

# SUSTAINABLE CONSTRUCTION

THE MOST ADVANCED GREEN COATING SOLUTION ON THE MARKET



## Sustainable construction

#### Air quality

Considering that we spend more than 80% of our time indoors, it becomes essential to improve air quality in our homes and workspaces.

Over 900 compounds have been detected in indoor air and some pollutants can be two to five times more concentrated indoors than outdoors. Many of these pollutants fall under the category of *Volatile Organic Compounds* (VOCs), chemicals that evaporate at room temperature, contaminating the air we breathe, especially in enclosed spaces, even for years, causing various health problems. These chemicals are generated from building materials and other products in our buildings, being conventional paints their main source of emissions.

At Graphenstone, we want to bring nature back into our **lives**, **homes**, **and cities**. Our products, with **very low VOC emissions**, help create healthier spaces, combating air pollution.

#### **Circular economy**

Circular economy is a production and consumption model that involves sharing, renting, reusing, repairing, refurbishing, and recycling existing materials and products as many times as possible to create added value. This way, life cycle of the product is extended. In practice, it aims to minimize waste. When a product reaches the end of its life, its materials are kept within the economy whenever possible through recycling. This way, the life cycle of products is extended. It contrasts with the traditional linear economic model, which is primarily based on the "take-make-dispose" concept, requiring large amounts of cheap and easily accessible materials and energy.



100%
RECYCLED
PLASTIC

We eliminate the concept of waste **to make our product part of a fully green life cycle,** from the sourcing of our raw materials to the manufacturing of our products and their packaging. That's why we adhere to the philosophy of Reuse, Reduce, and Recycle.

# Natural products for healthy spaces

**Graphenstone** 

Our company is dedicated to the design and manufacture of coatings that are **respectful with people's health and the environment.** The range of products that we offer include certified decorative paints that contribute to **improve the air quality due to their CO2 absorption capacity and only trace VOC content.** They are the perfect fit for certified projects, **green buildings, passive Houses and smart cities.** 

#### Pioneers in sustainable building materials

We have been and still are committed to the development and creation of the most innovative and ground breaking line of natural paints and mortars using **lime from the highest quality local sources.** This unique lime is created using **a natural and environmentally friendly production cycle.** Our commitment to sustainability and the environment is accredited by the strictest and most recognized quality certificates and seals on an international level.





# The perfect mix

# **CO2** Absorption

## **TRADITION**



## INNOVATION





#### **ARTISANAL LIME**

#### **GRAPHENE**

Graphenstone paints combine lime and graphene in a

The lime is complemented by graphene **improving its** 

strength and flexibility. This perfect blend of tradition,

innovation and technology enables us to create premium,

environmentally friendly paints of the highest quality and

unique formula that we call **Graphenstone Technology.** 

Most of our products contain 100% artisanal lime made in wood burning kilns, which produces a high degree of whiteness and purity; it acts also as a natural preservative.

This high quality natural lime has been produced this way since the mid-nineteenth century.



Breathable









reflectance (SRI)





more durable.











#### Why it's important to reduce CO2?

The high concentration of CO2 in the world increases the greenhouse effect that is contributing to a rise in temperature on Earth. In addition, the air pollution in cities is causing serious concern for the health of those living there.



#### How does our paint absorb CO2?

Lime-based Graphenstone coatings absorb CO2 thanks to their natural carbonation process while curing. This results in cleaner environments and improved air quality. Most of the CO2 absorption occurs during the first 28 days of curing once the coating has been applied to the surface.

Carbonatation is a chemical reaction in which calcium hydroxide reacts with carbon dioxide and forms insoluble calcium carbonate.

The process of forming a carbonate is sometimes referred to as "carbonation", although this term usually refers to the process of dissolving carbon dioxide in water.





Obtain the same effect as trees in your home.

More information about the campaign at:

### www.myhomeisatree.com

\*The CO2 absorption occurs during the first 28-30 days after applying the product.

## **Certifications**

Do you want to know more about our certifications?



Scan this QR

Graphenstone is all about quality and certification. Our main values are ecology and sustainability, with products that comply with the principles of the circular economy. Our purpose is to innovate and create ecological, natural, and environmentally-friendly products that are respectful with people's health and the environment.

We want to contribute to people's well-being through the construction sector and serve as a reference point for other companies by meeting the requirements of ecological and sustainable construction. For us, innovation and sustainability go hand in hand.

Our commitment to sustainability and the environment is accredited by the strictest and most recognized international certificates and quality seals. Graphenstone is one of the global leaders in eco-friendly paint with numerous certifications.

The use of Graphenstone products, being composed of mineral materials, enables a proper recyclability of those, as well as the surfaces on which they are applied, resulting in a low environmental impact throughout the complete life cycle of the building. The use of Graphenstone products promote resource efficiency through effective and appropriate management of construction waste, as their application only generates waste in the form of the recycled polypropylene container that contains the product.

#### Cradle to cradle



An international certification that recognizes the sustainability of products by evaluating material safety, potential for reuse, use of renewable energy, water management, and company social responsibility.

#### **Global GreenTag**





An international certification that assesses the safety and environmental toxicity of products, examining aspects such as resource usage, waste reduction, greenhouse gas footprint, and water usage.

#### **Indoor Air Comfort GOLD**



The certification guarantees compliance with low VOC emission requirements and demonstrates the company's commitment to contributing to the creation of healthier spaces with better air quality. Additionally, the certificate validates

compliance with emission requirements in various European and non-European countries, such as the French Class A+ standard.

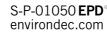


#### **Ecolabel**



The European Union's ecological label for environmental excellence, which is awarded to products that meet strict sustainability criteria, have a low environmental impact, and are durable, easy to repair, and recyclable.

#### **Environmental Product Declaration**



The Environmental Product Declaration (EPD) is an internationally certified declaration that assesses the environmental

impact taking into account the product's lifecycle, absence of pollutant emissions, and other relevant environmental information.

#### **Sensitive Choice**



A global program that identifies, through research and testing, those products whose composition helps control conditions such as asthma or allergies.

The benefits of certifying a sustainable building include increased profitability for the builder, operator, and/ or maintainer of the building; reduced environmental impact; and improved comfort and health for the occupants. The indoor environment of the buildings where we live, work, study, shop, or interact plays a significant role in our quality of life.

#### WELL



A rating system to measure, certify, and monitor the features of a property that impact the health and well-being of people.

The raw materials used in the manufacturing of our products are responsibly sourced following the corresponding quality regulations. In addition, accredited by the most demanding comprehensive certifications and analyses available today, our materials meet the highest health standards, requiring no optimization strategy. During the manufacturing process, environmentally friendly energy is used and a virtually zero carbon footprint is generated thanks to emissions offsetting throughout the entire product lifecycle.

Our products, thanks to their certifications and quality labels, contribute to improving the sustainable certification of a building, providing an economical and simple way to obtain points in environmental certifications that are leading the regulation of efficient construction today (such as LEED, BREEAM or WELL, for example).

#### LEED





A certification system for sustainable buildings developed by the US Green Building Council. It takes into account the incorporation of aspects related to energy efficiency, use of alternative energies, improvement of environmental quality, efficient water

consumption, sustainable development of open spaces on the site, and material selection.

#### BREEAM



A method of assessing and certifying the sustainability of a building that evaluates ten different categories: management, health and well-being, energy, transportation, water, materials, waste, ecological land use, pollution, and innovation.

# Lime-based paints



### **Colours from Soft Selection** and ColorNature 120



**Ecosphere** 

Interior paint



BREATHABLE ABSORBS CO2 REDUCES CONDENSATION







Mineral ecological paint specially suitable for interior walls with matt finish. Thanks to it's formula based on 100% artisanal lime, the product absorbs CO2\* and it has an excelent breathability that prevents condensation. Made with Graphenstone Technology for greater resistance and durability. No toxic odors, minimal VOCs emissions, and alkaline pH that does not contribute to mold proliferation. Class A1 fire reaction according to Royal Decree 842/2013. Washability Class 1 according to UNE-EN ISO 11998.

Performance 12-14 m<sup>2</sup>/L per coat.





Biosphere













Mineral ecological paint specially suitable for exterior walls with matt finish. Thanks to it's formula based on 100% artisanal lime, the product absorbs CO2\* and it has an excelent breathability that prevents condensation. Made with Graphenstone Technology for greater resistance and durability. No toxic odors, minimal VOC emissions, alkaline pH that does not contribute to mold proliferation, and a Solar Reflectance Index (SRI) higher than 100. Class A1 fire reaction according to Royal Decree 842/2013. Washability Class 1 according to UNE-EN ISO 11998.

Performance 12-14 m<sup>2</sup>/L per coat.

## **Energy efficiency**



The application of paint with high reflectance can reduce the temperature of the exterior surface by an average of 30-40%, which will consequently generate less heat flow into the building.

This effect can significantly improve thermal comfort and reduce air-conditioning costs. High Solar Reflectance Index coatings improve energy efficiency by reducing the energy demand of buildings.



# AmbientPro+

Photocatalytic paint Interior/Exterior



EFFECT









PHOTOCATALYTIC ABSORBS CO2

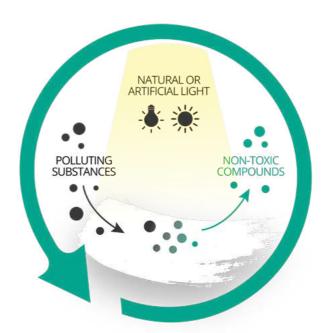


Mineral photocatalytic paint specially designed for both interior and exterior use with a matt finish. Thanks to its formula based on 100% artisanal lime, the product absorbs CO2\* and exhibits excellent breathability, preventing condensation. Made with Graphenstone technology for enhanced resistance and durability. Odorless, minimal VOC emissions, alkaline pH that does not contribute to mold proliferation. With the incidence of light (natural or artificial), it decomposes pollutants such as NOx, VOCs, CO, SOx, formaldehydes, etc., and reduces odors. Active in the visible and UV light range (400-800 nm). Class A1 fire reaction according to Royal Decree 842/2013. Washability Class 1 according to UNE-EN ISO 11998.

Performance 12-14 m<sup>2</sup>/L per coat.



## **Photocatalysis**



Pollution is an increasing concern in cities, both environmentally and for the health of citizens. In addition to the urban planning measures that are now being implemented, we can improve air quality with innovative building materials such as coatings with photocatalytic effect that reduces air pollutants.

Photocatalysis is based on the natural decontamination principle of nature itself. It could be called the photosynthesis of urban surfaces, although different processes and variables interfere in each process. Just as photosynthesis, thanks to sunlight, is capable of eliminating CO2 to generate organic matter, photocatalysis eliminates other common pollutants in the atmosphere, such as NOx, SOx, VOCs, CO... by means of an oxidation process activated by solar energy. Through photocatalysis, most pollutants present in urban areas can be eliminated.

# **Great variety of colours** GCS 980 / ColorNature 120

# **Functional paints**



GrafClean

Interior/Exterior paint



AIR QUALITY







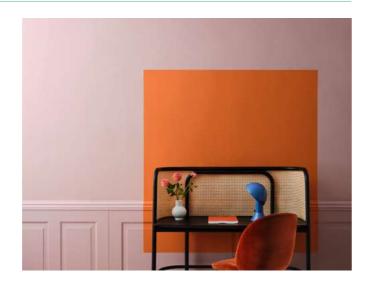




Water based paint suitable for interior and exterior walls with a matt finish. The product is highly breathable and provides an excellent indoor air quality due to its only trace VOCs content.

It contains lime which acts as a natural preservative. Fire Reaction Classification: B-s1, d0 according to UNE EN 13501-1:2007 + A1:2010. Washability Class 1 UNE-EN ISO 11998.

Performance 10-14 m<sup>2</sup>/L per coat.





GrafClean





GREAT VARIETY



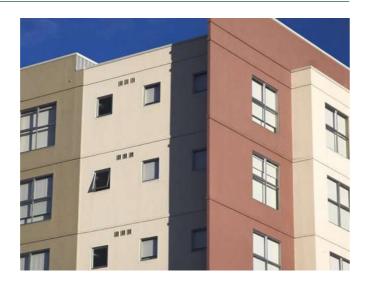
WEATHERPROOF



Highly resistant acrylic paint recommended for facades with a matte finish. Excellent durability, weather resistance, and protection against UV rays. Contains lime that acts as a natural preservative.

Facade paint

Performance 10-14 m<sup>2</sup>/L per coat.





**Proshield** Shielding paint







Proshield is a conductive paint designed to **protect against** high and low frequency electromagnetic radiation.

Ideal for protection against electromagnetic radiation from telephone towers (including 5G technology), radio antennas, television transmitters, external WiFi networks and other EMR/EMF emitting devices.

Proshield reduces electromagnetic pollution, as well as interferences between wireless networks in different spaces, improving effectiveness of RFID and WiFi systems. Recommended for commercial stores and warehouses, hospitals, domestic use, offices, laboratories, recording studios and server rooms.





**WaterProof** 

Waterproof coating







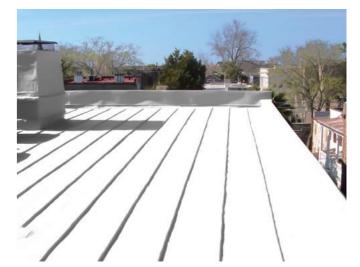


HIGH SOLAR REFLECTANCE

WEATHERPROOF

Water-based protective coating with glass microspheres ideal for roof coatings. It is the perfect solution to protect terraces and roofs from leaks and/or accumulations of water. It works by penetrating into small fissures forming a continuous impermeable and elastic layer. It is a solution that contributes to improving energy efficiency thanks to its high solar reflectance index.

White. Performance 700-800 g/m<sup>2</sup>.



# The Earth Collection

The Earth Collection coatings are high-end decoration finishes that enhance the beauty and timelessness of the natural effects of lime, while maintaining the highest standards of sustainability, benefits and respect for the environment and health. Based on high quality artisanal lime combined with graphene technology, making them unique in the market.

It is a selection of colors and textures inspired by the Earth.

Highly breathable. Outstanding flexibility, adherence and workability. Absorb CO2\*.







Purifies the environment

\* The CO2 absorption occurs during the first 28-30 days after applying the product.

## Health & Sustainability

Naturalness is accompaigned by the care of health. We produce materials that help you live better creating healthier environments.

The Earth Collection is a range of ecological products free of harmful substances. Our focus is to reach the well-being of people and create a positive impact on our planet.

### Nature

A healthy home is a beautiful home. Connecting to nature is a way of self-care. In Graphenstone we rely on the purity of the natural mineral ingredients that we use. The coatings are designed with the expertise of our product developers, making our coating formulations even more effective.

## **Timelessness**

We care about creating products that last over time, for its quality and beyond ephemeral trends.

## **Beauty**

The beauty of lime is reflected in the nuances that appear during its application; the marks of the spatulas, the trowels, the irregularities that are recognizable by sight

fundamental axis of the birth of Graphenstone materials. Our laboratory continue intensively with the research of more sustainable ingredients to develope new effective formulations.



## Craftmanship

Graphenstone products were created searching for the artisanal origin and the good work of past generations. The lime used is selected by hand and cooked in a wood oven in a millennial process.

## Wabi-sabi

Wabi-sabi is a Japanese term that describes a aesthetic vision based on "the beauty of imperfection". It combines the attention to the composition of minimalism, with the warmth of objects from nature.



# Siena



Siena is a mineral paint ideal for creating a limewash effect on interior surfaces. Intended for high decoration that seeks the timeless beauty of lime effects, slightly marking the waters and chiaroscuros with a natural matte finish, easy to apply. Thanks to it's formula, the product absorbs CO2\* and has an excelent breathability that prevents condensation. With Graphenstone Technology for greater resistance and durability.



Breathable Reduces



Absorbs CO2\* Purifies the



Limewash



# Modena



Modena is a bi-component lime mortar in paste with Graphenstone technology. Continuous coating with a superfine finish, natural matt and with lime effects for vertical and horizontal surfaces. Highly breathable. For application in construction, restoration of historic buildings and high decoration.



Breathable Reduces



Absorbs CO2\* Purifies the



Superfine





# Venetta



Natural venetian plaster with a decorative marbled finish. It offers a great versatility of high decoration projects in interiors and exteriors, creating healthier decorative environments. Venetta contributes to create healthy spaces, absorbs CO2\* and is highly breathable. The product is made with Graphenstone technology, providing resistance and durability.



Breathable Reduces condensation



Absorbs CO2\* environment



Venetian

\*The CO2 absorption occurs during the first 28-30 days after applying the product.



# Firenzza



Bi-component lime mortar of with Graphenstone technology. Thanks to its technical properties, it can be processed as a continuous material allowing the same finish to be obtained on both vertical and horizontal surfaces. It creates an entirely mineral and highly breathable support. Suitable for construction, rehabilitation and restoration of historical buildings.



Breathable Reduces condensation



Absorbs CO2\* Purifies the environment



Textured





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