

Project:

Thermal Insulating, Stain Resistant Elastomeric Waterproofing Paint

Product:

SurfaPaint ThermoDry
Elastomeric Roof Paint

Benefits:

- Blocks Heat
- Conserves energy
- Reflects 94,8% of IR radiation
- Creates a watertight film
- Exceptional elasticity and substrate adhesion
- Excellent gap bridging
- Withstands ponding water
- Excellent opacity and coverage
- Excellent durability to UV
- Excellent alkali resistance
- Excellent color stability and chalk resistance
- Excellent resistance to dirt, mildew and staining
- Extended lifetime
- Low VOC, water based paint
- Easy surface application

Applications:

Exterior horizontal and inclining surfaces, such as: Terraces, concrete surfaces, plaster, roof tiles, bricks, wood, tar, bitumen.

Color:

White



Low Volatile Organic
Compounds (VOC)

**Ideal Waterproofing
even with ponding water**

Packaging:

10L Plastic (HDPE) Buckets

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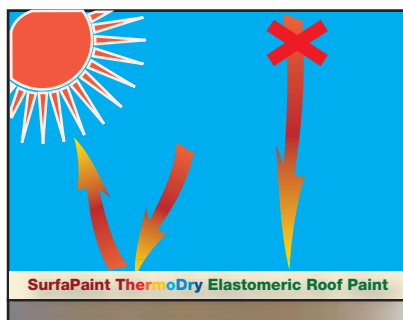
SurfaPaint ThermoDry Elastomeric Roof Paint

Thermal Insulating, Stain Resistant Elastomeric Waterproofing Paint for Horizontal or Inclining Exterior Surfaces

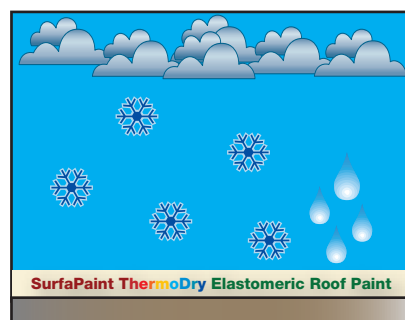
A huge amount of energy “travels” easily through roofs. Therefore, extended amounts of energy are required for cooling in the summer or heating in the winter. SurfaPaint ThermoDry Elastomeric Roof Paint is a high quality elastomeric acrylic paint with thermal insulating properties, ideal for exterior use in horizontal and inclining surfaces. Powered by SurfaPore ThermoDry, it contains special nano and micro-sized thermal insulating materials contributing to energy savings during winter and summer. The thermal insulating particles block heat transfer, reflect thermal radiation, and create a moisture barrier that can result in significant energy savings. Excellent durability to UV radiation and alkali. SurfaPaint ThermoDry Elastomeric Roof Paint forms an impermeable and elastic film of excellent adhesion, which retains its elasticity even under very low temperatures. It is resistant to adverse weather conditions and has long lasting durability. The fluoropolymeric additives make the surface dirt repellent and easy to clean.

SurfaPaint ThermoDry Elastomeric Roof Paint conserves energy by reflecting thermal insulation, “blocking” thermal transfer and reducing water permeability of exterior surfaces. It has low dirt pick-up and offers complete waterproofing.

Prevents Heat Inflow



Waterproofs
Horizontal Surfaces



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Lavrio 19500, Greece

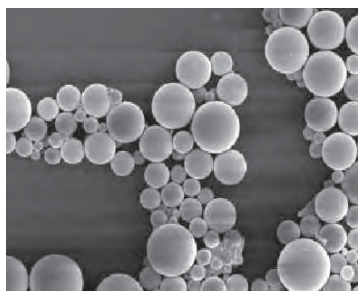
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Nanotechnology 

SurfaPaint ThermoDry Elastomeric Roof Paint Description

SurfaPaint ThermoDry Elastomeric Roof Paint is a unique formulation that combines three different performance pillars, altogether: The selection of the resin polymer is responsible for the elastomeric behaviour in a wide range of external temperatures. Elasticity values are more than 350%. It is also the main element that provides an impermeable barrier, even under ponding water or snow pack. The resin polymer is the ideal matrix for SurfaPore ThermoDry nano- and microparticles, which attribute its thermal properties. While the final coating reflects thermal radiation (InfraRed region of light) by more than 94,7% (ASTM G173-03), its thermal conductivity is 4 times less than that of a regular paint ($<0,1 \text{ W/(mK)}$, ISO EN 12667). Therefore, you enjoy increased energy efficiency, a reduced CO_2 footprint and tangible savings. The triple pillar is completed by special fluoropolymer (PVDF) ingredients, that induce low surface energy for dirt shedding. Practically, SurfaPaint ThermoDry Elastomeric Roof coating remains white after application, repelling dirt and preserving the original aesthetic integrity of the surface applied. All in all, SurfaPaint ThermoDry Elastomeric Roof Paint combines the functionality of unique elements to offer a "smart" final coating that protects and saves energy simultaneously!



Thermal insulating particles of SurfaPore ThermoDry Elastomeric Roof Paint

International Standards Testing

Thermal Conductivity: $<0,1 \text{ W/(mK)}$, (EN ISO 12667:2004). The corresponding value of a conventional paint is $0,50 \text{ W/(mK)}$.

Thermal Reflectance: 94,76% Reflection in the InfraRed region of light (700nm - $2,2\mu\text{m}$ ASTM G173).

Liquid water permeability: "non-permeable" by water according to EN ISO 1062-3:2008

Fungal resistance: excellent resistant against fungi & algae, Class 1 according to BS3900-G6:1989

Elasticity: -10°C : 400%, 23°C : 381%, 60°C : 315%.

Crack binding: Covers hair cracks up to 1,20mm.

Application: SurfaPaint ThermoDry Roofs can be applied directly on exterior horizontal (e.g. terraces) and inclining surfaces. New substrates from cement or masonry should have cured for more than 3-4 weeks before primer application. Adverse conditions during or immediately after application may affect the coating's properties. **Preparation:** Ensure all surfaces are clean and dry prior to application. Remove any dust, dirt and flaking parts. **Application note:** Stir well before application. Fill the bridging gaps and hairline cracks with a suitable putty. Surfaces are primed with SurfaPaint ThermoDry Roofs thinned with water up to 50%. Application temperature should be between $5 - 35^\circ\text{C}$. Apply 2 coats using a good quality brush, roller or by airless spraying without thinning. Ensure corners and edges are adequately covered. Additional coats should be applied 24-36 hours after the previous application. **Spreading Rate:** $2 \pm 1 \text{ m}^2/\text{L}$. **Drying Time:** Typically 4 hour depending upon coat thickness. Low temperatures and high humidity will lengthen drying times. **Cleaning of tools:** All tools and equipment should be cleaned immediately after use with water. **Storage:** Store in a cool, dry, well ventilated area away from heat and direct sunlight. Carefully reseal partly used containers. Protect from frost. To avoid risk of spillage, always store and transport in a secure and upright position. The shelf life of the product in airtight containers is 18 months post production date. **Safety:** Keep out of reach of children. Do not use empty container for storing food. Avoid contact with skin and eyes. After contact with skin wash immediately with soap and. Do not use solvent thinners. In case of contact with eyes, rinse immediately with plenty of water and if necessary seek medical advice. If swallowed seek medical advice immediately and show this container or label. Do not empty into drains or watercourses. Dispose of empty container responsibly and according to local legislation. **VOC (Volatile Organic Compounds):** Maximum EU VOC content limit value (Directive 2004/42/CE) of the product in a ready to use condition (category A/c "Exterior walls of mineral substrate", Type WB): 40 g/L (2010). **Maximum VOC content of this product is 30 g/L .**

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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.

NanoPhos at a Glance...

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, Portugal, France, Italy, Greece, Cyprus, Turkey, Egypt, Saudi Arabia, Bahrain, UAE, Iran, India, China, New Zealand, Japan and Mexico.

www.NanoPhos.com



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 production and sales of chemical products for cleaning and protection of surfaces and nanotechnology products.