



Basorplast PVC cable trays

Installations & uses

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Introduction

BPE 60x100 to 60x300



Models (HxB):

60x100; 60x150; 60x200; 60x300; 100x200; 100x300; 100x400; 100x600.
Types: Slotted or solid bottom.
Finishes: PVC M1 UV RAL 7035

Characteristics of the tray:

- Non metallic system
- Resistant to UV radiation. Excellent behaviour in outdoor installation.
- Impact Strength: 20J, except 60x100 with 10J
- Minimum temperature: -4 °F
- Maximum temperature: 140 °F
- Non-flame propagating component
- Without electrical continuity
- Electrical insulating component
- Dielectric Strength 18 +/- 2 kV/mm
- High protection inside and outside against corrosive substances
- M1 reaction to fire acc. to UNE 23727
- Glow wire test degree 1760 °F, EN 60695-2-11
- Flammability UL 94-VO, ANSI/UL 94-1995
- Limiting Oxygen Index LOI>50%, EN ISO 4589
- Comply with RoHS directive, 2002/95/CE
- Raw material without silicone

BPE 100x200 to 100x600



INSTRUCTIONS FOR USE

- For the assembly, two union joints and four M8 Bolt sets are needed for each stretch (8 for H100 models).
- Tray installation for electrical systems should NOT run under other types of canalizations such as water, vapour or gas canalizations.
- To guarantee a good ventilation, we recommend installing the trays

keeping a minimum distance of 250 mm between each tray.
- Suitable for wet, salty and chemical aggressive environments.
- To assure good performance under expansions, the increase in temperature must be noted, depending on the expected growth

in the temperature (ΔT) leave a gap (h) between cable trays according to the following table :

ΔT (°F)	h (mm)
68	5
86	7
104	9
122	11

MODEL	Safe Working Load - kg/m (lb/ft)		
	2.4m (8ft)	1.8m (8ft)	1.5m (5ft)
BPE-60X100	9.7 (6.5)	17.3 (11.6)	25 (16.7)
BPE-60X150	9.9 (6.6)	17.6 (11.8)	25.3 (17)
BPE-60X200	28.1 (18.8)	49.9 (33.5)	71.9 (48.3)
BPE-60X300	55.2 (37)	98.1 (65.9)	141.3 (94.9)
BPE-100X200	69.6 (46.7)	123.7 (83.1)	178.2 (119.7)
BPE-100X300	107.2 (72)	190.5 (128)	274.4 (184.4)
BPE-100X400	178 (119.6)	316.4 (212.6)	455.6 (306.2)
BPE-100X600	219.7 (147.6)	390.5 (262.4)	562.4 (377.9)

MODEL	Safe Working Load - kg/m (lb/ft)		
	2.4m (8ft)	1.8m (8ft)	1.5m (5ft)
BPE-60X100	6.9 (4.6)	12.3 (8.3)	17.8 (11.9)
BPE-60X150	7 (4.7)	12.5 (8.5)	18 (12.1)
BPE-60X200	20 (13.4)	35.6 (23.9)	51.3 (34.5)
BPE-60X300	39.4 (26.4)	70 (47)	100.8 (67.7)
BPE-100X200	49.7 (33.4)	88.3 (59.3)	127.2 (85.5)
BPE-100X300	76.5 (51.4)	136 (91.4)	195.9 (131.6)
BPE-100X400	127 (85.3)	225.9 (151.8)	325.3 (218.6)
BPE-100X600	156.8 (105.3)	278.8 (187.3)	401.5 (269.8)

Water Treatment



Water treatment is any process that makes water more acceptable for a specific end-use. The end use may be drinking, industrial water supply, irrigation, river flow maintenance, water recreation or many other uses, including being safely returned to the environment. **These kind of works with a lot of humidity need materials such as PVC to avoid corrosion and guarantee a long life of the installation.**



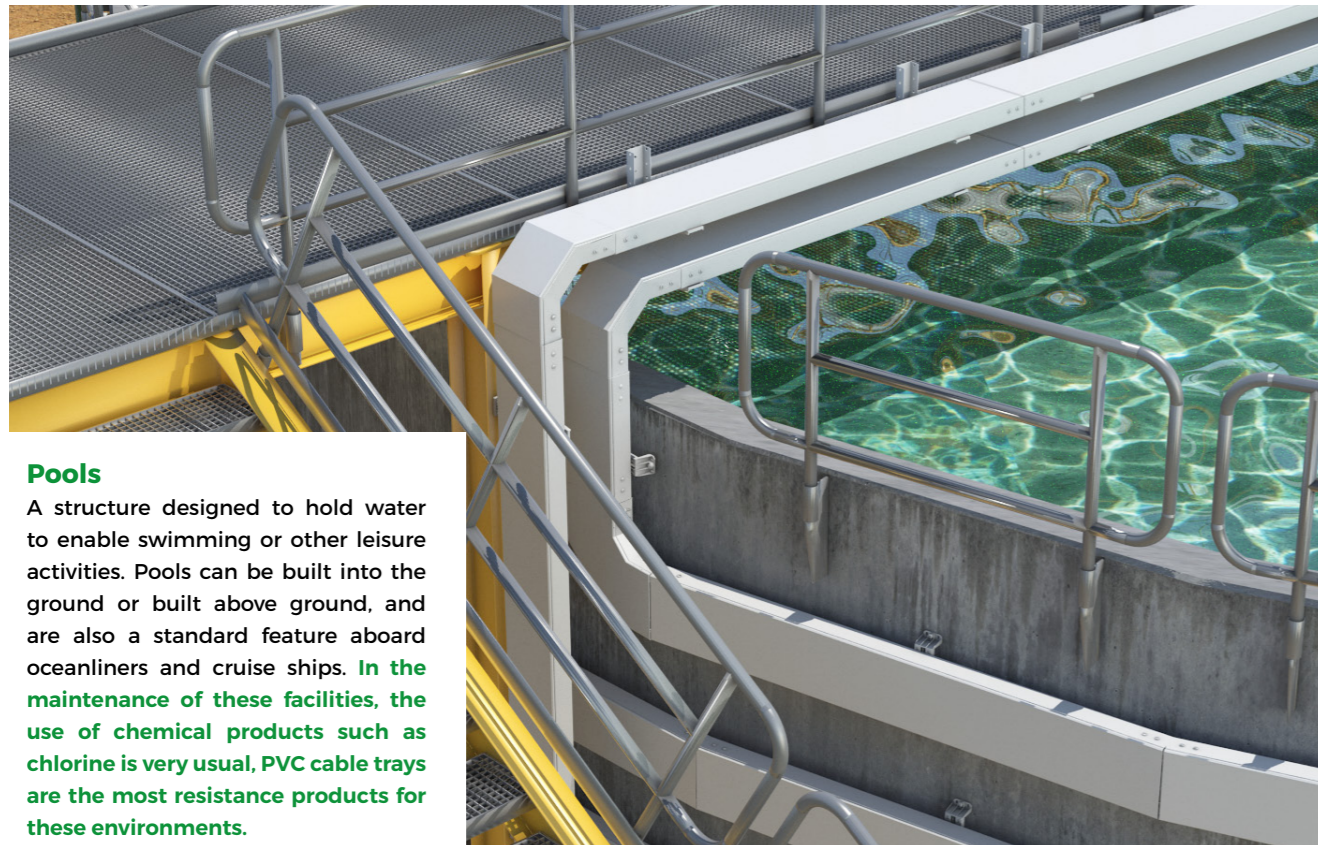
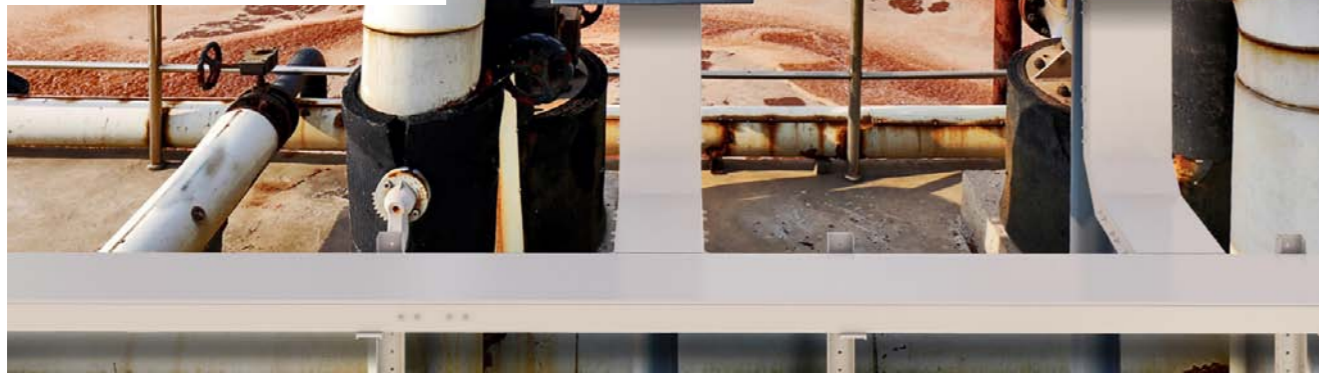
Desalination plants: Saline water can be treated to yield fresh water. Two main processes are used, reverse osmosis or distillation. Both methods require high energy inputs and generate saline environments. **The PVC trays are perfect to be installed here because they are not affected by salty environment.**



Pumping stations: Pumping stations are facilities including pumps and equipment for pumping fluids from one place to another. They are used for a variety of infrastructure systems, such as the supply of water to canals, the drainage of low-lying land. **A pumping station needs to be installed with non metal trays due to the high humidity of these areas.**

Wastewater treatment

Is a process used to convert water no longer needed or suitable for its most recent use - into an effluent that can be either returned to the water cycle with minimal environmental issues or reused. Treatment means removing impurities from water being treated and this process generates gases. **These gases are corrosive and can affect metals, PVC cable trays are the most efficient solution for these environments due to it's high resistance to corrosion.**



Pools

A structure designed to hold water to enable swimming or other leisure activities. Pools can be built into the ground or built above ground, and are also a standard feature aboard oceanliners and cruise ships. **In the maintenance of these facilities, the use of chemical products such as chlorine is very usual, PVC cable trays are the most resistance products for these environments.**

Mining



Mining is extraction of valuable minerals or other geological materials from the earth usually from an orebody, lode, vein, seam, reef or placer deposits. Mining in a wider sense includes extraction of any non-renewable resource such as petroleum, natural gas, or even water. Types of mining are hydroskimming, fire refining, smelting and others, most of them with water in process. **The PVC cable trays are the most convenient products for humid environments thanks to the high resistance against the moisture oxidation.**

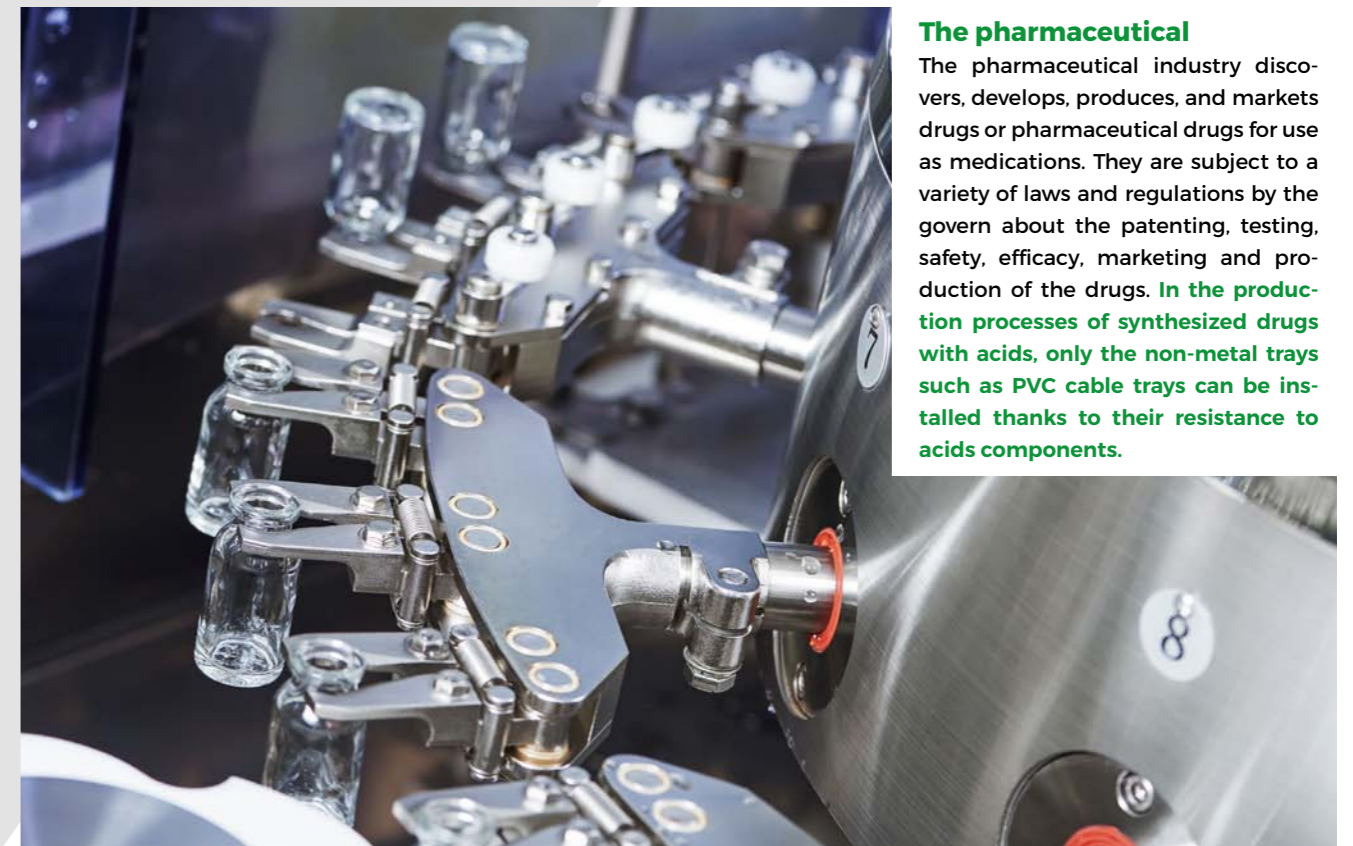
Chemical Industry



The chemical industry comprises the companies that produce industrial chemicals. Central to the modern world economy, it converts raw materials (oil, natural gas, air, water, metals, and minerals) into more than 70,000 different products through chemical processes. **These chemical environments produce very aggressive atmospheres that highly affect metals. The PVC cable trays are perfect choice due to its high resistance against these aggressive atmosphere.**



Petrochemicals.
Also called petroleum distillates, are chemical products derived from petroleum. Some chemical compounds made from petroleum are also obtained from other fossil fuels, such as coal or natural gas, or renewable sources such as corn or sugar cane. The two most common petrochemical classes are olefins and aromatics obtained thanks to aggressive distillate processes. **These processes generate humid environments. The PVC cable trays are the best solution to the water effects does not impact into the products because they are not altered by water.**

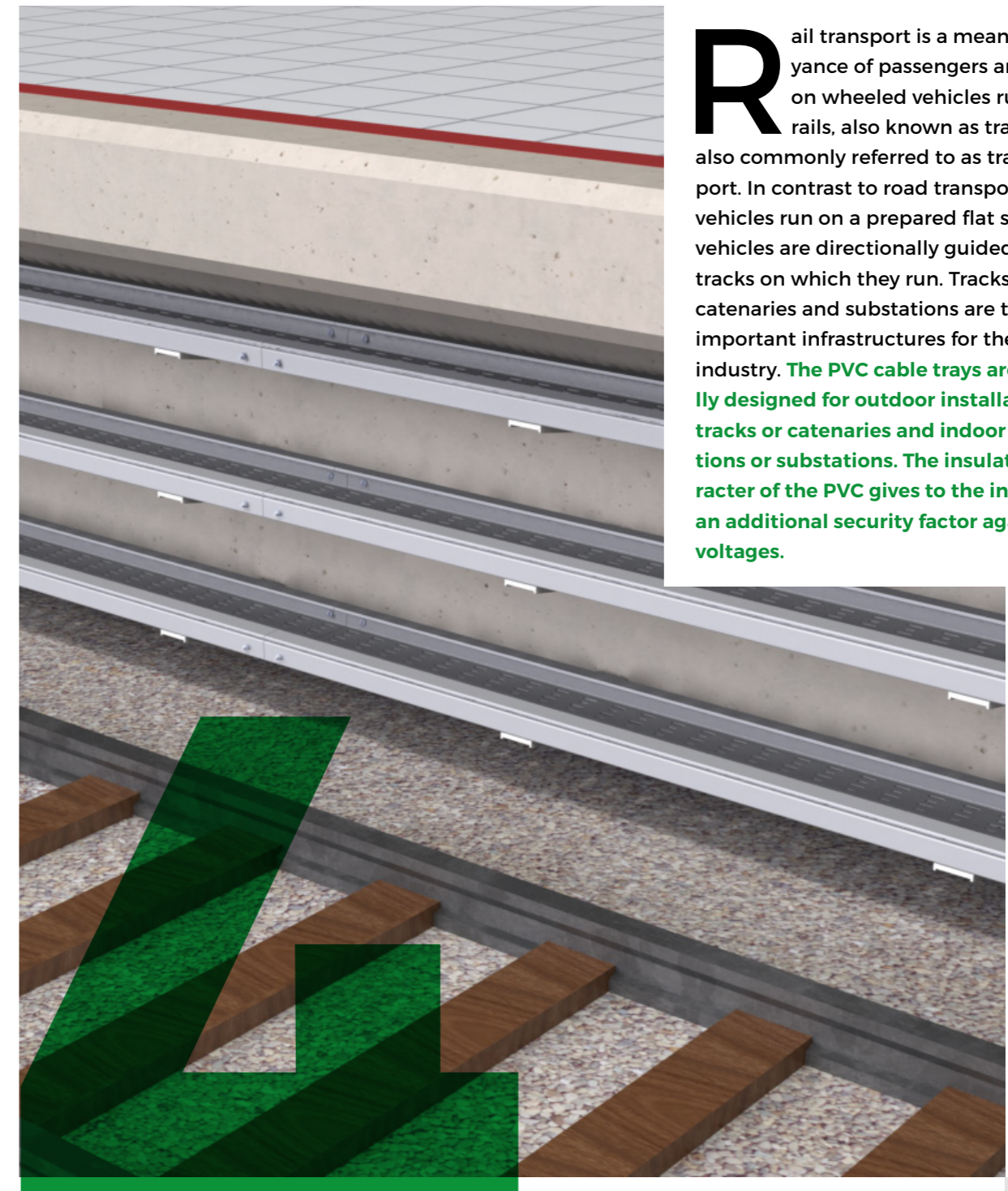


The pharmaceutical
The pharmaceutical industry discovers, develops, produces, and markets drugs or pharmaceutical drugs for use as medications. They are subject to a variety of laws and regulations by the govern about the patenting, testing, safety, efficacy, marketing and production of the drugs. **In the production processes of synthesized drugs with acids, only the non-metal trays such as PVC cable trays can be installed thanks to their resistance to acids components.**



The pulp and paper industry
Comprises companies that use wood as raw material and produce pulp, paper, board and other cellulose-based products. The papermaking process has a low environmental impact, while the paper is not bleached. Bleaching requires the use of hydrogen peroxide, or chlorine dioxide, two highly polluting and aggressive substances. **The PVC cable trays are specially designed and formulated to respond to these environments with hardness and durability.**

Railways infrastructure



Rail transport is a means of conveyance of passengers and goods on wheeled vehicles running on rails, also known as tracks. It is also commonly referred to as train transport. In contrast to road transport, where vehicles run on a prepared flat surface, rail vehicles are directionally guided by the tracks on which they run. Tracks, stations, catenaries and substations are the most important infrastructures for the railways industry. **The PVC cable trays are specially designed for outdoor installations as tracks or catenaries and indoor as stations or substations. The insulating character of the PVC gives to the installation an additional security factor against high voltages.**

A fertilizer

A fertilizer is any material of natural or synthetic origin that is applied to soils or to plant tissues to supply one or more plant nutrients essential to the growth of plants. This goal is met in two ways, the traditional one being additives that provide nutrients. The second mode by which some fertilizers act is to enhance the effectiveness of the soil by modifying its water retention and aeration. **These processes produce acid and alkaline environments. The PVC cable trays are the best solution due to proven resistance to these environments.**



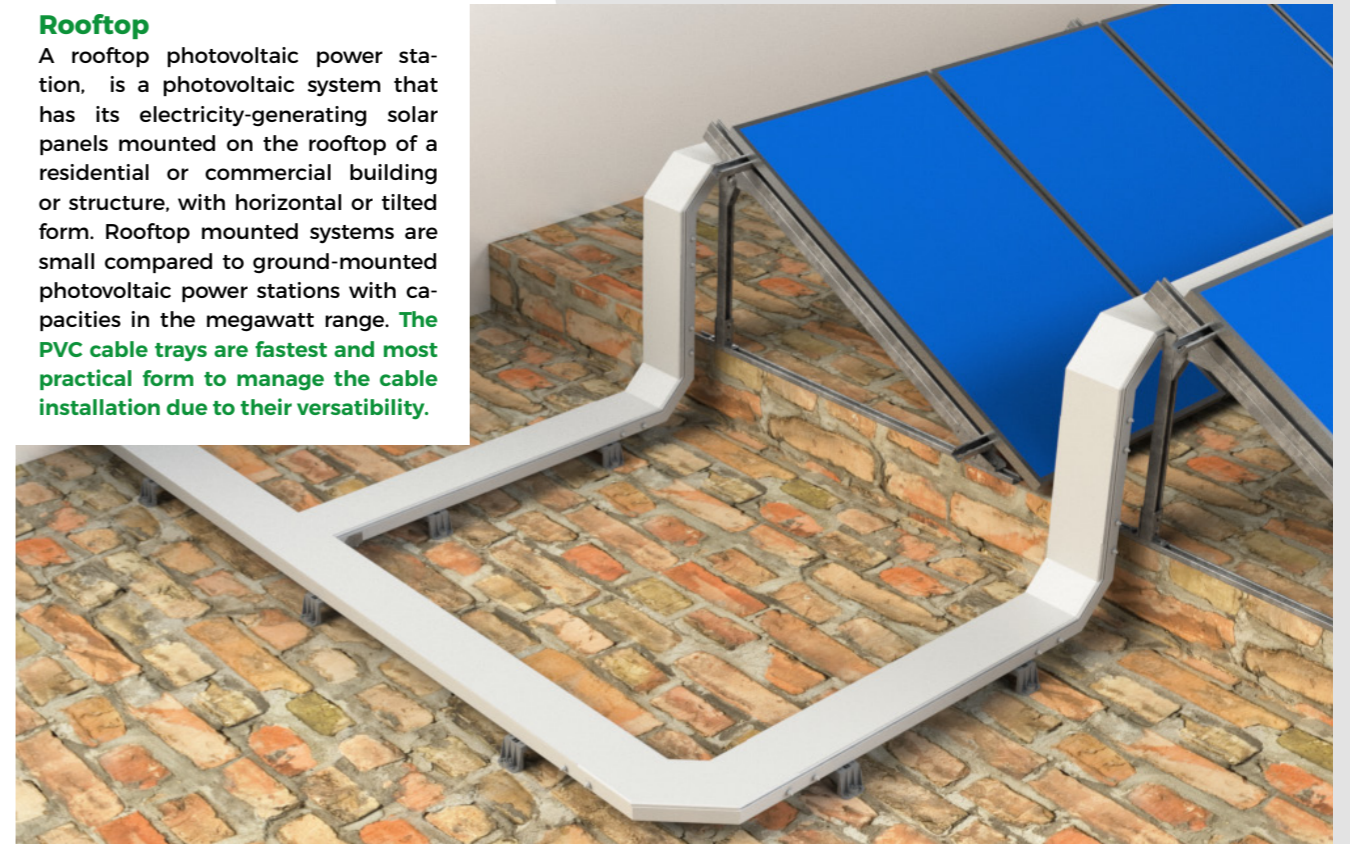
Solar installations

The solar energy is the energy obtained by the light and heat catchment made by the sun. These installations transform the solar radiation into Electrical energy through photovoltaic panels, making possible the accumulation into batteries. All these installations are outdoor, where the inclement weather affect directly. **The PVC cable trays are specially designed to be installed in outdoor environments, having an excellent resistance to the rain and humidity without any kind of oxidation.**



Rooftop

A rooftop photovoltaic power station, is a photovoltaic system that has its electricity-generating solar panels mounted on the rooftop of a residential or commercial building or structure, with horizontal or tilted form. Rooftop mounted systems are small compared to ground-mounted photovoltaic power stations with capacities in the megawatt range. **The PVC cable trays are fastest and most practical form to manage the cable installation due to their versatility.**

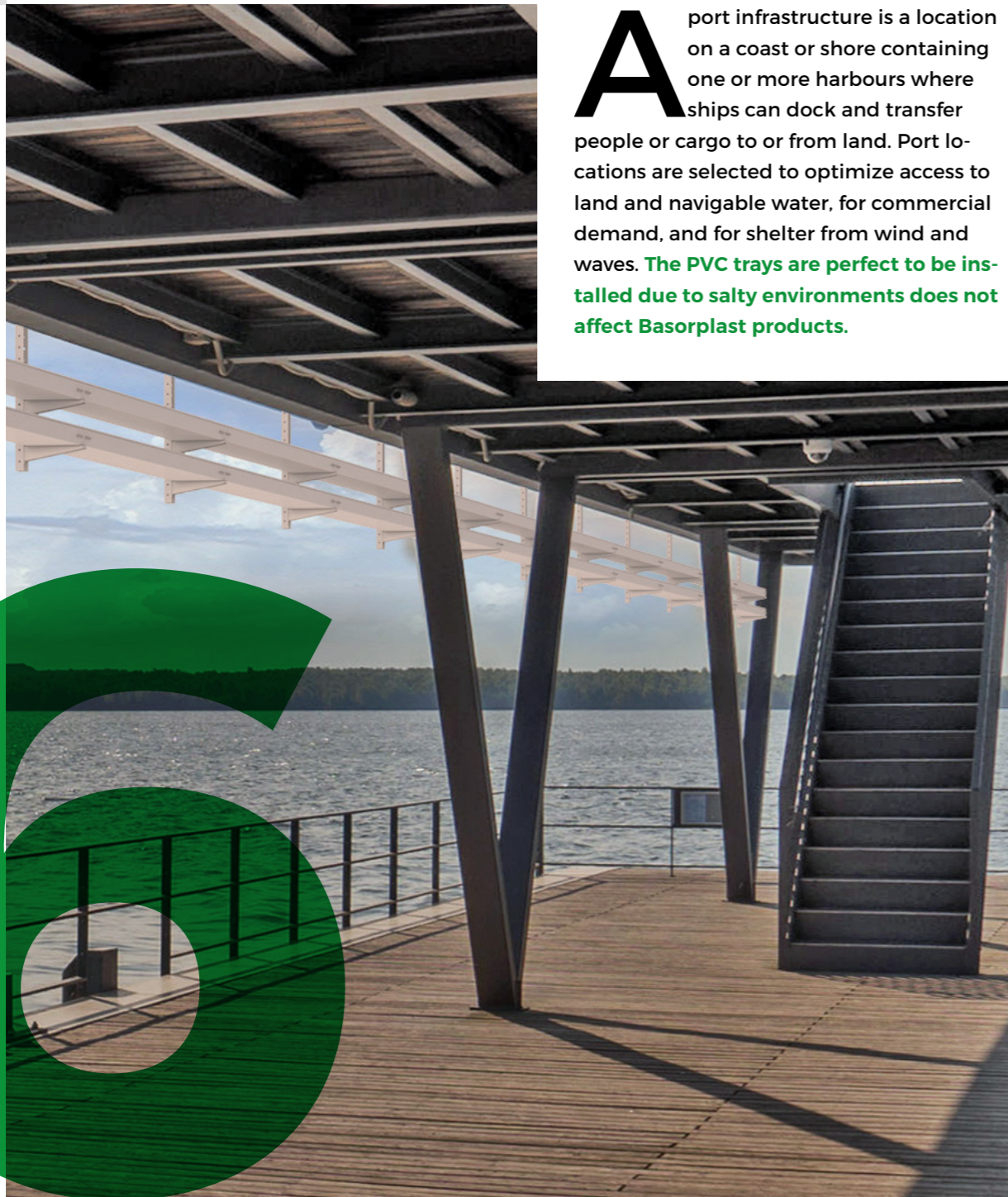


Solar Farm

A Solar Farm is a photovoltaic power station, with a large-scale photovoltaic system designed for the supply of merchant power into the electricity grid. They are differentiated from most building-mounted and other decentralised solar power applications because they supply power at the utility level, rather than to a local user or users. **The PVC cable trays are the fastest and practical form to manage the cable installation due the easier to construct the way to the solar panels.**



Sea and ports infrastructure



A port infrastructure is a location on a coast or shore containing one or more harbours where ships can dock and transfer people or cargo to or from land. Port locations are selected to optimize access to land and navigable water, for commercial demand, and for shelter from wind and waves. **The PVC trays are perfect to be installed due to salty environments does not affect Basorplast products.**

Harbour crane

Is a type of machine, generally equipped with a hoist rope, wire ropes or chains, and sheaves, that can be used both to lift and lower materials and to move them horizontally. It is mainly used for lifting heavy things and transporting them to other places. **Cranes are commonly corroded by salty winds. The PVC cable trays are the best solution against the oxidation produced by these winds.**

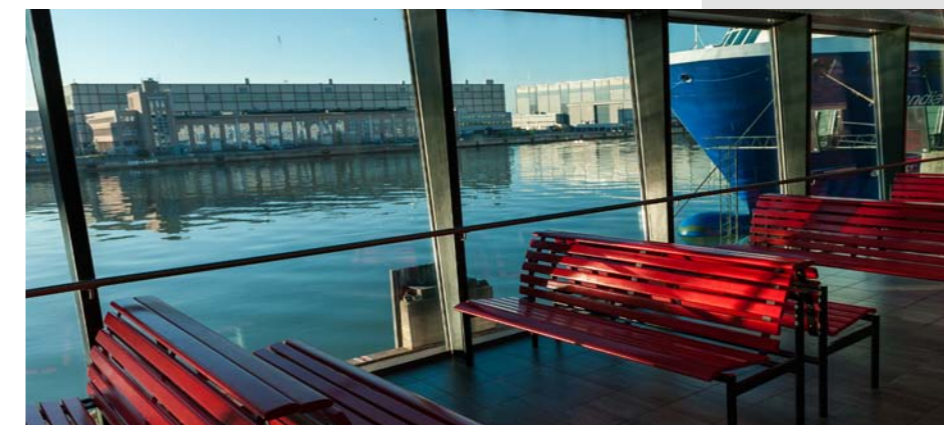


Dam barrier

is a barrier that impounds water or underground streams. Reservoirs created by dams not only suppress floods but also provide water for activities such as irrigation, human consumption, industrial use, aquaculture, and navigability. Hydropower is often used in conjunction with dams to generate electricity. **Dams are subjected to very humid and salt windy areas, the PVC cable trays are not altered and are the best solution for these works.**

Dock

A dock is either the area of water between or next to a human-made structure or group of structures involved in the handling of boats or ships, usually on or close to a shore, or the structures themselves. **Docks are subject to high humidity. PVC cable trays are not altered by the harmful effects of these environments.**



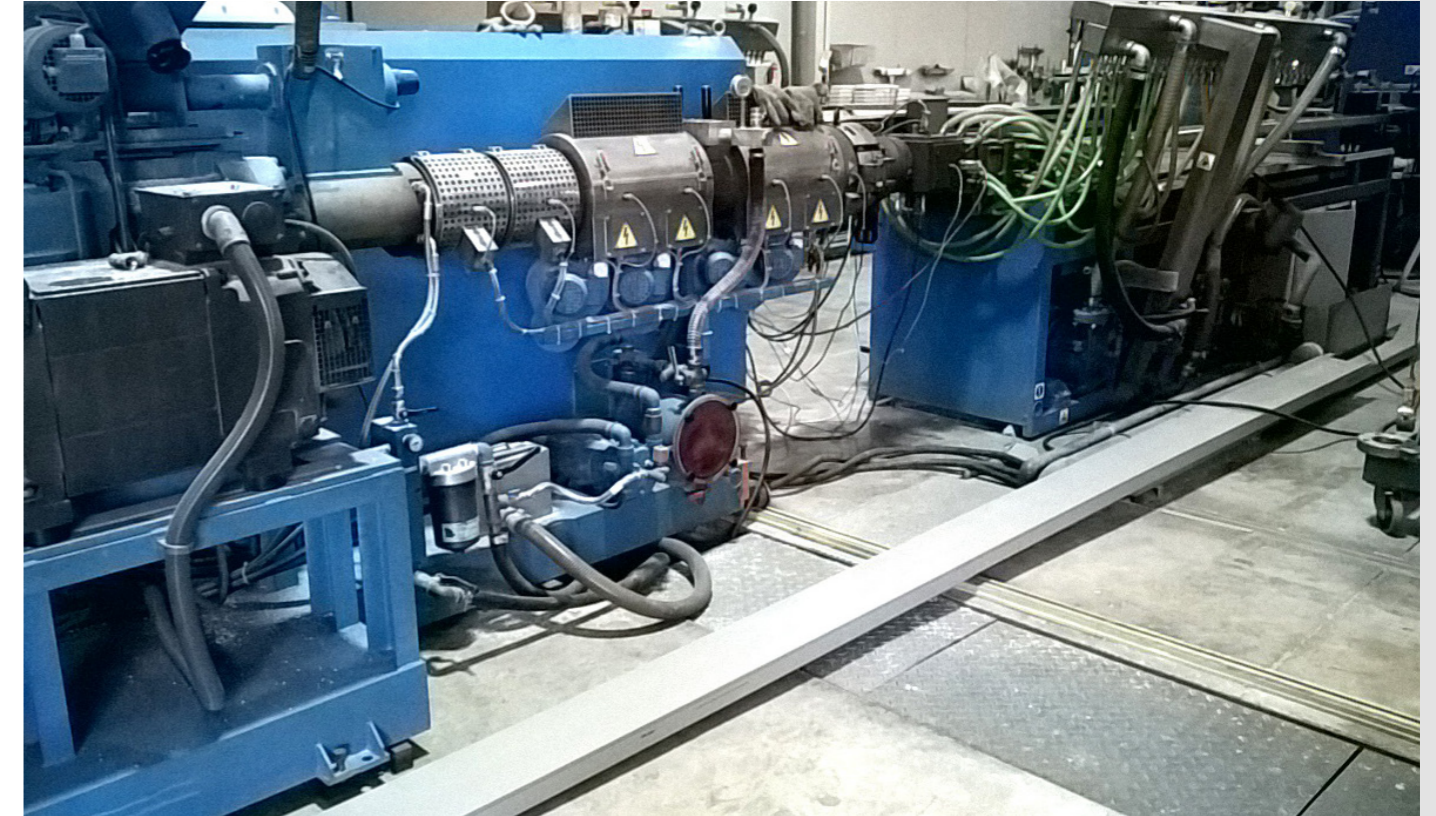
Boarding Bridge

Is a platform used to the entry the passengers onto a watercraft that can be located in harbour or at sea. Boarding starts with entering of the first passenger and ends with the seating of each passenger and closure of the doors. **Boarding bridges are located at very humid areas. The PVC cable trays are not corroded by it being the best solution for the cable management.**

Machine Building



The machine industry or machinery industry is a subsector of the industry that produces and maintains machines for consumers, industry, and many other sectors in the economy. **The insulating character of the PVC cable trays gives to the machinery installation a higher security for indirect electrical contacts.**



Machinery with water in process, the means of production for businesses in the agriculture, mining, industry and construction. The means of production for public utility, such as equipment for the production and distribution of gas, electricity and water. A range of supporting equipment for all sectors of the economy, such as equipment for heating, ventilation, and air conditioning of buildings.

The production of the machinery industry varies widely from single-unit production and series production to mass production. From a certain stage in the production, the specific customer requirements are build in, and the unique product is created. The processes of the machinery generate humidity environments. **The PVC cable trays are the best solution because the water effects do not have any impact into the products.**

Shore and cost infrastructures



A shore or a shoreline is the fringe of land at the edge of a large body of water, such as an ocean, sea, or lake. In physical oceanography, a shore is the wider fringe that is geologically modified by the action of the body of water past and present, while the beach is at the edge of the shore, representing the intertidal zone where there is one. **These kind of areas suffer the effect of the salty winds. PVC cable trays are not altered by the oxidation that the salt produces in metals. For this reason, it is the best option to be installed at sea fronts.**



HOTEL

A hotel is an establishment that provides lodging paid on a short-term basis. Facilities provided may range from a modest-quality mattress in a small room to large suites. The hotels located at beach areas or near from the sea, are affected directly by the humid and the salty winds every day. **The PVC cable trays are specially designed to not be affected by these environments, being the best option for this kind of installation.**



TERTIARY BUILDING

A commercial or tertiary building is a building that is used for commercial use. Types can include office buildings, warehouses, or retail. In beach locations, a commercial building often combines functions, such as an apartments on levels 2-10, with retail on floor 1. The buildings located at beach areas or near from the sea, are affected directly by the humid and the salty winds every day. **The PVC cable trays are specially designed to not be affected by these situation, being the best option for this kind of installation.**

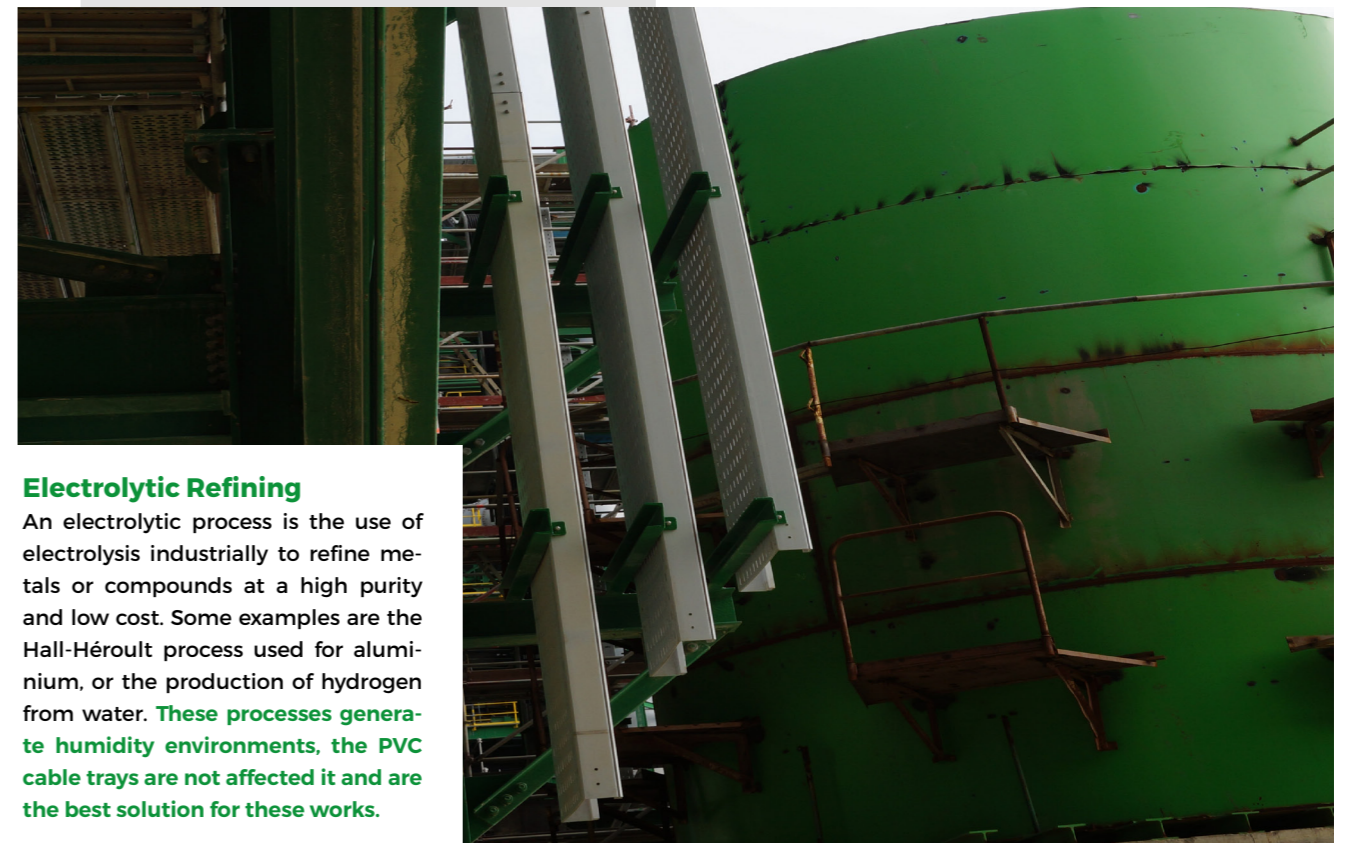
Metal Chemical Industry



The production of metals involves the chemical processing to extract the metal that contain, and the mixture of metals, sometimes with other elements to produce alloys. **These process are highly aggressive due to the sulphur generated. The PVC cable trays are the most convenient solution thanks to the big resistance to this highly corrosive environment.**



Metallurgy
Is a domain of materials science and engineering that studies the physical and chemical behaviour of metallic elements, their intermetallic compounds, and their mixtures, which are called alloys. The production of metals involves chemical processing to produce alloys. **These processes produce zinc and lead atmospheres. The PVC cable trays are designed to withstand on these environments with a long life.**



Electrolytic Refining
An electrolytic process is the use of electrolysis industrially to refine metals or compounds at a high purity and low cost. Some examples are the Hall-Héroult process used for aluminium, or the production of hydrogen from water. **These processes generate humidity environments, the PVC cable trays are not affected it and are the best solution for these works.**

Products that the pvc tray can replace



The PVC cable trays can replace other materials with a high resistance against the corrosion, salinity or humidity like **Fiberglass, stainless steel 304, stainless steel 316 or aluminum.**

Main Advantages:

Excellent corrosion behavior for chemical and saline environment

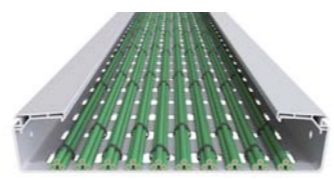
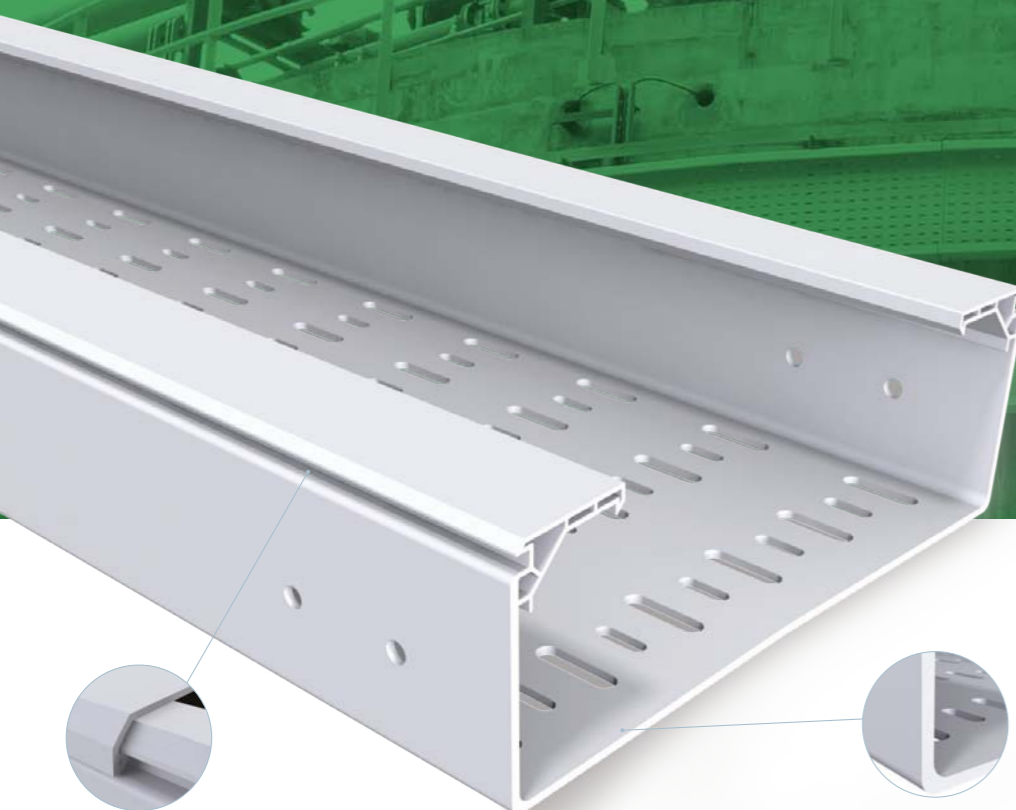
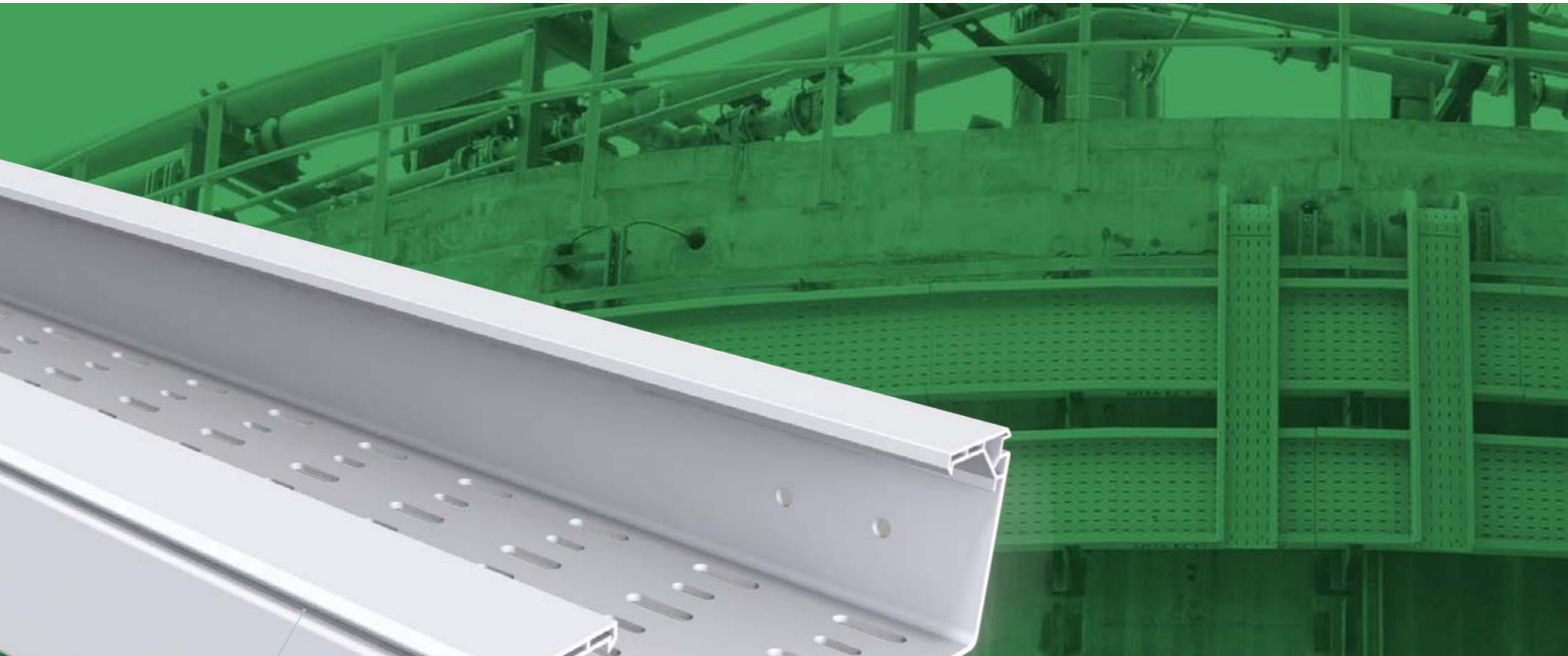
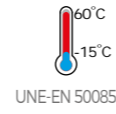
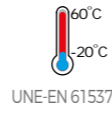
Electrical safety: Insulating material, earthing not required. Specially important in installations in areas where there are access for people. In a metal tray with a bad grounding, or coincide in the middle of 2 crossbeams, is potentially dangerous if it is touched. Due the pvc trays are insulating, these situations are not danger, even if there are a bare wire inside, the tray remains secure if you touch it.

Avoids creepage, hot spots and electrical arcs.

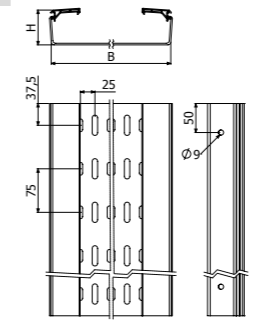
Good performance outdoors and to corrosion, over 40 years experience in outdoor installations.

No maintenance.

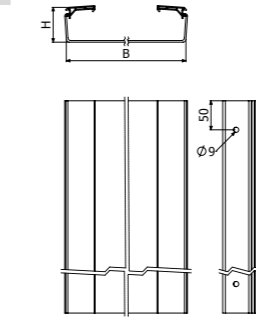
	ADVANTAGES	DISADVANTAGES
FiberGlass Cable Tray, Cable Ladder	Best price	Lowest admissible working load
	Equal or better chemical behavior	
	Self extinguising	Greater limitation of working temperatures
	Recyclable	
	Weithg Product for comfort installation.	
Stainless Steel Cable Tray, Cable Ladder	Major Electrical Safety of the installation, does not have electrical continuity	Lowest admissible working load
	Cost efficient	Greater limitation of working temperatures
	Facing SS304 better performance in saline environment	
Aluminium Cable Tray and Cable Ladder	Major Electrical Safety of the installation, does not have electrical continuity	Lowest admissible working load
	Cost efficient	Greater limitation of working temperatures
	Best corrosion behavior for aluminum (NO Anodized, 100% welding cable ladders)	



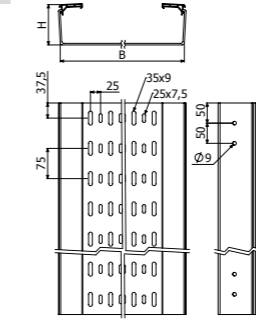
BPE / H60



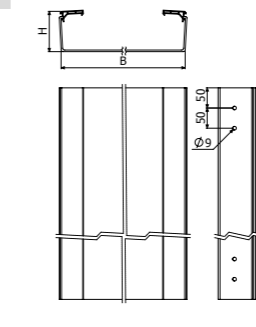
BPE-C / H60



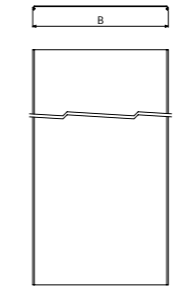
BPE-P / H100



BPE-C / H100



TBPE



3m (10ft)	↕		↔		PVCMI UV	SWL					
	Up to 104 F°		Up to 140 F°			1m between supports		1.5 m between supports		1m between supports	
	mm	inch	mm	inch		Kg/m	Lb/ft	Kg/m	Lb/ft	Kg/m	Lb/ft
BPE 60X100	60	2 3/8"	100	4"	2/10070	39	86	20	44	20	44
BPE 60X150	60	2 3/8"	150	6"	2/10071	43	95	22	49	22	49
BPE 60X200	60	2 3/8"	200	8"	2/10072	64	141	31	69	31	69
BPE 60X300	60	2 3/8"	300	12"	2/10073	74	163	38	84	38	84



3m (10ft)	↕		↔		PVCMI UV	SWL					
	Up to 104 F°		Up to 140 F°			1m between supports		1.5 m between supports		1m between supports	
	mm	inch	mm	inch		Kg/m	Lb/ft	Kg/m	Lb/ft	Kg/m	Lb/ft
BPE-C 60X100	60	2 3/8"	100	4"	2/10062	39	86	20	44	20	44
BPE-C 60X150	60	2 3/8"	150	6"	2/10063	43	95	22	49	22	49
BPE-C 60X200	60	2 3/8"	200	8"	2/10064	64	141	31	69	31	69
BPE-C 60X300	60	2 3/8"	300	12"	2/10065	74	163	38	84	38	84



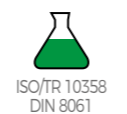
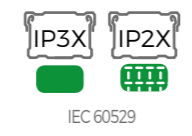
3m (10ft)	↕		↔		PVCMI UV	SWL					
	Up to 104 F°		Up to 140 F°			1m between supports		1.5 m between supports		1m between supports	
	mm	inch	mm	inch		Kg/m	Lb/ft	Kg/m	Lb/ft	Kg/m	Lb/ft
BPE 100X200	100	4"	200	8"	2/10074	119	263	57	126	57	126
BPE 100X300	100	4"	300	12"	2/10075	125	276	61	134	61	134
BPE 100X400	100	4"	400	16"	2/10076	168	371	81	179	81	179
BPE 100X600	100	4"	600	24"	2/10077	227	500	112	247	112	247



3m (10ft)	↕		↔		PVCMI UV	SWL					
	Up to 104 F°		Up to 140 F°			1m between supports		1.5 m between supports		1m between supports	
	mm	inch	mm	inch		Kg/m	Lb/ft	Kg/m	Lb/ft	Kg/m	Lb/ft
BPE-C 100X200	100	4"	200	8"	2/10066	119	263	57	126	57	126
BPE-C 100X300	100	4"	300	12"	2/10067	125	276	61	134	61	134
BPE-C 100X400	100	4"	400	16"	2/10068	168	371	81	179	81	179
BPE-C 100X600	100	4"	600	24"	2/10069	227	500	112	247	112	247



3m (10ft)	↕		PVCMI UV
	mm	inch	
TBPE 100	100	4"	2/10078
TBPE 150	150	6"	2/10079
TBPE 200	200	8"	2/10080
TBPE 300	300	12"	2/10081
TBPE 400	400	16"	2/10082
TBPE 600	600	24"	2/10083



TBPE



CPBPE



TCPBPE



CCBPE



TCCBPE



CXBPE



TCXBPE



PDBPE



TFBPE



PSBPE



JUBPE



JUBPE-A

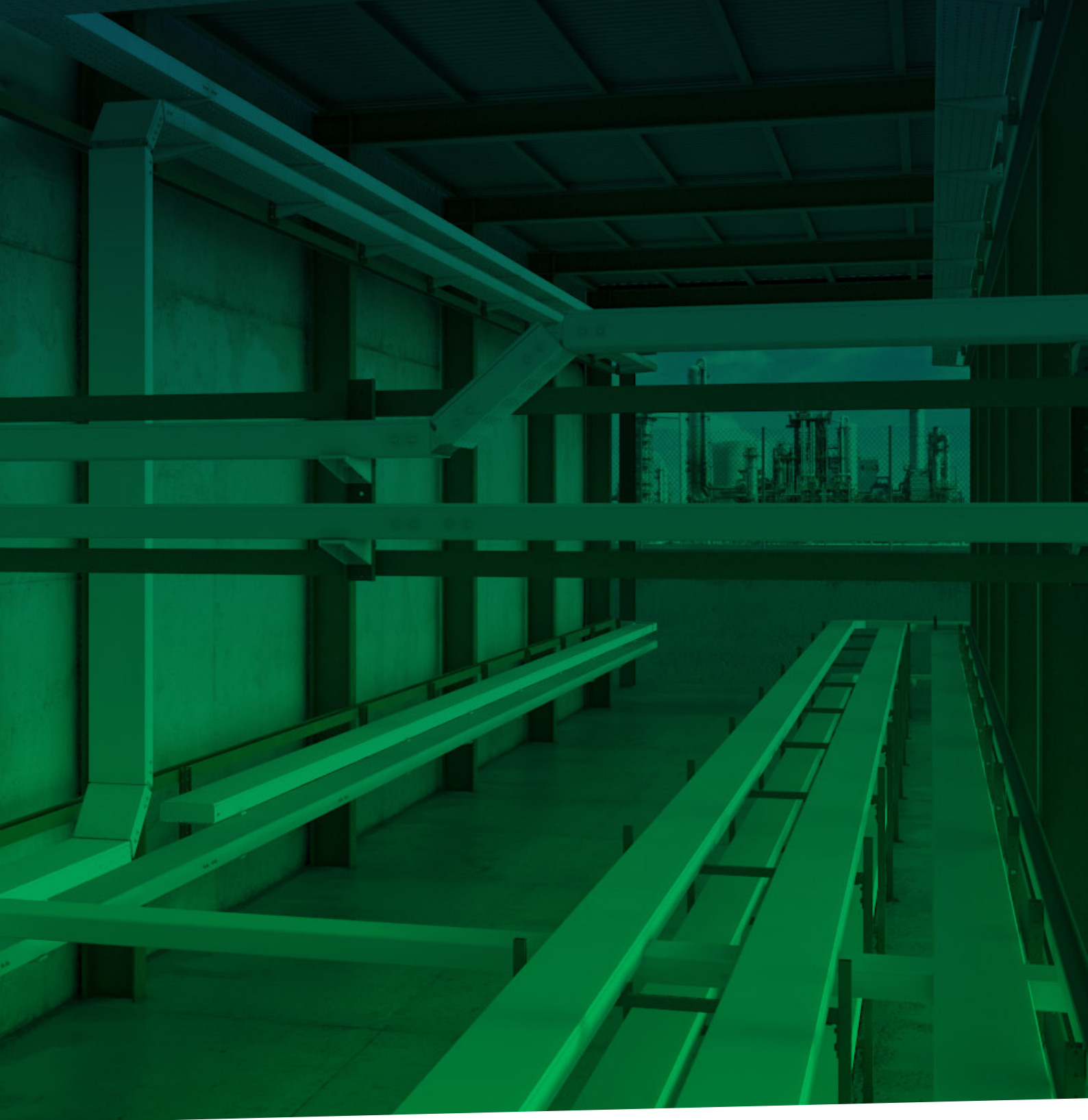


JUBPE-B



CTBP





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