

# TOMORROW'S FLOORING

BE ONE STEP AHEAD IN THE FLOORING INDUSTRY | FEBRUARY 2011

*The solution is..*



## NEW ADHESIVE RANGE FROM MAPEI

ECO Friendly Adhesives Safer for the Environment and You at No Extra Cost!

To Install

- Linoleum
- Carpet Tiles
- Carpet
- PVC
- Vinyl
- Rubber



MADE IN THE UK



0121 508 6970 • [www.mapel.co.uk](http://www.mapel.co.uk)



# NO-NONSENSE NANO COATING

Traditionally, natural stone has been treated with chemical-based impregnating and surface sealers which fill up the capillaries and pores of the stone. But now an ultra thin liquid glass has been introduced to the market.

## Two hours after treatment, coating invisible

Ultra thin layered liquid glass coats the stone by way of a molecular film so that water and oil molecules are prevented from passing through the molecules of liquid glass but oxygen molecules are allowed to pass through i.e. the coatings are breathable at the molecular level.

The terms Nano and Nano Coating are increasingly used in marketing material these days. Nano products refer to items or coatings which have dimensions that are measured in billionths of a metre which can be visualised as 80,000 times thinner than a human hair.

Nanopool GmbH is a German based company which is the world leader in liquid glass nano layering technology. This technology involves the use of pure glass [silicon dioxide or SiO<sub>2</sub>] which is derived from pure quartz sand and held in a solution of either water (for absorbent surfaces) or alcohol (for hard surfaces) and can be applied to virtually all surfaces by way

of spraying or wiping.

Once applied to the surface, the solution begins to polymerise and the glass molecules bind to the surface by way of electrostatic force to form an invisible protective coating. There are no glues or chemical binding agents involved. Nanopool have developed a range of ultra thin glass coatings specifically for natural stone.

These coatings vary in strength and include a specific anti graffiti application. Quantum Stone Ltd, based in Reading, Berkshire, working in partnership with Nanopool have exclusive rights over the use of this revolutionary award winning technology in the United Kingdom.

The technology was the Green Apple winner of 2007 for the most innovative and environmentally friendly product. The technology is fully tested and certified in accordance with relevant EU Legislation.



Stone floor immediately after treatment

The flooring of a London based international bank comprised of untreated York Stone which, although hard wearing sandstone tends to absorb oils and other liquids easily. Due to the porosity of the substrate, traditional impregnators were proving to be either ineffective or too costly. A further complication was that the floor had to be treated in a live environment and therefore it was difficult to section off significant areas of the building to enable the sealants or impregnators to be safely applied and left to cure.

As they are in the nature of a molecular film that binds to the substrate, they are more efficient in covering large areas of porous stone. In addition, only one coat is necessary and it is not necessary to remove any surplus.

The treated areas are walkable within



One hour after treatment, demonstrating hydrophobicity

a relatively short time [depending on the ambient temperature which affects the rate of polymerisation of the SiO<sub>2</sub>] with full curing taking 24 hours.

Consequently, relatively large areas of floor could be treated relatively quickly and with minimal disruption. The efficacy of the treatment can be tested after a relatively short time by applying water to the treated surface and checking that the coating is trying to repel the water as evidenced by beading. After the solution has polymerised, the treated floor is totally unaffected in its appearance.

[www.qsprotect.com](http://www.qsprotect.com)

