

# Preserve properties and the territory with new technologies

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## SUMMARY

Sardinia is famous for landscapes and wonderful coasts. These conditions combined with the hospitality of inhabitants, in a few months, concentrate millions of tourists spend their holidays there. So it's necessary the improvement of accommodation facilities. □□ This influx of people often means that many buildings like accommodation facilities or holiday home are particularly intense use, and the proximity to the sea means lots of maintenance, sometimes invasive ones. □ Maintenance is often very invasive for territory itself and sometimes during the construction of a building it must to distort surrounding territory. □□ People often have to reconstruct buildings because structure are compromised, this is because buildings are subjected to intensive use, proximity to the sea and proximity to underground water tables (many buildings have basement) □□ So our aim as professionals is to protect in every possible way these landscapes and buildings which by now are unrepeatable as they could no longer be built on those coasts because of today's laws. We are called to carry out maintenance work and we must be as ready as possible to obtain the best results in the least invasive way. □□ In Costa Smeralda area it was possible to make conservative maintenance and protection interventions through the use of nanotechnology; thank to its effects it protect exposed materials atmospheric agents and wear, even on external flooring subject to heavy tourist traffic. □□ This protection allows to reduce the number of interventions on the building, reduce the war and tear of buildings and it saves money. It also increase comfort for millions of tourist which they will always find optimal construction buildings instead of more worn our every year. □ The reduction of periodic maintenance needed also leads to a reduction of number of people dedicated to it and therefore a quieter environment which create to more comfort for users whether tourists or locals. □□ The effects nanotechnology can give to materials are: □ Hydrophobic effect: water isn't absorbed □□ Hydrophilic effect: water spreads evenly instead of drops. □□ Photocatalytic effect: it has used to activate titanium (present on products/materials) which in turn interacts with sunlight or artificial light to decompose organic and inorganic

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substances present in the air. □ □ In fact the nanotechnology has had great success on facilities on the coasts, so in the following description there is an example of what I create at the “Phi Beach Open Air Club” located in Baja Sardinia. The maintenance interventions refer to the protection treatment of surfaces exposed to atmospheric agents, with the aim to decrease cleaning cost and preserve the aesthetics. We apply different treatments: □ -Hydrophobic and anti-limescale treatment to preserve the visibility and appearance of glass walls on the restaurant hall □ -A protection to prevent yellowing and degradation caused by UV rays of polycarbonate panels □ -A treatment to prevent dirty and stains of wood and stone surfaces to keep as the original ones □ -A treatment to prevent corrosion and maintain the brightness of metals □ □ Furthermore, it will be illustrate an analysis, actual construction and future maintenance costs. □

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