

3 C Photocatalytic

Pavement

activa

updated 05/2014

Photocatalytic cement based Pavement finish

3C PHOTOCATALYTIC LT PAVEMENT uses light energy to destroy airborne pollutants. Thus:

- ELIMINATES contamination
- Prevent the growth of fungi and bacteria
- Eliminate odours IN AIR
- Enable families to live in a healthy environment
- Reduces average city temperature thanks to its light colours and porosity

3C PHOTOCATALYTIC LT PAVEMENT has Photocatalytic elements regularly distributed on the surface, improving its air cleaning power. Presented in different colours, on request, is a magnificent finish for renewal of all kind of pavements as streets, sidewalks, lanes, bicycle lanes, pedestrian areas, kindergartens, gardens or parks, improving air quality and temperature

3C PHOTOCATALYTIC LT PAVEMENT is used in city centres, in air polluted areas and in buildings and equipments sensitive to people's health:

- Streets
- Promenade areas
- Bike lanes
- Parks and gardens
- Public areas
- Sport areas

-PHOTOCATALYSIS

Photocatalysis is a technology that works under the same principles than Photovoltaic Panels (Solar cells). It uses light energy, in the range between visible and UVA, to destroy the pollutants produced by car exhausts pipes, industries, kitchens and heating, that affect human health and dirt

- It is **MAINTENANCE FREE**, and its effect is **PERMANENT**.
- It is a **CLEAN TECHNOLOGY**

- It is not only a **SURFACE CLEANER**, it is an **AIR DEPOLLUTER**
- **SAVES MONEY**, as surfaces remain clean during years
- **DESTROYS** the **DIRT** and reduces the growth of **MOULDS AND BACTERIA**

It is a **NATURAL** effect, and reproduces the activity of the sun and plants as depollutant

-THE RESULTS

Tests based on ISO standard 22197, highlight an exceptional pollution destruction capacity of our top component: **2620 $\mu\text{mol NOx/m}^2$** ,

Healthy Environment
Low Pollution
Fresher cities

-APPLICATION

1.-Flexible and resistant cold surface

3C PHOTOCATALYTIC PAVEMENT doesn't require water addition. Powder is mixed with the resin at a ratio of 2 kg of powder and 1 kg of resin. . It is mixed using electrical mixer, at low speed, until the mix is homogeneous. On absorbent surfaces, it is required to moisten it before application .

3C PHOTOCATALYTIC PAVEMENT is applied in two coats of maximum 1 mm each, on clean, smooth and free from efflorescences supports that may be consistent enough to support the traffic. Avoid application under hot temperatures or strong sun. Allow 48 hrs for a correct curing at 20 °C.

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3C PHOTOCATALYTIC PAVEMENT needs moisture for proper curing. If the surfaces dry too fast or the weather is hot and dry, it is recommended to keep moisture after application. The recommended final thickness is around 2 mm. Although the product is designed to have very good adherence to the majority of supports, it is advised to test adherence before application. It is advised to respect all kind of dilatation joints existing in the support layer.



3C PHOTOCATALYTIC PAVEMENT can have a rough or smooth surface.

2.-Photocatalytic high performance finish

Once the flexible and resistant cold surface has been applied, before the curing, when it is still fresh, the third component, **PHOTOACTIVA S** is sprayed on top, at a ratio of 100 g/m², providing the pavement surface the photocatalytic properties that will convert the 3 components system into a powerful environmental and health tool.

PHOTOACTIVA S will help the correct curing of the pavement.

Photocatalysis is a superficial activity. Only illuminated particles are active.

TECHNICAL DETAILS

3 Components photocatalytic cement /acrylic pavement for urban environmental improvement.

- Appearance:
 - Powder admixture
 - Resin dispersion
 - Photocatalytic emulsion
- Mix density 1.2 kg / l
- Pigmented on request. 56 colours available
- Yield:
 - Mix 1.5 - 3.5 Kg/m² (2 mm thick)
 - Powder admix. 1.0 - 2.3 Kg/m²
 - Resin dispersion 0.5 - 1.1 Kg/m²
 - PhotoActivas S 0.1 Kg/m²
- Mix application time 2 hrs
- Dry touch 5-7 hrs 25 °C
- Max Thickness by layer 1 mm
- Total thickness max 2mm
- Curing time 48 hrs (20°C)
- Adherence EN 1015/12 0.98 N/mm²
- Water absorption 0.004 g/cm²
- Freezing/thawing 0.1kg/cm²
- Application temp. between 5 °C and 30 °C
- Do not apply if rain is foreseen in the next 24 hrs
- Store in dry areas.
- Shelf life 12 months for the admixture
- Admixture: 25 Kg bags
- Resin: 25 Kg Containers
- PhotoActiva S : 10 l canisters

It Contains Recycled Material: we care for the environment

3C Photocatalytic Pavement: *Photocatalytic finishing and repair for all kind of pavements, having enhanced photocatalytic superficial activity in the UVA-visible range, based on EPS Technology, applied on a resistant and flexible acrylic mortar. The combination results in a reduction of air pollution and average temperature, depending on surface colour*

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