

NanoSolutions for MegaProblems!

How do I **waterproof** and **thermally insulate** my rooftop?

On a clean and dry surface apply the following steps:

- 1st step: Apply **SurfaPore C** for waterproofing the surface (optional).
- 2nd step: Repair large cracks (>2mm) and fill-in gaps.
- 3rd step: Apply a priming coat: dilute **SurfaPaint ThermoDry Elastomeric Roof Paint** with an equal amount of water and apply on surface.
- 4th step: Without diluting and using a good quality roller, apply 2 coats of **SurfaPaint ThermoDry Elastomeric Roof Paint** in different directions: one horizontally and the other one vertically. Edges should be adequately covered. Allow 24 hours in between coat applications and after priming.

Allow 7 days of curing for complete waterproofing. Total coverage: 2 m²/L (includes priming and two top coats).

How do I **clean** and **protect** my marble surfaces?

1st step (cleaning):

For porous/unpolished marbles: Clean the surface diluting **DeSalin K** with water in a 1:4 ratio. Wash with plenty of water.
For polished marbles: Clean with **DeSalin T**. Place on the surface and cover with a cloth or cotton in order to reduce evaporation. Allow it to act for 24 hours. Every 3-5 hours, wet the cloth with **DeSalin T**, in order for it to always remain moist.

2nd step (protection): Using a brush or roller cover the surface with **SurfaPore M**, with no dilution. After 15 minutes and before the material dries, remove any excess using a moist cloth and polish the surface. Re-apply one hour after the initial application following the same procedure. **SurfaPore T** can also be used in the case of polished marbles.

How do I **remove mold** and **prevent** its growth from interior walls?

1st step: For the removal of mold and black spots from our walls, use **DeSalin AM** with a brush, without any dilution. After 24 hours, scrub well with a sponge and wash off with water.

2nd step: Apply on the dry surface **SurfaPaint ThermoDry Interior** in any light color you select. Apply a second coat of paint after 4-6 hours. In this manner, you apply a high quality paint that prevents moisture to condensate on thermal bridges (cold areas of the wall) that leads to mold growth.

How do I **repair cracked plaster** and damaged paint from rising damp?

1st step: With a spatula we remove loose material from the surface.

2nd step: Apply **SurfaPore C** and allow for one week to pass in order for the accumulated moisture to dry.

3rd step: Apply **Surfamix C** as a primer (diluted 1:3 with water).

4th step: Three hours after priming, if required, re-plaster by using **SurfaMix C** in your paster mix.

5th step: Prime the repaired area using again **Surfamix C** as a primer (diluted 1:3 with water).

6th step: Apply the appropriate paint: **SurfaPaint ThermoDry Interior** (internal walls) or **Exterior** (external walls).

What is Nanotechnology?

Nanotechnology refers to the scientific field, which deals with very small structures, usually sized below 100 nm. One nanometer (nm) is one billionth of a meter (10⁻⁹ m) - it is so small that if earth were one meter in diameter, then one nanometer would have been the size of an apple! Nanosized materials reveal unique properties when compared to ordinary, bulk materials or even molecules.

Why Nanotechnology on my surfaces?

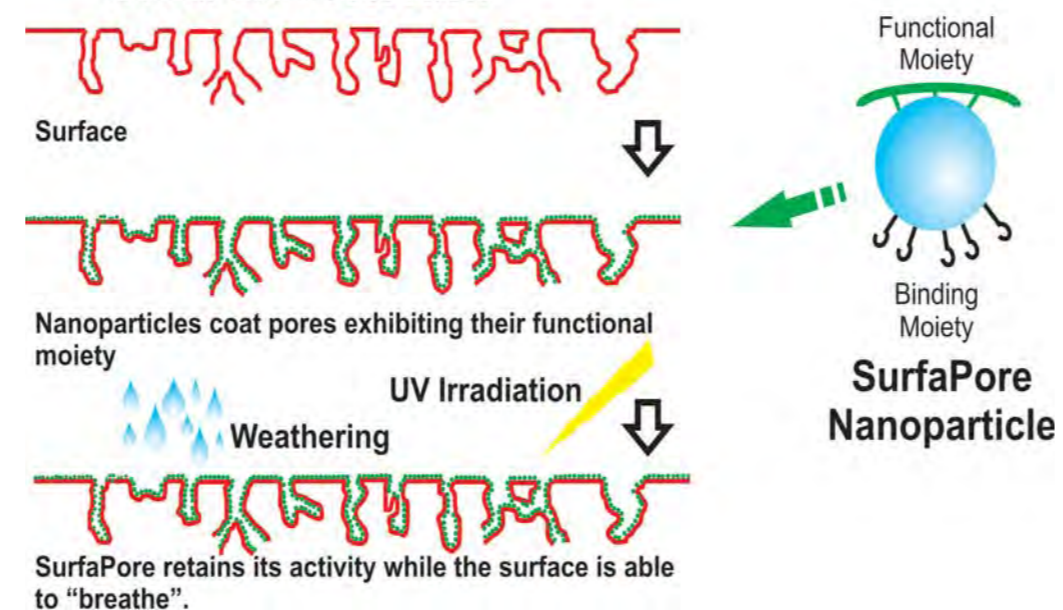
NanoPhos formulations act completely differently, when compared to polymer membranes or traditional silicone based formulations, as they do not create a "plastic film" on the surface applied. They protect and waterproof surfaces, by deeply penetrating into the pores of cement based substrates: Instead of sealing the pores, nanoparticles "coat them", assuring that water or other corroding factors are effectively repelled by chemical forces. In this manner, protection is provided deeply into the substrate which is therefore not affected by abrasion or mechanical wear. As nanoparticles do not form polymer chains, SurfaPore modified surfaces can last longer; even after eight years they can exhibit 95% of their original activity or functionality. All formulations are more resistant to the "hard" part of solar light (UV radiation) which does not cause them to become "yellowish". While NanoPhos' formulations do not alter the color and natural appearance of the surfaces modified, they also allow them to breathe.

A very important advantage of SurfaPore technology is the "breathing" of the modified surfaces. In particular, in case moisture is trapped behind a SurfaPore C, R or W modified surface, the water will evaporate into the environment, without accumulating inside the building's structure. Therefore, internal (negative) pressure is relieved by evaporation since water vapors can still travel inside the pores of the material and exit into the open environment. However, water from the external environment is blocked from being transferred inside the material. In this manner, common building failures (swelling, cracking, warping) are prevented and SurfaPore modified surfaces remain dry and unchanged in both their appearance and mechanical properties.

Safety

All SurfaPore, SurfaMix, SurfaPaint, ThermoDry and SurfaShield are not hazardous according to directives 67/548/EC and 1999/45/EC. NanoPhos' formulations are water based and without hazardous solvents. The Volatile Organic Compounds (VOC) content is always lower to the limits imposed from the EU.

SurfaPore Protection



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LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY. The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that NanoPhos' products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent. NanoPhos specifically disclaims any other expressed or implied warranty of fitness for a particular purpose or merchantability. NanoPhos disclaims liability for any incidental or consequential damages. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.



At NanoPhos, we take advantage of the unique properties of nanotechnology and invent clever materials that solve every day problems. By harnessing nanotechnology, we seek to create a more comfortable, safe and trouble-free living environment. We transfer innovations out of our lab into the hands of consumers. Our vision is clear: "Tune the nanoworld to serve the macroworld" – in simple terms we make nanoparticles solve common problems.

NanoPhos was recognized in January of 2008 by Bill Gates as one of the most innovative companies and also received the 1st prize for innovation at the prestigious 100% Detail Show in London. SurfaShield technology, received the prestigious GAIA award at the 2010 International Building and Construction Show BIG5 in Dubai for its environmentally friendly and innovative profile. NanoPhos is a rapidly growing company that is actively expanding its distribution network. Currently, the company is present in the UK, Norway, Sweden, Finland, Germany, Portugal, France, Italy, Greece, Cyprus, Turkey, Egypt, Saudi Arabia, Bahrain, UAE, Iran, India, China, New Zealand, Japan and Mexico.



NanoPhos SA has been approved by Lloyd's Register Quality Assurance to follow the EN ISO 9001:2008 Quality Management System and EN ISO 14001:2004 Environmental Management System for the development, production and sales of chemical products for cleaning and protection of surfaces and nanotechnology products.

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How can I **protect** **waterproof** **thermally insulate** and keep my **surfaces new**?



SurfaPore®
WaterProofing & Protection

SurfaShield®
Self-Cleaning & Self-Sterilizing

ThermoDry®
Thermal Insulation for Paints

SurfaMix®
Cement Admixture

SurfaGuard®
AntiCorrosion for Metals

DeSalin®
Cleaning & Restoration

High Quality Paints for Thermal Insulation and Water Proofing

SurfaPaint ThermoDry

SurfaPaint ThermoDry paints are ready for use paints, that "block" heat, reflect thermal radiation and prevent thermal bridges. They prevent moisture condensation and the development of mould and black spots on surfaces. SurfaPaint ThermoDry are high quality paints that contribute towards the energy efficiency of buildings.



Interior

High quality emulsion paint for interior surfaces (walls, cement, plasterboard)

- Saves energy
- Thermal insulation
- Prevents thermal bridges
- Υψηλή αντοχή στην απότριψη
- Excellent washability
- Long lasting
- Water based with low VOC
- Easy to apply
- Great coverage
- Increased protection against mould and algae

Exterior

High quality 100% acrylic paint for exterior surfaces (walls, stucco, cement)

- Saves energy
- Thermal insulation
- Reflects 94,2% of Infrared Radiation
- Bridges gaps
- UV and salt resistant
- Long lasting
- Water based with low VOC
- Easy to apply
- Great coverage
- Increased protection against mould and algae

Metals

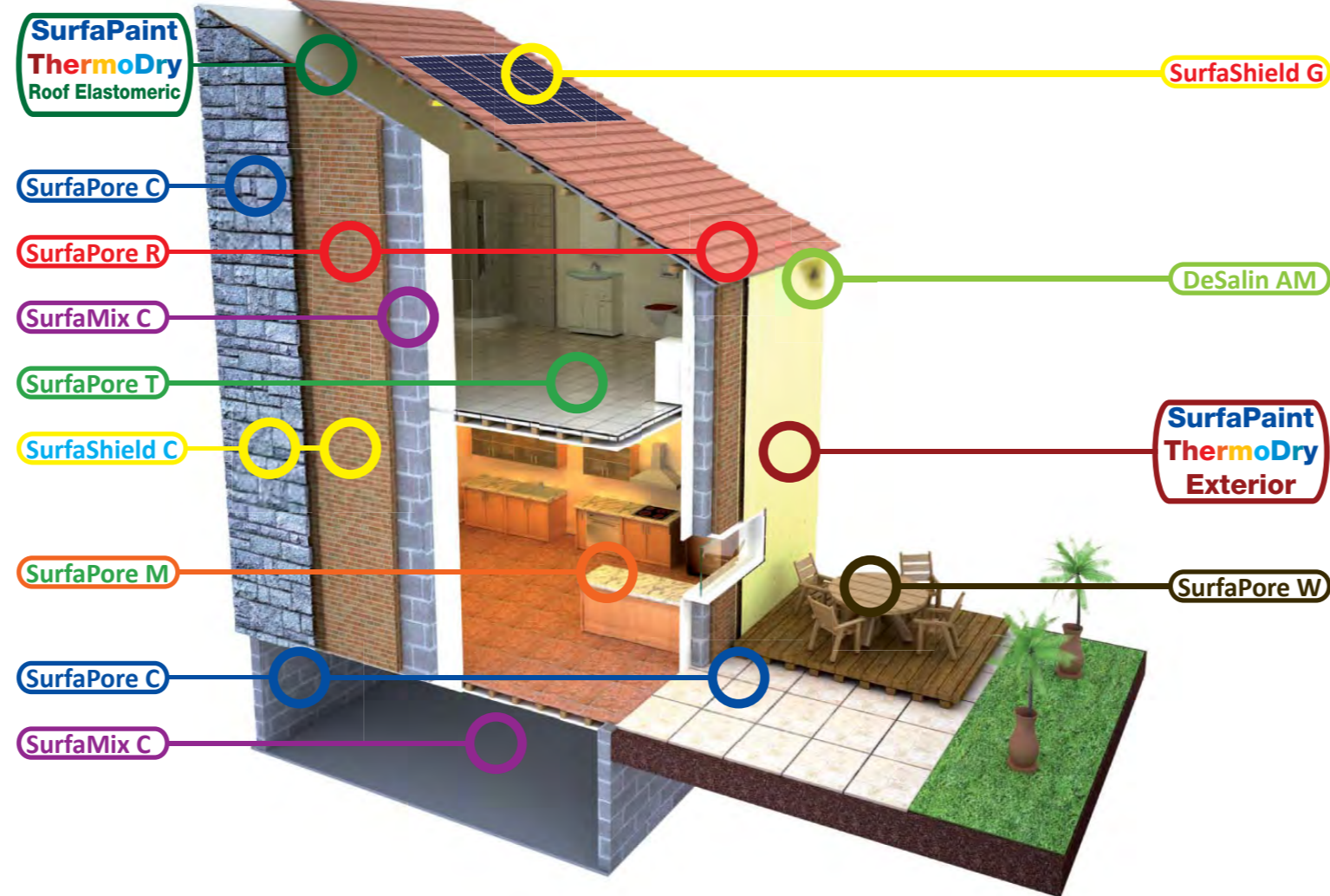
High quality PU-acrylic paint for metal surfaces (ferrous metals, metal sheet, industrial buildings, tanks, containers)

- Saves energy
- Thermal insulation
- Direct application on metallic surfaces
- Excellent adhesion and elasticity
- Withstands temperatures up to 150°C
- Protects from corrosion
- Long lasting
- Water based with low VOC
- Easy to apply
- Great coverage
- UV and salt resistant

Elastomeric Roof

High quality thermal insulating elastomeric paint, with low dirt pickup for external horizontal or vertical surfaces, and especially for waterproofing roofs

- Saves energy
- Blocks heat transfer
- Reflects 94,8% of Infrared Radiation
- Complete waterproofing
- Excellent adhesion and elasticity
- Ideal for gap bridging
- Withstands ponding water
- Great coverage
- UV and salt resistant
- Chalking resistant
- Excellent dirt resistance and mould prevention
- Long lasting
- Easy to apply



For more information visit our website at:
www.icmtechglobal.com

SurfaPaint ThermoDry paints can be tinted in light colors with commonly available coloring systems (RAL or NCS)

Additive for Thermal Insulation and WaterProofing of any Water Based Acrylic Paint

SurfaPore ThermoDry

Nanotechnology and Microtechnology additive for making any acrylic water based paint thermal insulating and water repelling. By "blocking" the thermal transfer it helps in conserving energy. Protects against mould growth, extends paint life, increases paint volume by 60% and it is applicable for both internal & external walls.



Cement & Plaster Admixture that Enhances Adhesion, Elasticity, Workability and Water Resistance
 Ideal as a paint primer

SurfaMix C

SurfaMix C is a water-based admixture for cementitious mortars, grouts, renders and plasters enhancing adhesion and bonding on application surfaces. Further, it improves elasticity and reduces cracking, shrinkage and the formation of water absorbing capillaries. SurfaMix C is an ideal admixture for exterior or interior masonry coatings. SurfaMix C when diluted by water at a ratio of 1:3 becomes an ideal primer for masonry.



Before Protection... Clean with DeSalin®

DeSalin C Efflorescence & Salt Deposit Cleaner

Effective cleaner for the removal of efflorescence from cement surfaces, mortar, grout, stucco, roof tiles, natural or artificial stones. Quick and effective action.

DeSalin K Effective Cleaner for Resistant Surfaces

Special cleaning formulation for fast and effective action. It is ideal for the removal of difficult stains such as paints, mould and cement residues. For lighter stain loads, it can be diluted with tap water.

DeSalin AM AntiMould Prevention and Cleaner

Powerful water-based fungicide that kills mould, algae and microorganisms for internal and external masonry surfaces. Ideal for cleaning infected surfaces and preventing the black and green spots caused by microorganisms.

DeSalin T Cleaner for Sensitive Surfaces such as Marbles

Active cleaner that is specially formulated for polished and sensitive surfaces like marble or granite. Ideal for persistent, deeply absorbed stains such as coffee, wine, oil, tomato or other organic based materials. Acid Free Formulation.

Nanotechnology for cement surfaces, mortar, grout, stucco and natural or artificial stones. SurfaPore C is a water-based formulation: just apply it on existing surfaces or mix with your base materials instead of water. Create an invisible water repelling layer that shields against moisture and protects against surface cracking, freeze threat & mould!

SurfaPore C Water Repellent for Cement Surfaces, Mortar, Grout & Stucco Natural or Artificial Stone



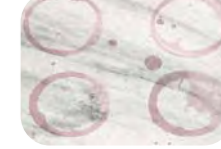
Nanotechnology for any clay based surface such as roof tiles, cotto and pottery. SurfaPore R protects your clay surfaces from water penetration. Clay surfaces and roof tiles are effectively protected from deterioration and from the unsightly "greening" of mold growth.

SurfaPore R Water Repellent for Clay based Surfaces, Ceramic Roof Tiles, Cotto Tiles and Pottery



Nanotechnology for protecting marble, granite and porcelain surfaces from staining. The staining of porcelain, marble and granite tiles can be disastrous for these valuable surfaces. Creates an impermeable and invisible barrier by sealing even the finest pores of these surfaces.

SurfaPore T Water Repellent & Sealant for Marbles, Granites and Tiles that Stain



Active Nanotechnology for protecting marbles, granites & stones against water, stains and oil. Stains can destroy your valuable stone, marble and granite surfaces. Do not simply seal these surfaces from stains, but also make them oil repellent. Its heat resistant formulation makes it ideal for kitchen countertops.

SurfaPore M Water and Oil Repellent Sealant for Marbles, Granites Stones and Porous Surfaces



Nanotechnology for Absorptive Wooden Surfaces. SurfaPore W was developed based on the unique properties of wooden surfaces. A combination of active ingredients repels water without changing the natural appearance of wood. It can be applied as a final coating or as a primer before the application of varnish or any other coating.

SurfaPore W Water Repellent & Preservative for Wood: Protects from Cracking & Warping naturally



Nanotechnology for water, oil protection and primer for fibrous materials. It water based and can be easily applied on surfaces such as carton or kraft paper, plasterboards, drywalls and composite wood. It can be directly applied on gypsum plaster, such as well! It can also be used as a primer improving the adhesion of paints.

SurfaPore F Water and Oilproofing for fibrous materials, such as plasterboards, composite wood and carton



Nanotechnology for corrosion protection and pretreatment of metal surfaces for enhanced paint adhesion. Applicable on carbon steel, cast iron, galvanized (zinc plated) steel, stainless steel and aluminum alloys. Prevents corrosion of metal steel bars and also passivates existing rust. Also applicable as a primer for enhanced adhesion of metal paints.

SurfaGuard M Corrosion protection for metals such as steel or aluminum. Primer for metal paints



SurfaShield C is the latest nanotechnology achievement. It harnesses environmental light and makes porous surfaces Self-Cleaning and Self-Sterilizing. Therefore, SurfaShield C coated surfaces actively decompose any organic stain, bacteria, mould or other pollutants. It can be applied on light shaded paints, plaster, masonry walls, cementitious surfaces, stone and "flamed" marble or granite in order to keep them clean.

SurfaShield C Nanotechnology Formulation for Self-Cleaning, Self-Sterilizing and Anti-Static Porous Masonry Surfaces and Paints



SurfaShield G transforms glass surfaces (windows, screens, photovoltaic PV and solar panels) into self-cleaning, super-hydrophilic and antistatic. While it decomposes pollutants on and around the glass panels, it creates an invisible coating that prevents dirt or dust accumulation, without altering glass clarity and transparency. Maintaining PV panels cleaner with SurfaShield G directly translates to enhanced panel efficiency and measurable performance increase. Applicable only by special spraying.

SurfaShield G Nanotechnology for Self-Cleaning, Super-Hydrophilic and Antistatic Glass Surfaces (Windows, Screens, Photovoltaic and Solar Panels)

