

KRYPTON

magazine

2022

WE DO IT FOR YOU!



NUM. 2

**Becoming stronger,
to help you go further**



KRYPTON
chemical.com

RAYSTON
products

We develop and manufacture polyurethane, epoxy and polyurea resins for construction, refurbishment, and industry.

From our facilities we distribute our products to more than 70 countries for waterproofing, flooring, and corrosion protection projects. Our products are the result of intensive research, optimum production process and a thorough quality control scheme under ISO 9001. The continuous development of these processes provides top quality products and maximize customer satisfaction.

SOME REASONS TO WORK WITH KRYPTON CHEMICAL

- MORE THAN 20 YEARS OF EXPERIENCE
- ISO 9001 CERTIFIED QUALITY
- OWN R&D DEPARTMENT
- BESPOKE AND OPTIMIZED PRODUCTION UNITS FOR DIFFERENT PRODUCTS
- TECHNICAL SUPPORT
- ACCOMPANIMENT IN ALL PHASES OF THE PROJECT
(SPECIFICATION, TECHNICAL ASSISTANCE AND QUALITY CONTROL)
- SPECIFIC TRAINING
- TOP LEVEL CUSTOMER SERVICE



Decorative flooring, Málaga.
80 m², Pavistone.



Geriatric, Beasain.
1.500 m², Rayston Floor PU 30 Flex System.

STRATEGY & HUMILITY

Management team

KRYPTON CHEMICAL



In the hectic Post-Covid scenario we have been living (strong demand in most sectors of economy, severe shortage of raw materials, logistics costs multiplying, ...), companies have gone back to their annual routines (execution, control, evaluation and planning activities) that are part of management essentials.

A very important part of planning is to establish the strategy for the coming years. It is said that "a bad strategy is better than no strategy at all".

Surely the previous sentence refers to the fact that if we don't know where we are going, we run the risk of ending up where we don't want to be. This is what strategy is all about: defining where the organization must go, what resources are needed to do so, and ultimately in order to obtain what results.

Strategy also needs defining what we do not want, that is, establishing "trade-offs": what is it that we will stop doing, or that we are not going to promote anymore, in exchange for focusing much more on we are good at to obtain better results. The strategy cannot be to "go for it all", because surely you run the risk of finishing halfway in almost everything and doing things that make no sense, just for the sake of doing them.

It is essential to "focus" on those things, that bring a certain logic to what we do. In any case, the definition of trade-offs must be done with great care, with a scalpel, and not with a hammer. Otherwise, we may break green shoots that could bring us great results in the future. And always with humility. Humility is a virtue on the rise these days.

The uncertainty that haunts us makes it very difficult to be able to express a firm opinion on what we will and will not do. The ups and downs of economic activity force us to hold the rudder with care and be ready to turn it quickly in the face of difficulties that could put us in danger. Humility as individuals and as workers is essential. Recognize our limitations and what really matters.

In our case, the most important things are our customers and all the people who work in this company. To them we owe our efforts and the will to move forward, building the foundations for future growth: things that make us the best option for our customers and help us to serve them better. The foundations for growth can be material (production assets, machinery), but often the most important ones are intangible: talent, knowledge, and the willingness to do well. Building solid foundations for growth is our obsession and what we have been doing for more than 20 years. We invite you to follow us on this path towards the construction of a solid project, while remaining the best choice for our customers and stakeholders.



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A NEW GOAL FOR 2022: USA

One of the most important strengths we have at Krypton Chemical is the enormous geographic diversification of sales.



International business will account for 72% of sales in 2022 and this allows us to compensate significantly for the different economic and geopolitical cycles that occur globally

Although our solutions are currently marketed in some 70 countries in the 5 continents, there is still considerable room for further growth.

Precisely in this sense, the strategy is to enter new countries and there is no doubt that one of the most important new markets for 2022 is the USA

It is a very stable market from all points of view and very professional, tremendously competitive and with very powerful local players that also operate at a global level. Entering the USA will give us not only an option for sustainable long-term growth in sales, but also an important knowledge that will allow us to continue growing as an organization and transmit this knowledge to other geographical regions.

We have been working throughout 2021 on the particularities demanded by the North American market, such as specific certifications and bespoke solutions that will allow us first to achieve some penetration and obtain a sustainable market share over time.

We have also created the subsidiary Krypton Chemical Inc. to have a base of operations in the near future and to be able to act as a local player.

But undoubtedly, what will make us successful in the USA is, as always, the people. And in this sense, at a commercial level, we have top level professionals who are already closing the first agreements with American companies to supply our waterproofing solutions, both "hot spray" polyureas and "cold applied" membranes.

The future is very promising and shows endless potential, we can be proud to be able to take another step forward with the confirmation of commercial entry into the USA in 2022.



APLINOR CELEBRATES ITS 15TH ANNIVERSARY

Specialists in consulting, design, and application of waterproofing and paving systems.

APLINOR

APLINOR, was founded in 2006 with the widely fulfilled objective of making a niche in the national market for the repair, protection and waterproofing of all types of structures, constructions, and surfaces.

APLINOR is the trade name of the company APLINOR Xpraytech Systems S.L.

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There are moments in the life of a company when you need to analyze the trajectory and goals achieved

In the highly competitive world we live in, it is not always easy to maintain continuous growth and improvement, and that is why it is necessary to value those aspects that make it possible.

It has been 15 years since the foundation of Aplinor, 15 years of hard work that with effort, professionalism, honesty, and commitment, have allowed us to make a niche for ourselves in a very

without a good team, of which Krypton is undoubtedly a part.

Throughout our trajectory it has always been present, showing loyalty and unconditional support in difficult moments, celebrating together the successes achieved, sharing projects and illusions, and managing to create a bond beyond the professional field that has been materialized with the recognition you have given us.

We are proud and grateful for making us feel part of you, for making our passion



hostile market in which synergies and collaboration between agents play a very important role.

At Aplinor we are aware of this, but also of the importance of the human factor as a fundamental basis for the company's development. The objective of growth and profitability would not be possible

and enthusiasm grow every day, for the human quality of the entire Krypton staff that manages to transmit that which is important is sometimes invisible to the eyes, but inescapable to the heart and for the loyalty that you have always shown us.

We are and will be eternally grateful.
APLINOR Team

CUSTOMER EXPERIENCE PROJECT (CX)

The strategic Customer Experience (CX) project places the customer at the center of all Krypton Chemical's actions.



Krypton Chemical started in April 2020 the strategic Customer Experience (CX) project with the main objective of putting the Customer (our real Boss) at the center of all the actions of the different departments of the company and not only of the commercial area.

In an increasingly global and competitive environment, a project such as CX is essential to understand the different needs of each type of Customer depending on the markets and geographic regions where they operate.

We are present in some 70 countries and have subsidiaries in France, Italy, UK, Chile, and Egypt, and this forces us to increasingly customize our solutions and services to the wide variety of customers we have in the regions where we operate.

The project started with a multidisciplinary team of 15 people from different departments of the company (sales, marketing, quality, human resources, production, customer service, technical and IT) and from all organizational levels. These people were organized into four working groups, each one coordinated by a member of the Management Committee due to the strategic importance of the project.

Two important actions carried out by the four working groups are worth mentioning:

Internal Analysis

Improvement proposals that could affect the customer experience were analyzed internally and resulted in 91 actions from all departments.

External Analysis

We contacted customers in different countries that accounted for 70% of sales to see what actions we should implement from their point of view.

Internal actions are being worked on in each group, establishing a timetable and priority to implement them. As for customer proposals, we are establishing Mind Maps and Customer Journeys by customer type to also determine the moments and needs that each type of customer values most during the commercial relationship with us.

Additionally, the CX project is enabling a very motivating interdepartmental involvement allowing professionals from different levels to interact for a common goal: The Customer! The improvement of the Customer Experience is never ending and is a continuous evolution so we will keep you informed periodically of the evolution of this project!

The project started with a multidisciplinary team of 15 people from different departments of the company

GROWING TOGETHER



Krypton Chemical's products have been tested and proven effective in many construction sites in more than 70 countries around the world. We are represented on all continents and continue to grow with our customers.

www.kryptonchemical.com

ANTICORROSIVES, QUALITY AND EFFICIENCY

New products for the benefit of the customer

Mar Gavira. Protective Coatings Division. Anticorrosives Product Manager



What is the department's mission?

To introduce Krypton Chemical in the anticorrosive market. A market that is much larger than liquid waterproofing and resin flooring, and which has a great synergy with these activities.

What are the work processes?

We develop new products based on Krypton Chemical's technologies in polyurethane, polyurea, epoxy and polyspartic resins. These products also follow a constant improvement process like the one we have for our regular products, and until we achieve customer satisfaction.

What are the particularities of the products you are developing?

Krypton Chemical has always been a leader in 1-component polyurethane-based coatings (primers, intermediate coats and topcoats). This technology brings huge advantages in the corrosion protection market, thanks to greater ease of use, less product waste and a wider range of ambient temperatures and relative humidity at the time of application.

Apart from 1-component PU, we are also developing more conventional products based on 2-component PU and Epoxy, which are the technologies in use in most markets.

Finally, we are adapting well-known Krypton Chemical products and developing systems based on these for the corrosion protection market, such as polyurea P350, which has achieved C5 certification for metal protection and high durability.

What markets do you want to reach?

We are working hard in Spain, with some projects already successfully executed, such as the refurbishment of the Telefónica Group headquarters (150,000 m²) and the refurbishment of bridges over the M30, both in Madrid. We have also made a strong start in Portugal, one of the most dynamic markets in Europe in this sector. Finally, our collaboration with Krypton's partners in the 70 countries in which we sell our products has enabled us to work in Norway, Finland, Egypt, and several other countries in Eastern Europe.

Who is your target client?

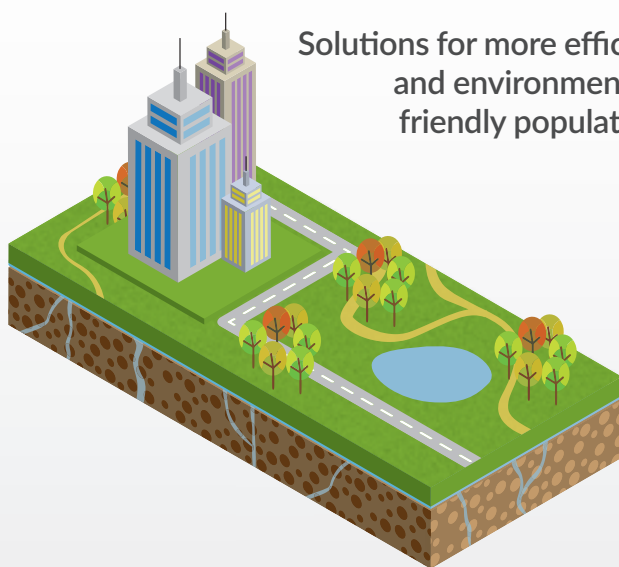
Our strategy in this sector is to take advantage of synergies with our other activities and to provide an added value to customers with large assets (public administrations, large companies, etc.) in the management and maintenance of these assets. For this reason, we collaborate with existing customers of Krypton Chemical and with companies specialized in this sector, who need a competent and reliable supplier that meets their needs.

What are your goals for 2022?

In 2022 we must finalize the product range, combining high performance products for specific projects with products for daily use. We also must optimize our costs and be the best cost/benefit option for our customers: with equal quality, Krypton Chemical must be able to offer the best option for each project. Finally, as in all businesses, we need the support of the entire sales team and our customers to achieve continuity in manufacturing, which allows us to ensure quality and efficiency in production.

RAYSTON FLOOR PU40 ECO

Revolutionary new system for pavement rehabilitation
and water recovery



Solutions for more efficient
and environmentally
friendly populations

The Rayston floor PU40 ECO system is a new system for the rehabilitation of footpaths or auxiliary roads with a medium level of vehicular traffic (pedestrians, bicycles or cars occasionally) formed mainly by quarry crushed and/or crushed stone or rocks recovered from the area bound with polyurethane resin Pavistone 2k coatings.

Pavistone 2k resins passed the test for water for human consumption according to Royal Decree 140/2003, of February 7, which establishes the sanitary criteria of water quality for human consumption. In addition, we have the analysis on biological carbon with respect to total carbon. This new certificate states the percentage of raw material of vegetable origin (renewable) in its composition, the result has been very favourable obtaining 57% of carbon content of vegetable origin.

The drainage capacity of the system is equally important. This is essential to prevent stagnant water from remaining in the pavement, and for this reason we tested the permeability of the system, obtaining a result of 108.13 l/m²/s.

One of the applications that is gaining more and more strength is the already known as sponge city, which

consists of recovering rainwater for use in irrigation, sanitation, and cleaning in times of drought. This avoids flooding and the collapse of sewage systems.

China already has approximately 30 cities that incorporate this new solution. There is talk that the European cities of Berlin and Rotterdam want to incorporate these solutions, as well as Bilbao and Barcelona.



RAYSTON MUCH MORE THAN A BRAND



Our Rayston brand includes and encompasses all the values of our work: a strong technical know-how, a lot of patience, so that the result is always the best, and an indestructible commitment to all our customers' works and at any stage of the same. These are the pillars on which we build our products and develop our systems. Thanks to these qualities we have been able to create a range of polyurethane, epoxy and polyurea products that are ideal for your site.

All of them under the Rayston name.

More than just resins for construction and industrial applications, we create complete solutions. This is the key to our customers' projects, so that their works have a high quality and long durability. Rayston is not only the brand name of Krypton Chemical but represents all the values for which we are also known.

Behind the Rayston brand you will always find the Krypton Chemical team, which works with all its knowledge, enthusiasm, and capabilities in the same direction as all its customers.

www.kryptonchemical.com



TECHNICAL SERVICE, ACCOMPANYING THE CUSTOMER SINCE 2009

“Krypton Chemical never leaves the customer alone”

José Pareja. Head of Technical Service

- When was the Technical Service Department created?

The department was created in 2009, since we saw the need to create it to offer a better service to our customers.

- Have its functions changed much from the beginning until now?

At the beginning it was created to develop hot-melt products based on polyureas and it has evolved towards new technologies in applications, customer training, ... Always offering a technical service when the customer has any problem or doubt, either on site applications or machinery. About polyureas we currently offer more than 20 different products, we are one of the companies with more types of polyurea worldwide.

- What do you think the Technical Service department will be like in ten years' time?

I think it has a very promising future as we work on new systems and technologies with the aim of offering the best technical service to our customers. At

Krypton Chemical we have excellent product development, and we always respond to the customer. We work through the customer to always offer the best ideas and solutions to their problems.

- What is the most important lesson you have learned over the years?

I have certainly learned a lot in technical service, but I like to emphasize that it is a continuous learning process, together with our customers. We are the link between the laboratory and the users of our products, both in innovation and in constant improvement.

- In which countries have you needed the presence of Technical Service?

In many and all over the world, mainly in Europe, South America, Africa, Russia, and China.

- Which country or area has surprised you most pleasantly?

Each country brings you something, a history, and an experience because they are all different. The nice thing is to get to know the people of each place, this is the most remarkable thing. Variety makes richness.

- Tell us some anecdotes about those trips...

There are many anecdotes, some funny and some not so funny. Some of them can be told and others cannot... As a curiosity, for example, we were in Colombia doing ballistic tests, lining the fuselage of helicopters to prevent bullets from penetrating them.



- How do you see Krypton Chemical in a few years?

Surely much better than now and always moving forward. We have the best products and excellent professionals, which will undoubtedly allow us to excel and improve every day. As far as Krypton Chemical's Technical Service is concerned, I would like to point out that it never leaves the customer alone, unlike other manufacturers who do not offer this service. It is a department that is highly valued by our customers.



HEINEKEN AND COCA-COLA CENTRAL OFFICES

MACEDONIA

These headquarters belonging to Heineken and Coca-Cola, located in Macedonia, needed a flooring solution that was continuous, durable, and quick to put into service. Krypton Chemical offered a system based on a unique technology, slow curing polyurea, which allows us to work at high speed with hot spray machines, but at the same time we obtain an excellent leveling finish of the product. On this occasion, our Colodur ECO, a water-based aliphatic polyurethane aliphatic paint, was chosen for the finishing paint, which provides gloss and wear resistance, one of the main requirements.

Basic description:

Location: Macedonia

Area: 1921m²

System: Rayston floor PUA-S 30

Work description :

As a primer it was recommended to apply a first coat of Epoxy Primer 100 with 10% Rayston solvent, followed by a second coat of aggregate primer. Once dry, the surface was sanded, and Polyurea HSL-S was applied. The following day, a first color coat of Colodur ECO was applied in the desired color and a second transparent matte coat was applied.



GYM Shock and abrasion resistant flooring

Italy

Gym floors need high resistance to impact and abrasion since they daily have to withstand a large influx of people performing activities on them.

Basic description:

Floor surface: 1.300 m²

Coating: Paviflex

Type of application: Cold application

Finish: Colodur Eco

Work Description:

1. Adhesive and rubber Mat. The Paviflex Sport system consists of a layer of flexible resin Paviflex applied on top of a rubber mat with insulating, thermal and acoustic properties. To fix the rubber to the surface, PU 2K Adhesive was used to ensure proper adhesion. To seal the mat, the same Paviflex resin was applied with Rayston Thickener additive.

2. Paviflex

This is a self-leveling polyurethane coating, flexible, resistant, and special for interiors, which makes it ideal for gymnasiums. Together with the rubber mat, it is capable of absorbing light impacts and avoiding injuries, making it very suitable for sports courts and gyms.

3. Finishing

The work was finished with Colodur Eco. This finish provides high resistance to abrasion and chemical agents.



SPORTS PALACE JOSÉ MARÍA MARTÍN CARPENA Rehabilitation

Málaga

Rehabilitation of building roofs: Waterproofing of the roof and improvement of the energy efficiency of the José María Martín Carpena Sports Palace.

During the months of October and November 2020, the refurbishment of the roof of the José María Martín Carpena Sports Palace, an emblematic building of the Málaga City Hall, where sporting and cultural events are held throughout the year, was undertaken. The roof, with a surface area of 9,000m², had 3 different substrates on which to act: asphalt sheet, metal sheet and concrete. Each substrate required a different approach and primer.

Basic description:

Surface area: 9,000 m² of sheet metal roofing

System: Krypton Chemical's Impermax 2K System was chosen, a two-component hot spray polyurethane base, with ETE for roof waterproofing issued by the Eduardo Torroja Institute, which estimates its useful life at 25 years in extreme weather conditions. To improve the building's energy efficiency, the sealing was done with Colodur Blanco, with one of the highest refractance indexes on the market, which gives the roof "Cool Roof" characteristics.



WALKWAYS OF THE COMMUNITY OF MADRID Anticorrosive

Madrid

The metal structure of the footbridge was painted with a paint system of which we have no information. It had a lot of rust and corrosion spots mainly in the lower parts of the structure, possibly due to the salts that are spread in winter for the melting of ice.

This structure is going to be repainted with Krypton Chemical's corrosion protection system, specific for the maintenance of metallic structures such as bridges

Basic description:

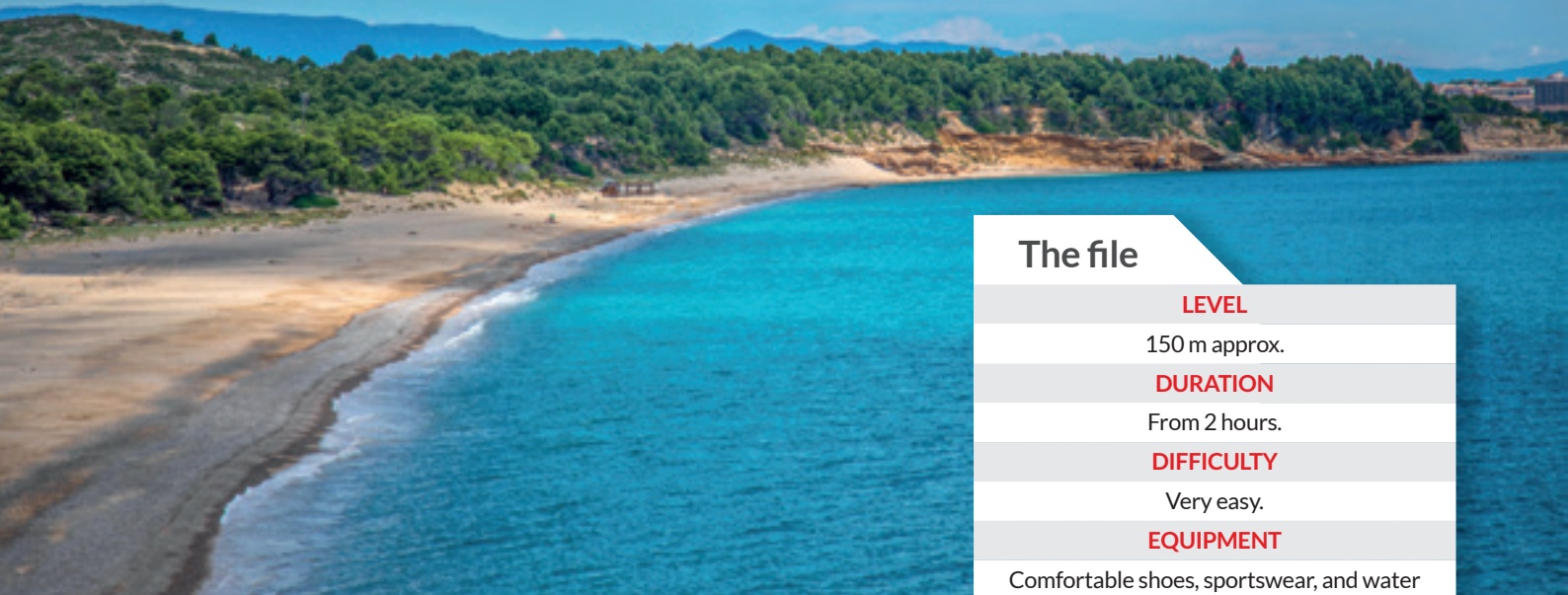
System: Cleaning, mechanical brushing ST3 at all points of corrosion and damage, treatment of the damaged area. Application of the Rayston paint system, ideal for maintenance and repairs, in this case with two coats.

- **Primer:** Rayston Rayforce mastic red 140 microns
- **Finish:** Rayston Top G 2k ral 7022 , 100 microns

Work description:

Corrosion protection of the metal structure of the footbridge in Cerceda (Madrid). It is a pedestrian walkway which is going to be painted with the Krypton anticorrosive system in the metal structure and the Rayston flooring system for the pedestrian walkway.





The file

LEVEL

150 m approx.

DURATION

From 2 hours.

DIFFICULTY

Very easy.

EQUIPMENT

Comfortable shoes, sportswear, and water

LA ROJALA AND LA PLATJA DEL TORN

An ideal route to enjoy from September-October to May, since in summer there is a lot of people on the beach and perhaps, you will not find the tranquility you are looking for

Ismael Sabaté. Production department

Undoubtedly Vandellòs and l'Hospitalet de l'Infant is a county that has many mountains and very varied, but there is a very special one, the Rojala, which has a feature that makes it unique and different from the others, and not only in this village. This unique feature is the possibility of an outing through nature, combining the sea and the mountains just a few meters away. In addition, this route is very interesting because it is very simple and very accessible, which allows us to visit it whenever we want, whether for sport, walking, spending time with the family, or simply to disconnect...



Itinerary

The route can be started from any place in l'Hospitalet de l'Infant. You will find the seaside promenade and from there go towards the campsite El Templo del sol following the GR-92. Once there, you will find a very nice and well-marked path that you will not leave until reaching the islet of Torn, which must be visited.

Following the GR-92 you will arrive at the Justell cove, where you will enjoy some magnificent dunes, just at the end you will turn right and after the bridge we will turn right again where there is an indication. From here we will follow the yellow signs until reaching the Mirador del Torn where you will enjoy spectacular views. You cross the road and climb the stairs that invite to continue the route. This section is extraordinary because it gives the feeling of being able to touch sea and mountain at the same time. You will follow the yellow lines that will take you to an esplanade. Once there you find a road, turn right, and follow it to the campsite.

CONTINUOUS RADON GAS BARRIERS

Major advantages over barriers based on prefabricated sheeting



Radon is a natural radioactive gas that can be found in high concentrations in indoor spaces, such as homes and workplaces. It is a major cause of lung cancer.

Radon gas barriers applied in liquid form offer many advantages over barriers based on prefabricated sheets: total continuity (absence of joints), very low permeability to this gas and ease and speed of application.

Krypton Chemical, S.L. proposes two coatings for this type of application:

1

The hot applied pure polyurea, reference Rayston Spray D50, is specially designed to be applied on the foundations of new constructions. It can be applied bonded, or also in floating form (without the need for prior preparation of the support) together with the special Geomax Spray 200 geotextile (NMDC system, unique in the market).

2

Impermax 2K M is a cold-applied, solvent-free, elastomeric polyurethane designed especially for small repairs and sealing in existing buildings where radon gas incoming flow needs to be reduced

With a diffusion coefficient of less than 10^{-11} m²/second, applied at a minimum thickness of 2 mm, the two coatings perfectly meet the requirements of CTE DB HS6.



CASE STUDY:

Rehabilitation of terrace with decorative finish in red quartz. Portugal

We present a practical case where two needs of the work have been solved in an optimal way in a single intervention:

1. On the one hand, infiltration problems were solved with the help of the elastomeric and continuous membrane applied in liquid form, with Impermax SF (solvent-free).

2. In addition, a new, highly resistant, and decorative finish was created for the terrace with colored quartz, sealed with Colodur transparent resin.

SUSTAINABLE ROOFS

Constructive solutions to help mitigate climate change.

Xavier Cros. Graduate in Chemical Sciences and Ingénieur ENSPM



The first image that may come to mind when thinking about a chemical company like Krypton Chemical, S.L. is that of a company that is not very “green”, very aggressive with the environment. But the reality is quite the opposite, the constructive solutions of Krypton Chemical, S.L. contribute to improve our environment, to reduce the carbon footprint and to mitigate climate change

One of the greatest challenges that humanity is currently facing is trying to curb the possible negative consequences of climate change and global warming, caused by the increase in the concentration of carbon dioxide (CO₂) in the atmosphere. In this article we describe how the products, construction solutions and actions of Krypton Chemical, S.L. are helping to mitigate this worrying phenomenon.

Sustainable roofs

A sustainable roof is one whose materials, components, and design help to reduce the environmental impact of the building throughout its lifetime. For example, such a roof could help to save or produce energy, having a design that would allow for the reduction of waste and material consumption during the construction and operation stages (regular maintenance).

It could even be made of renewable and non-hazardous materials, neither for people nor for the environment.

Roof waterproofing membranes applied in liquid form, deliver a light weight, effi-

A sustainable roof is one that, thanks to its materials, components and design, helps to reduce the environmental impact of the building

cient and very durable solution when compared with traditional bitumen systems. This allows a reduction in the weight of

materials used, enables lighter structures and minimizes waste. Lifespan of building is also extended. This is a very important aspect, since according to some estimates 8% of global CO₂ emissions come from cement production.

Additionally, many of the raw materials used by Krypton Chemical, S.L. are manufactured in the same petrochemical plant in Tarragona, significantly reducing the CO₂ produced during transportation.

Krypton Chemical, S.L. in this sense, provides several efficient solutions. Let's see some of them.

GREEN ROOFS

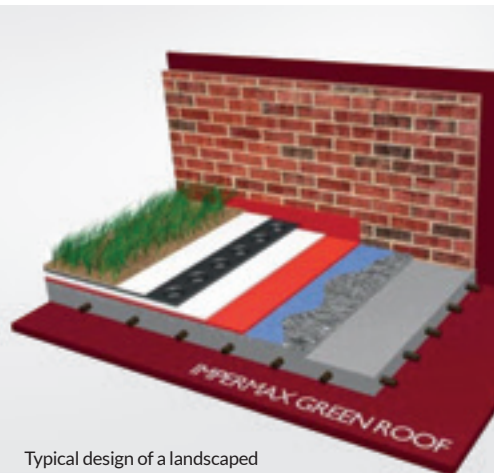
Green roofs keep the inside of buildings cooler in summer and warmer in winter, in other words, they act as thermal and acoustic insulators. In addition, they can capture polluting chemical compounds and CO₂ from the atmosphere.

For the waterproofing of these roofs, Krypton Chemical, S.L. proposes Impermax 2K elastomeric membrane, with optimum puncture resistance and high durability. This is demonstrated by its European ETE certificates (number 10/0296) for roofing and root penetration resistance.

In addition, this membrane is formulated with renewable raw materials of vegetable origin, in other words, it is a material that does not depend entirely on petroleum and is much more sustainable than other waterproofing membranes available on the market.



Appearance of the Pyracantha Coccinea shrub. This plant has fast-developing, extremely strong and aggressive roots. To obtain the European certificate of resistance to root penetration, the Impermax 2K membrane was applied in 6 pots of 80x80x30cm. And after two years of testing, in contact with the plant, the membrane has not suffered any perforation and has maintained its watertightness, in all 6 pots



Typical design of a landscaped roof design. The Impermax 2K waterproofing membrane is applied on a regulated and primed substrate and protected with a geotextile. A drainage and moisture retention membrane is placed on top of it. The system ends with a substrate and plants

COOL ROOFS

A cool roof can reflect most of the energy coming from the sun, instead of letting it penetrate inside the building.

The surface of a cool roof heats up much less during the sunny summer months, a highly desirable situation in our Mediterranean climate.

This allows, for example, to reduce the consumption and maintenance costs of air-conditioning installations. It also extends the life of the waterproofing coating, which, by working at a lower temperature, its degradation is reduced.

The efficiency of a cool roof can be measured with the SRI, Solar Reflectance Index. Colodur Pigmented white protective finish has an SRI value of 105, one of the highest on the market

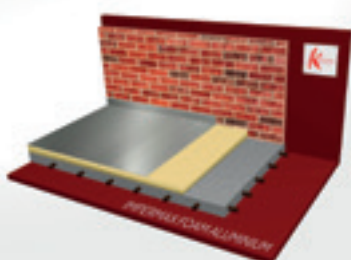


Impermax Plus system with a "cool roof" finish applied over an old asphalt roofing membrane (flat roof in Italy with photovoltaic panels).

With this single action, the water ingress problems could be solved, the useful life of the roof and therefore of the building was extended. The old asphalt fabric was also re-valued, as it ceased to act as a waterproofing membrane and became the vapor barrier of the system, saving materials and reducing waste generation. The "cool roof" finish also allows the photovoltaic panels to operate at a lower temperature, multiplying the generation of clean electricity.

INSULATION PLUS WATERPROOFING

These compact systems improve the thermal and acoustic insulation of the roof and create an efficient waterproofing in a single action. This reduces the consumption of materials, and, above all, the energy required to air-condition the interior of the building. In short, a significant reduction in CO₂ emissions is achieved.



Alzheimer's Therapy Center and Memory Unit in Reus. Sustainable wood building with a sustainable roof. PIR insulating panels (special foamed insulating material with extremely low thermal conductivity) were installed on top of the roof. These panels have a dual function: insulation and slope creation. They reduce the consumption of materials and the weight of the roof, giving lightness to the structure. It was finished with Impermax 2K waterproofing resin and a "cold roof" type finish with Colodur Pigmented in white.

Combination of thermal and acoustic insulation with waterproofing, applied in two simple stages, which means savings in costs and use of materials. The insulation (first layer) consists of a polyurethane foam whose foaming agent is water, reference Rayston Spray Foam 50W. In the past, polyurethane insulating foams were based on fluorinated chemical compounds that damaged the ozone layer and contributed excessively to global warming; this is obviously not the case with water, which is harmless. The final waterproofing layer consists of an Impermax Polyurea H Flex membrane (aluminum color). This system also has an asbestos encapsulation certificate that protects people from the carcinogenic potential of old asbestos roofs.



**we do it
for you.**

Polyurea Spray Course

TECHNICAL TRAINING CENTER
ZEELAND (NL)

Practical and Theoretical training for Krypton Chemical hot spray products and systems



The secrets of good
polyurea membranes



Hot spray machinery
and guns



Systems and spray
techniques

ADVANCED TRAINING

700€

**Talk to your Krypton Chemical sales representative to learn
about special conditions!

More information
at marketing@kryptonchemical.com

RAYSTON
products



Highlights 2021

Net sales
compared to 2020

+21%

10

New waterproofing
certificates

6

New flooring
certificates

1

New
anti-corrosion certificate

number
of customers

+400

6

Specialized
production units

72

Present in 72 countries

21,6

Hours of training
per employee

+3.300

References sold

+12,5%

Staff in 2021

RAYSTON FIRE E Y POLYUREA H SL-S

Krypton Chemical launches innovative new products

Rayston Fire E

Rayston Fire E is a two-component resin based on a pure polyurea, applied with a hot spray machine with a 1:1 ratio by volume. Once cured, it forms an elastomeric coating, with great capacity to bridge possible cracks in the substrate. It has a high resistance to fire and in case of fire the coating does not help to expand it.

The main characteristic of this reference is that it has a reaction to fire certificate of Bs2d0. Euroclass B represents the lowest possible degree of flammability for combustible coatings/materials.

The coating is especially intended for the protection and waterproofing of structures where excellent fire resistance is required: tunnels, stadium bleachers...



Advantages

Excellent adhesion to concrete, mortar, and stone substrates.

Walkable within a few hours after application.

Waterproof and non-porous.

Easy to clean.

Self-leveling.

Ideal for

Coating of pavements in industrial premises.

Coating of pavements in warehouses.

Coating of pavements in large areas.

Polyurea H SL-S

Polyurea H SL S is a new slow reacting hybrid polyurea developed for hand & hot spray application with static mixer, with a working time of approximately 20 minutes, this time period allows to sprinkle colored aggregates, decorative chips to obtain a more resistant or decorative finish according to project requirements, curing time is 3-4 hours, no odor at all!

**...curing time
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WATERPROOFING OF BRIDGE DECK

New bridge on M-40 Colmenar Highway



Krypton Chemical provides its customers with on-site technical advice to assist them in the implementation of their latest technologies.

Waterproofed
area
6.000 m²



BACKGROUND

Serious corrosion problems

Due to corrosion problems in the reinforcement resulting from deficient waterproofing, the main bridge at the Colmenar highway junction over the M-40 (Madrid) belonging to the Ministry of Public Works had to be demolished.

The new bridge that replaced it was built as an emergency project and it was decided to waterproof it with Krypton Chemical's H Flex System, specifically for bridge decks, based on polyurea.

PROPOSED SYSTEM

H Flex System

The H Flex System has a 25-year ETE specifically for the waterproofing of bridge decks, issued by the Eduardo Torroja Institute. It is a complete system, consisting of primer, main membrane, and protective coating. Krypton Chemical has developed Impermax Polyurea Polyurea H Flex with a high adhesion and crack bridging capacity, which makes it ideal for structures with movements. Impermax Polyurea H Flex was applied with an extra fast curing hot spray machine.



EFFICACY

Advantages of robot application



Higher productivity.

Higher quality of execution:
homogeneous membrane
thickness and adjusted to the
project requirements.

Savings in
application costs.

Less affected by wind.

WE DO IT
FOR YOU

ALL
THE
WAY

