

# NANO TOPPING TECHNICAL SPECIFICATIONS



## IMPERMEABILITY

*Water & Steam are not a problem. By selecting the right protective resin, Nano Topping can become a product with high impermeability, perfect for bathrooms & showers. In fact, in determining the depth of water penetration under pressure, Nano Topping demonstrated the complete absence of penetration*



## CLEANING

*Nano Topping is also resistant to the harshest chemical agents.*

*Continuous & without grouting, Nano Topping is easy & easy quick to clean. A wipe with a damp cloth with the addition of a little neutral, non-foaming detergent is enough to clean the surface.*

*Moreover, various testes have shown that Nano Topping is resistant to the various chemical agents contained in many products in common use*



## SLIDE RESISTANCE

*Various finishes for various degrees of slide resistance.*

*Thanks to Nano Topping's craftsmanship application process, it is possible to choose the perfect grade of finish for your project.*

*Smooth for interior flooring, rougher when a greater degree of slip-resistance is required, for exteriors or pool decks, for example.*



## FLAME RESISTANCE

*Nano Topping is flame & smoke resistant. Nano Topping attained an excellent classification for flame resistance & smoke resistance ( class S1). This allows it to be used in almost all civil and commercial locations.*



## IMPACT

*Nano Topping is resistant to the hardest of blows.*

*In a test in which a mass was dropped on the floor, Nano Topping was assesed "Class 3 - IR>20" which is the equivalent of a 1 kg sphere falling from a height of 2 meters. Sample intact following the impact.*



## RESISTANCE

*You can be sure with Nano Topping. The material that most lends itself to comparison with Nano Topping is wood.*

*However, Nano Topping is greatly superior in terms of resistance to scratches, impact and wear & tear. Numerous tests carried out in accordance with various regulations have demonstrated the unique features of Nano Topping.*

# FlexStone®

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## ABRASIONS

*No scratches, not even under stress.  
We rolled a chair with W-type wheels and soft polyurethane tread with a 90 kg load over a Nano Topping floor 25,000 times. The result of the test was "no visible defect".*



## INDENTATIONS

*Nano Topping is twice as resistant as wood. We rolled a diameter of 10mm into Nano Topping laid on concrete base by applying a 1000N load. The result of the test was 9.6 kg/mm<sup>2</sup>, more than double that of a high resistance wooden floor (4.51 kg/mm<sup>2</sup>).*



## ADHESION

*Nano Topping adheres to every surface.  
Due to its polymeric formula, Nano Topping enables greater adhesion than that of traditional adhesives for floor laying, ensuring absolutely safety. Indeed, the so-called "tear test" produced results higher than 2.5 Nmm<sup>2</sup>.*



## CRACKING

*Nano Topping is more elastic than concrete.  
Unlike traditional materials (tiles, marble and concrete), Nano Topping has elasticity properties that enable it to undergo slight deformation before cracking. This allows it to be applied to special bases, for example, wooden surfaces.*



## AIR QUALITY

*Nano Topping is a healthy choice.  
Living in a healthy environment means using products that do not release harmful substances in the places where they are applied. This is why Nano Topping is a "healthy" choice. The strict UNI EN ISO 16000-9:2006 tests demonstrated that Nano Topping does not emit any volatile organic compounds (VOC), awarding it an A+ rating, which is the maximum possible.*



## THERMAL CONDUCTIVITY

*Excellent conductivity for reducing energy consumption.  
When using underfloor heating, thermal conductivity is important. Nano Topping has double the Lambda value ( $\lambda=0.46$ ) of a wooden surface. The Lambda coefficient measures the capacity of a material to transmit heat. A high Lambda value corresponds to high thermal conductivity, less consumption & as a consequence, better performance from the heating equipment.*

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## PROPERTIES

Type	Cementitious Polymer modified Nano topping	
Colour	Standard / Customized	
Density	3200 kg/m <sup>3</sup> (wet)	
Application	Trowel	
Application Temperature	+5°C to 35°C	
Cure Time	96 Hours	
Thickness	1.5mm to 3mm (total)	Method: ASTM C-836
Adhesion to Concrete (Peel, N/m)	Results: 1200 N/m	
Water Vapour Permeance	Results: <1 perms for 60-mil wet coating (grains/sf/hr)	Method: ASTM E-96 Wet Method
Resistance to Degradation in Soil	Results: Good	Method: ASTM E-154
Mould growth & Bacterial Attack	Results: No Degradation	Methods: ASTM D-3273, ASTM D-3274

## USES

- Floors, Walls, Ceiling, Roofs & Furniture
- Pedestrian Decks
- Balconies and Terraces
- Parking
- Decks
- Horizontal & Vertical Surface application.

## ADVANTAGES

- Economical
- Water Resistant
- Sun Reflectivity
- Simple Application
- Anti-Root Properties
- Full Surface Adhesion
- Water Vapor Permeable
- Resistant to Detergents, Oils, and Common Chemicals
- Seamless
- Easy Local Repair, in Case topping is Mechanically Damaged
- Maintaining Mechanical Properties at a Temperature Range of -300 C to +900 C.
- UV Protected & Waterproofed Surfaces Usable for Medium to Heavy Pedestrian Traffic/ Light vehicular traffic.

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