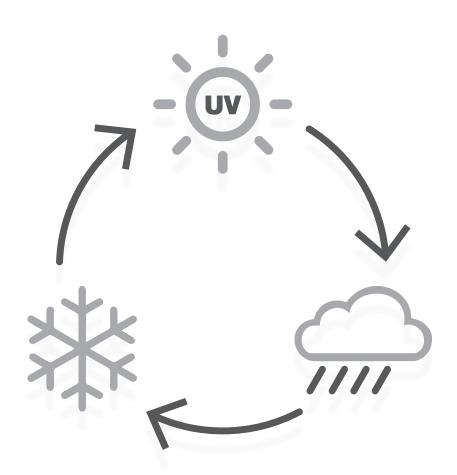


# Unex solutions for outdoors



www.unex.net



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## Unex solutions for outdoors

In 1964, Unex was born with a purpose: to create environments with maximum electrical safety for the benefit of installations and their users.

Pioneers in electrically insulating solutions, today Unex has created a market for non-metallic products in a sector that historically was dominated by metal.

#### Unex history: major milestones

Unex launches its first products: helical tube, perforated tape, marking systems and **UNEXDUCT**, the first slotted trunking.

#### 1974

Introduction of **Cable ties 22**, manufactured under MIL (US Military Standard)

#### 1975

Production of our own raw material.

Launching the first PVC cable tray.

#### 1985

Launching of the **Insulating cable tray 66** with a more evolved and resistant design.

#### 1990

Launching of the **Trunking 73**, a 3m large trunking with flexible compartments and a system for mounting switches and sockets.

#### 1991

First European manufacturer to introduce **M1** 

#### 1999

Launching of the **Slotted trunking 88 halogen free**.

#### 2006

First European manufacturer of cable management to comply with **RoHS Directive**.

#### 2007

Launching of the Cable tray 66 halogen free

#### 2014

Unex celebrates 50 years.

#### 2015

Launching of the Cable ties 22HD (heavy duty) for special applications.
Launching of the detectable Cable ties 22DT.

#### 2018

Launching of the **Insulating Cable Iadder 67**. The first cable ladder in thermoplastic material.



## Own design, formulation and manufacturing

Since its inception, **Unex** has focused its efforts on **R&D**, formulating its own raw materials and designing each of its products, offering innovative solutions.



Listening, advising and offering you the solution that best adapts to your needs has been our raison d'être for more than 55 vears.

### Quality marks

The pursuit of efficiency, continuous improvement and the high added value of our products allows us to offer the best solutions, accredited internationally by obtaining the most prestigious approvals and quality marks.





















See up-dated quality marks by part number at www.unex.net

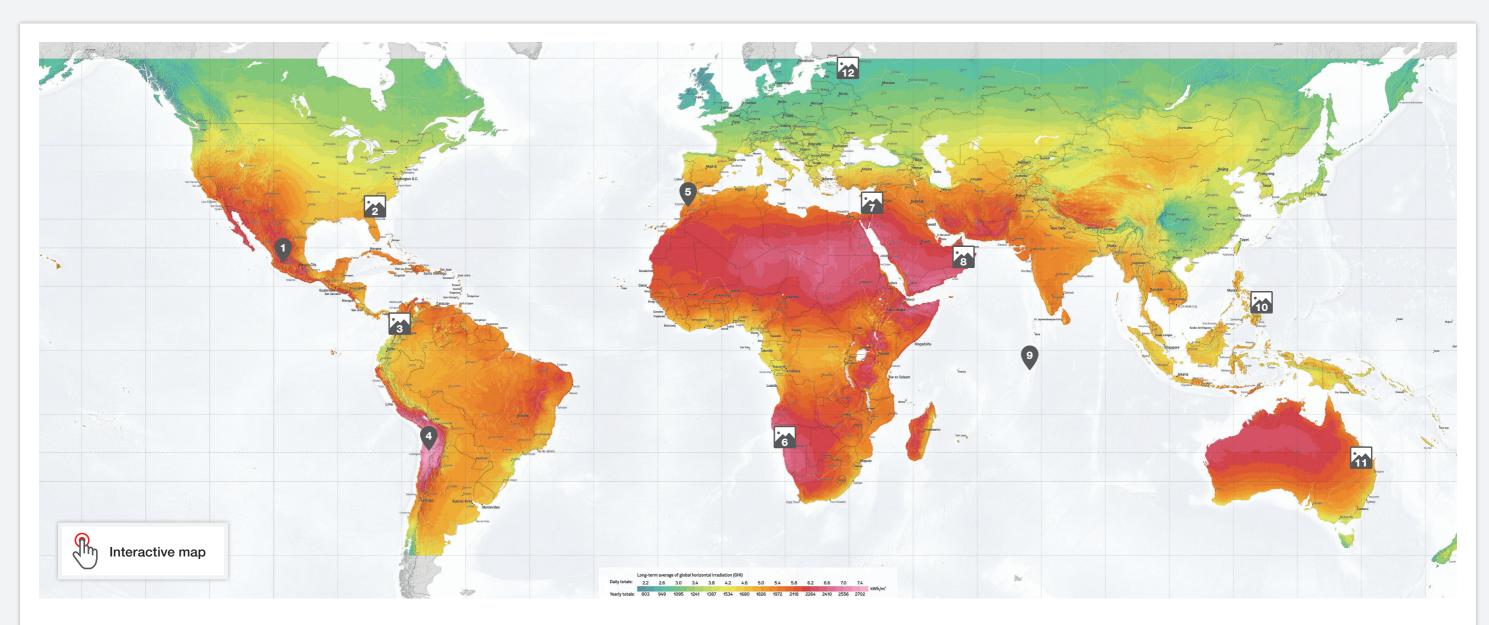


## International experience

Unex insulating solutions are backed by more than 45 years of experience in outdoor installations, remaining unalterable even in the most demanding conditions: direct exposure to inclement weather, ultraviolet radiation, or presence of pollutants.

In the following map you can see some of our projects.

With experience in outdoor installations all over the world, our products have proven their effectiveness and durability even in the most extreme climatic conditions.







Copyright © 2019 THE WORLD BANK Data provider: The world bank Source: ESMAP Santa Marta Harbour · Colombia

4 Atacama gas · Chile

OCP - Jorf Lasfar/Safi Phosphate plants · Morocco

Dunes Mall PV rooftop · Namibia

Ashdod desalination plant · Israel

Tubli wastewater treatment plant · Bahrain

Oblu Maldives Hotel PV installation · Maldives

Cardona water treatment plant · Manila. Philippines

Fairfield sewage treatment plant, Sydney · Australia

St. Petersburg wastewater treatment plant · Russia



## Unex product families for outdoor installations

## **Electrically insulating systems for cable distribution**

## Insulating cable ladder 67



- For supporting and conducting large-calibre cables.
- Only one product for both horizontal and vertical installations.

#### Insulating cable tray 66



 For supporting, protecting and conducting cables in all type of installations.
 Available with perforated or non perforated base.

#### Insulating trunking 73



 For protecting and conducting cables.
 Profile with flexible partitioning and preassembled junctions for easy mounting.

## Unex advantages and benefits

- Insulating material offering maximum electrical safety: protection against indirect contacts.
- No earthing is required nor equipotential bonding is needed.
- Robust and durable systems offering increased rigidity and mounting security.
- With finishing elements that simplify and improve the finishes of the installation.
- Maintenance-free: reduces installation time and costs.
- Excellent resistance to corrosion caused by direct exposure to humid, saline or chemically aggressive environments.
- Suitable for outdoor use. Excellent performance even under the most demanding weather conditions like temperature changes, solar radiation, etc.
- High mechanical and impact resistance.
- Designed to work at full load: simpler calculation process in the design of the cable tray, execution and control of the installation. Load resistance in future extensions of the installation.



#### System for tying and fixing cables and tubes

Cable ties 22-0



• For all types of applications both outdoors and indoors.

Cable ties 22 HD (Heavy duty)



 For special applications, where a high resistance to the UVs and to chemicals is required.

Features of Unex cable ties	Indoor use	Outdoor use	UV resistance	Service temperature	Resistance to traction Width 4.8mm and 7.6mm	Resistance to chemical environments	Dry environments	Easy mounting
22-0 USIX		*	\(\frac{1}{2}\)	+105 °C -40 °C	Type 2	Limited	Hygroscopic	
22HD		*	<b>X</b>	+105°C -60°C	Type 2		Non- hygroscopic	
(*) Products certificated acc/IEC 62275 standard UV Resistant			(		TO AE NOOT			

(\*\*) Chemical environments depend on many factors and must be studied with a specific test.

### Unex advantages and benefits

- Reliability: more than 45 years of experience in all type of installations
- Good mechanical resistance and high tensile strength
- Easy mounting and smooth threading
- For outdoors use due to their high resistance to the UVs
- Own raw material formulation: improved technical characteristics

#### Cable cleats



 To fix cables to the crossbars of the Cable ladder 67, to the Strut channel 60 and to the Rooftop support 60.

## Unex advantages and benefits

- Manufactured in insulating, halogen free material
- Compatible with Unex Cable ladder 67 and with Unex Strut channel
- Fast mounting, without screws
- Ease and flexibility of installation: no space planning and additional site work are required



## Sectors of application

#### **Water treatment**

Installations characterised by environments with a high level of corrosion, oxidation and humidity, where the maintenance of the materials outdoors generates high costs.



Discover more applications of our products in water treament plants



## **Unex** Solutions













## **Chemical industry**

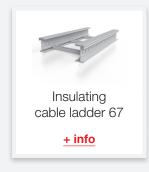
This sector requires high performance solutions, resistant to chemical aggressive products and environments.



Discover more applications of our products in chemical industries



## **Unex** Solutions











### **Photovoltaic** installations

In this type of installation, exposure to solar radiation reaches its maximum, so the use of products which do not develop very high temperatures, resistant to UV rays and extreme climatic conditions for the protection of the cabling has a major impact on the performance and durability of the plant.



Discover more applications of our products in photovoltaic installations



### **Unex Solutions**







+ info



Rooftop support 67-66 + info



trunking 73

+ info



22-0

+ info



Cable ties 22 HD

+ info



## Rooftop installations

Being permanently exposed to UV rays, climatic variations and attacks by birds or rodents, the insulation of cables and pipes, in this type of assembly, suffers great deterioration that directly affects the performance of the installations, shortening their service life.



Discover how to install our Insulating Cable tray 66 on a rooftop



### **Unex** Solutions







+ info









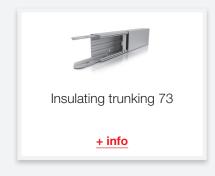
## Façade installations

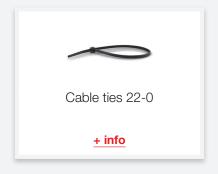
With the evolution of new technologies, this type of installations require adaptable materials which can be easily modified in order to guarantee the correct functioning of all the services. Moreover, they have to integrate into the architecture of the building, guaranteeing maximum electrical safety.



## **Unex** Solutions









#### **Unex Solutions for outdoors**

## Case studies



















## TMB metro lines L9/L10 (Barcelona)

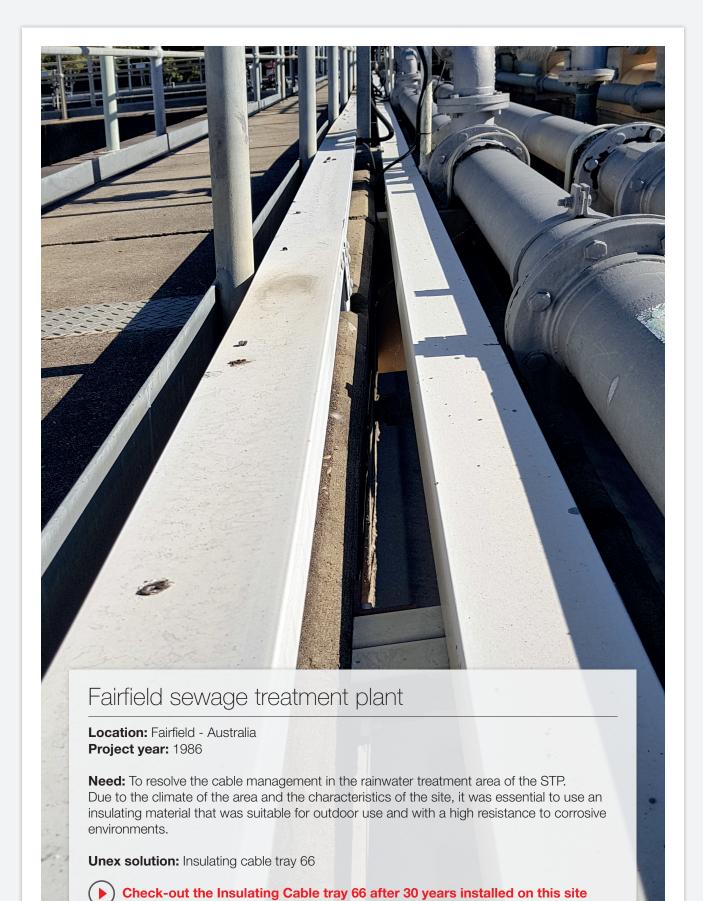
**Location:** Barcelona, Spain **Project year:** 2014

**Need:** Design a cable distribution and protection system for the remote control technology that allows the circulation of the driver-free trains in a 100% safe, flexible and reliable way.

**Unex solution:** Insulating cable tray 66, omega profile and cover fixing in thermoplastic material









## Petroleum Company

Location: Bataan, Philippines

Project year: 2018

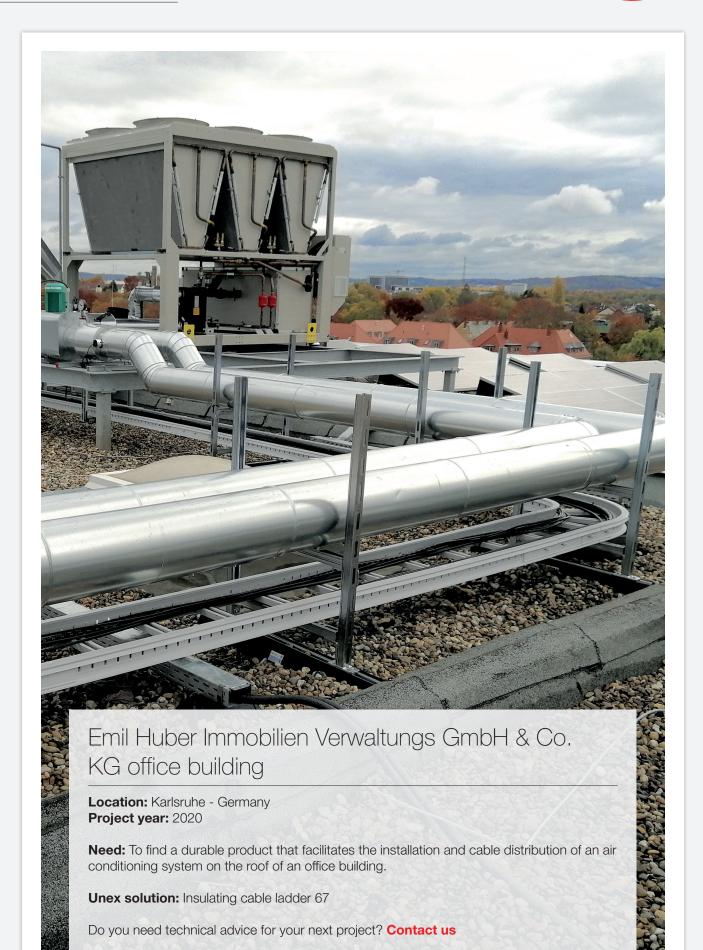
**Need:** To find a durable and reliable product to minimise plant maintenance in a coastal installation with the presence of hydrocarbons, explosive atmospheres and a high level of

corrosion.

Unex solution: Insulating cable tray 66









## Dunes Mall PV rooftop

Location: Walvis Bay, Namibia

Project year: 2019

**Need:** Install a photovoltaic system on the rooftop of a shopping centre located 1 km from

the sea, in a geographical area with high solar radiation and environmental salinity.

**Unex Solution:** Insulating Cable tray 66

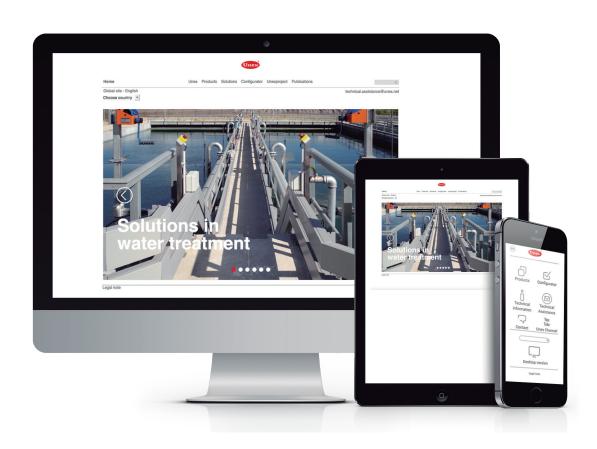




## 2.0 online tools available at unex.net

Unex offers different tools for the prescription:

- Unex Project for the dimensioning of Unex insulating trunkings.
- BIM-REVIT and 3D-DWG libraries for the entire Unex range.
- Configurator to quantify and calculate your needs.
- Mounting videos



## Follow us on our social media









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