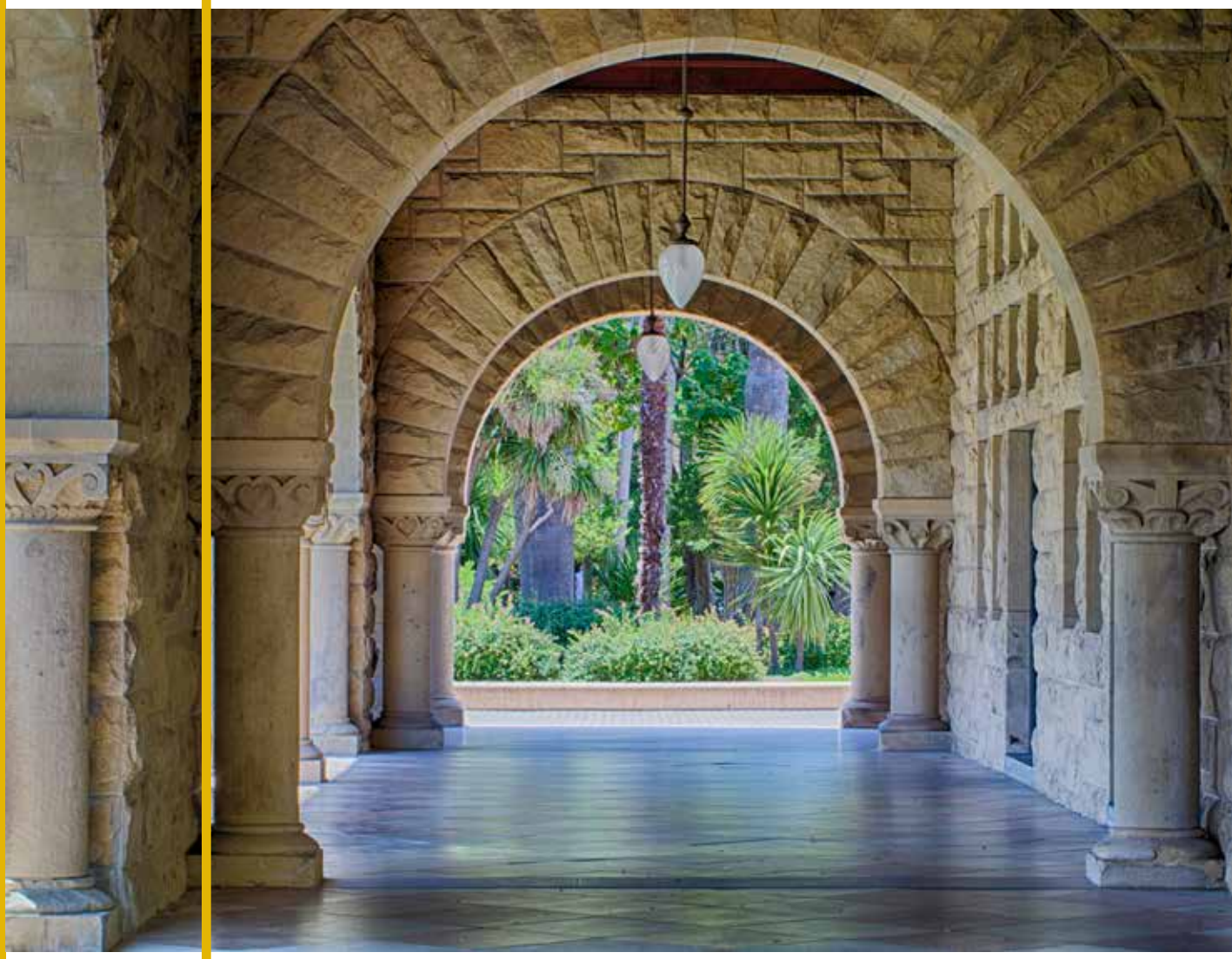
NANOTECHNOLOGY PROTECTIVE TREATMENT - POROUS WALLS

ECTOR

PROTETTIVO NANOTECNOLOGICO

RP-10/ RP-50

POROUS WALLS



IDEAL FOR VERTICAL SUBSTRATES SUCH AS POROUS BRICKS, STONES IN GENERAL, NATURAL PLASTER, LIME, CEMENT, CLAY, SANDSTONE...

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RP-10
RP-50

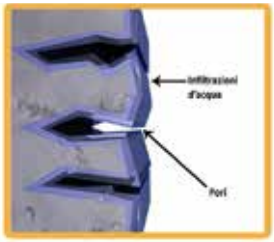
The best eco-friendly protection

ECTOR® RP-10 is a nanotechnology water-based formulation to be used to protect vertical porous substrates such as: brick, stone, natural plasters, lime, concrete, earthenware, sandstone, clay etc...

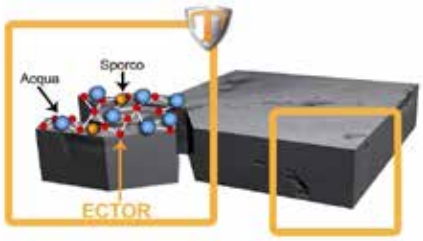
Ector® RP-10 is NOT an impregnating sealer and IT DOES NOT create a film. It works by inverting the surface energy from attractive to repulsive.

The nanoparticles of SiO_2 self-dispose into the micropores (nanoparticles are as small as the millionth part of a millimeter) and create a two-and three-dimensional structure at the nanometer scale, forming a FIELD OF LOW TENSION. Inverting the surface energy of matter from high to low is of primary importance because this prevents polluting agents (water, dirt, mold, bacteria) from penetrating into the substrate. These contaminants remaining on the surface will slip away in case of rain or they can be removed very easily.

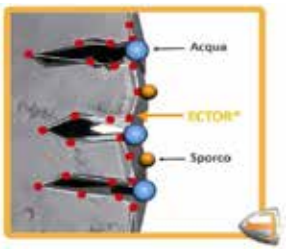
THIS IS A UNIQUE SYSTEM BECAUSE IT LEAVES THE BREATHABILITY OF POROUS MATERIALS UNCHANGED WHILE PROTECTING THEM



Microporosity of an untreated surface subjected to infiltration of water and dirt.



Two and three-dimensional structure created by Ector®. The surface is absolutely unassailable by external contaminants.



The red particles show the presence of the protection of Ector even in small micropores.

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features and advantages

RP-10
RP-50

- It does not create a film, it does not plug or seal the surface, leaving it perfectly breathable
- It is not an impregnating sealer; its application is very easy. It reduces the time and the cost of labor and of the scaffold (one coat is sufficient)
- It prevents the formation of mold, moss, fungi because the treated surface is not submitted to infiltration of water, preventing vegetation to proliferate
- Thanks to the absence of moisture there are no reactions of saltpeter
- Reduced of capillary moisture.
- Heat resistant (+450°C) and frost resistant (-35°C). UV stable
- It does not change the appearance of the treated surface
- Ector® RP-10 is solvent free and odorless
- Short drying time

THE HYDROPHOBIC AND TRANSPIRANT PROPERTIES OF ECTOR® RP-10, ALLOW INTERNAL MOISTURE TO ESCAPE AND PREVENT EXTERNAL MOISTURE TO PENETRATE INSIDE.

RISING DAMP: with Ector RP-10 this phenomenon occurs in a reduced way on a treated wall (UNI EN 1015 - 19:00). Tests on the capillary also show that there are not problems related to the formation of efflorescence, detachments of bricks and/or mortar, cratering or more.

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method of application

- Ector® RP-10/RP-50 is versatile and easy to apply.
- Ector® RP-10 is ready to use. It must be applied on a clean surface free of grease, mold, moss... It is recommended the application by an airless device (HVLP) with nozzles of diameter of 0,5 - 0,8 because these allow to cover a larger area without loss of product.
- Ector® RP-10 can also be applied with a paintbrush, a paint roller or a brush even if these methods require a higher consumption of product. Ensure to cover the entire surface evenly. If the substrate is very porous it is possible/recommended to apply a second coat of product within a maximum of 1-3 minutes after the first application preventing the product from drying (wet on wet).
- In case of wide areas proceed by applying the product on limited square meters. After the first contact, Ector® RP-10 immediately enters into the pores. The surface once dry is already protected, but the optimal and protective effect is achieved 24 hours after the application (at room temperature of 20°C). We recommend to test the effect after this time.
- Also make sure that the substrate is clean and that there are no residues of any other protective products (silicone, siloxane products) as their presence, even if irrelevant (in patches), might inhibit the aggregation of the nanoparticles of Ector®
- Against mold: the mold must be defeated before protecting the surface, so using additives (bleach for example) , dab the surface and let it penetrate as much as possible inside the porosity. Wait at least 24 hours, rinse , neutralize thoroughly and let dry. Now apply RP-10/RP-50.

ECTOR® RP-50 CONTAINS MORE ACTIVE PARTICLES. INDICATED TO BE APPLIED IN AREAS SUBJECTED TO THE MOST CRITICAL SITUATIONS SUCH AS EXCESSIVE POROSITY OF THE MATERIALS OR HIGH HUMIDITY

method of application

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Additional information and tips for user:
Ector® RP-10, joins at the molecular level with **mineral materials** therefore if used on plaster or synthetic colors (washable) where the percentage of polymers is high, Ector® RP -10 may not give the desired effects.
Before the application, for cleaning purposes, **do not** use cleaners with a pH lower than 3 or higher than 12 (acute acids or with high basicity). In case, rinse carefully and neutralize the surface. Ensure that there are no residues.
24 hours after the application, Ector® RP-10/RP-50 is resistant to acute acids but not to alkaline with a pH higher than 13.

DURATION:
If correctly applied the duration is about 8/10 years.

COVERAGE:
From 20 to 30 sq.m per litre depending on the substrate level absorption and on the method of application .

REVERSIBILITY:
The product is reversible with an additive having pH 14.

STORAGE:
At least 12 months in its original closed container. Once opened, the product must be used within 6 months.

STORAGE TEMPERATURE:
From + 4° C to +40° C.

PACKAGING:
Liter - Tank (5 -10- 20 liters) - Drum (200 or 1000 liters)

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produced by ***R. & R. GROUP***

delivered by ***RENODRY***

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