taiwan
Belgium	Italy	Turkey
Bulgaria	Mexico	Uae
China	Oman	Usa

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■ Commercial offices

■ International distribution network



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