



ZERONOX[®]

FACADES THAT CLEAN OUR AIR
by PoncE

**FACADES THAT
CLEAN THE
AIR**



FACADES THAT CLEAN THE AIR

We take a new step on our commitment to create Ecological Precast elements, featuring an Eco-Friendly technology in all our catalogue. Prefabricados Ponce introduces ZERONOX into every line of fabrication, giving a new benefit to each one of its products.

This technology offers protection to the exposed surfaces, as well as it allows an active surface. This means that all the exposed surfaces actively eliminate contamination from the air (NOx) and decompose organic material, using the sun and water from the rain.

The TiO₂, apart from degrading NOx and VOC's as toxic materials in the air, decomposes organic material on the exposed surfaces. The self-cleaning property in junction with super-hydrophilicity prevents the growth and accumulation of dirt, protecting the aesthetic qualities of our products in the long term. This is known as Self-Cleaning effect.





The photocatalysis has a very proved effective action against bacteria and fungus that attack cement-based surfaces. Titanium Dioxide has very strong oxidizing power, giving a biocide effect on any organic material. This helps fungus, bacteria, algae, etc., not to grow and die on photocatalytic surfaces under the impact of solar irradiance.

FACADES THAT CLEAN THE AIR



Our technology and the influence of the sun and water from the rain, reduce the concentration of Nitrogen Oxide, produced mainly by vehicles in the streets.

The sun irradiation in contact with exposed surfaces of our products, activates and allows them to retain the NOx from the air. The sun is used to degrade the NOx captured and converts it into Nitrates, which are not dangerous and are easily soluble in water,

and then eliminated in condensation. Within the chemical cycle, the resulting Nitrates can be absorbed directly by plants as essential nutrients.

The contamination of the air and the degraded organic material disappear from the façade by the impact of rainwater, helping to purify the air in a natural way.



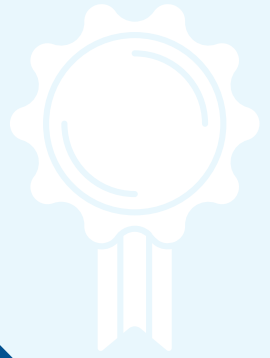
FACADES THAT CLEAN THE AIR

THE FACADE IS TREATED WITH ZERONOX

The air surrounding the surface of the facade contains contaminating particles and organic material.

PURIFIED AIR

50sqm of our facades cleans the contamination caused by one car.



ZERONOX ACTIVATION

ZERONOX is activated by the sun. The activated surface decomposes Nitrogen Oxide from the air and organic material from the surface. Nitrogen Oxide is decomposed in Nitrates.

NITRATES DISAPPEAR WITH WATER

Contamination of the air and degraded organic materials are eliminated from the surface by rainwater. The air is then purified in a natural way.



NOX

NOX


NOX

NOX

NOX

NOX





It is the best choice for your facades because it:

- **Reduces the amount of NOx, purifying the air we breathe.**
- **Decomposes organic material, not allowing the growth of bacteria, fungus, algae, viruses, pathogens, and other organisms.**
- **Offers you a self-cleaning effect from organic materials.**
- **Has a great effectiveness.**
- **Is environmental-friendly.**
- **Does not change the color of concrete.**
- **Optimizes maintenance.**
- **Offers you unlimited possibilities for the design of your architecture projects.**
- **Complies with ISO 22197-1.**
- **Is certified by D-TOX Laboratories in Germany.**



If you compare the reduction of NOx in a surface treated with ZERONOX and a reference surface between 10am and 8pm, you can see a reduction around 24% of NOx.



This is relative with over a 64% in the reduction of contamination generated by cars in the area within the same period.





Contact



Headquarters
Prefabricados
Ponce S.L
Calle Londres, 25
28983, Parla
Madrid, Spain



Tel: +34 916 992 480
Fax: +34 916 051 651



info@prefabricadosponce.es

WWW.PREFABRICADOSPONCE.ES