

**DISCOVER
ACTIVE SURFACES[®],
THE GREEN CHOICE
FOR WELL-BEING**



**Where design and science meet,
beauty and well-being live.**

DESIGN FOR WELL-BEING AND SAFETY

We all need to inhabit the spaces where we spend our daily lives safely and freely, without sacrificing design. The materials we choose for architectural and interior decoration projects must therefore guarantee maximum well-being, ensuring simple, lasting protection of our health.

Active Surfaces® are the 100% Italian answer which, in addition to being aesthetically beautiful, fulfil the need for well-being and safety.

Active Surfaces® are photo-catalytic, antibacterial and antiviral, anti-pollution ceramics certified to ISO standards and internationally patented, sold successfully worldwide for over 10 years. Active Surfaces® are high-quality ceramics for floors and walls, indoors and outdoors and for covering rooms and furnishings in personal care, food preparation and consumption settings like kitchen tops, tables, counters and work surfaces.

ANTIBACTERIAL AND ANTIVIRAL

ANTI-ODOUR

THE FOUR WELL-BEING ACTIONS OF ACTIVE SURFACES®

Active Surfaces® turn a simple ceramic slab into an eco-active material with four superior properties:

ANTIBACTERIAL AND ANTIVIRAL ANTI-POLLUTION SELF-CLEANING ANTI-ODOUR

Thanks to the action of (natural or artificial) light and the humidity naturally present in the air, Active Surfaces® are able to perform these four essential actions, increasing safety and well-being both in our homes, in bathrooms, kitchens and living rooms, and for workers and visitors in any public place, including hospitals, kindergartens, schools, libraries, airports, stations, bars, restaurants, hotels, swimming pools and spas.

Active Surfaces® have photo-catalytic properties that are activated by sunlight, UV lights as well as LED lights, and maintain their antibacterial effectiveness even in the dark. The antibacterial and antiviral action of Active Surfaces® is constant and everlasting.



ISO CERTIFICATIONS

ISO 22197: 2016
ISO 21702: 2019
ISO 18061: 2014

ISO CERTIFICATIONS

ISO 10678: 2010
ISO 27448-1: 2008
ISO 27447: 2009
ISO 22196: 2011

UNI CERTIFICATIONS

UNI EN 15457:2014
UNI 11484:2013
UNI 11021:2002
UNI 9805/91

ANTI-POLLUTION

SELF-CLEANING



ANTIBACTERIAL AND ANTIVIRAL ACTION

It has been certified that, through the oxidation caused by photo-catalytic process, Active Surfaces® are able to eliminate up to 99.99% of bacteria; from the most common, including Escherichia coli, to the most dangerous and antibiotic-resistant such as Staphylococcus Aureus MRSA. Recent ISO certifications also demonstrate the antiviral activity of Active Surfaces®; tests conducted on two particularly harmful and contagious viral strains, including the flu virus H1N1 and the Enterovirus 71, demonstrate up to 99.99% effectiveness against viruses.

The antibacterial and antiviral performance of Active Surfaces® is effective not only in natural light but even with LED lighting, in poorly lit conditions and even in the dark. In addition, the anti-mould and anti-fungal properties of Active Surfaces® are also certified.



**THEY ELIMINATE
UP TO 99.99% OF VIRUSES
AND BACTERIA**

ANTI-ODOUR ACTION

Active Surfaces® are able to degrade the main molecules responsible for bad odours, making environments more pleasant.

In fact, the photo-catalytic process degrades the bad-smelling organic molecules that come into contact with Active Surfaces®, keeping the environment comfortable and free from bothersome sensory pollution.



**THEY ELIMINATE
BAD ODOURS**





SELF-CLEANING ACTION

Thanks to the photo-catalytic properties of Active Surfaces®, dirt adheres less to the ceramic surface, making them easier to clean. Quick and easy cleaning consequently reduces the use of expensive and aggressive detergents, often toxic to humans and harmful to the environment.

The ultra-hydrophilic properties of Active Surfaces® make them easy to clean with water and mild detergents. For example, on external façades, the action of the rain on the slabs is all it takes to keep them clean for longer, conserving their appearance and drastically reducing maintenance costs.



EASY TO CLEAN

ANTI-POLLUTION ACTION

Active Surfaces® are able to convert volatile molecules of hazardous pollutants such as nitrogen oxides (NOx) and volatile organic compounds (VOCs) into harmless substances, with huge benefits for people's well-being, both indoors and outdoors. Photo-catalytic Active Surfaces® ceramic slabs permanently and continuously eliminate the polluting molecules present in the air with the simple action of light.

Active Surfaces® are activated by any kind of lighting, even new energy-saving LED lights.



THEY REDUCE TOXIC POLLUTANTS





ACTIVE SURFACES® AN ECO-SUSTAINABLE ICON

The philosophy behind Active Surfaces® and all the materials made in our factories pays close attention to the environment. All Iris Ceramica Group surfaces are produced through a careful selection of raw materials, and are recyclable. Our eco-active materials are made with over 40% of recycled materials, in accordance with LEED requirements.

Laboratory tests and literature analysis have determined that 1 sq m. of Active Surfaces® takes just 2 years to offset the NOx emissions required to produce it. This means that Active Surfaces® then continue to work for our well-being. The same cannot be said for inert materials that are unable to offset the substances emitted to produce them.



THE VALUE OF ACTIVE
SURFACES®
IS SCIENTIFICALLY
PROVEN AND **PATENTED**

INNOVATION AND CERTIFIED SAFETY EVEN IN THE “FOOD CONTACT” SECTOR

Active Surfaces® have obtained two important certifications in the “food contact” sector, issued by an accredited BELAC laboratory, certifying that these materials can be used in direct contact with food in full safety, whatever the type and formulation of the food they come into contact with.



WE ARE GREEN PRODUCERS

For the De Castilla 23 project in Milan, laboratory calculations were made to verify that the 16,088 sq.m. of Active Surfaces® laid outdoors eliminate 59 kg/year of nitrogen oxides, producing an effect equivalent to over 200,000 sq.m. of green areas.

The benefits of Active Surfaces® are clear for both those who live in the building and those who live in the neighbourhood.



16.088 mq
ACTIVE SURFACES®



OVER
200.000 mq
OF GREEN AREAS



USING ACTIVE SURFACES® IS LIKE PLANTING TREES



UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI CHIMICA

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I materiali Active™ per la TORRE UNIPOL SAI

Siamo abituati ad utilizzare i materiali ceramici per le loro caratteristiche tradizionali di robustezza, facilità di manutenzione, durabilità. In particolare le lastre in grès porcellanato sono sinonimo di resistenza agli agenti atmosferici, al fuoco in caso di incendio senza rilascio di sostanze tossiche nell'aria ed anche alla rottura per sbalzi termici.

Dal punto di vista tecnologico, Active™ è un'applicazione per le superfici in grès porcellanato, a base di biossido di titanio micrometrico fotocatalitico, che trasforma la semplice lastra ceramica, tradizionalmente inerte, in un materiale non solo ecosostenibile, ma anche scattivo. Le ceramiche Active™ sono frutto della ricerca italiana e sono state sviluppate tenendo conto delle più moderne scoperte scientifiche e tecnologiche utilizzando metodiche applicative all'avanguardia.

Le ceramiche fotocatalitiche hanno la caratteristica, unica al mondo, di poter giocare un ruolo attivo nel migliorare la qualità della vita dell'uomo. Infatti, grazie all'azione della luce e dell'umidità presenti nell'aria, le ceramiche Active™ risultano ancora più facilmente pulite grazie alla proprietà di self-cleaning, ma soprattutto sono in grado di degradare gli inquinanti più comuni presenti nell'aria che respiriamo. Queste molecole rappresentano un rischio per il nostro benessere e la nostra salute ed è sempre più importante trovare rimedi efficaci per ridurre l'impatto ambientale che l'inquinamento dell'aria può arrecare al territorio.

Le ceramiche Silver ground/Cloudy core Active™ e Antracite ground/Sharp core Active™ sono state scelte per le facciate e la pavimentazione di balconi e aree esterne per la Torre Unipol SAI di Milano, nell'intento di coniugare estetica ed ecosostenibilità, sfruttando le proprietà ecoattive di questi materiali, utili per il nostro benessere.

Due conti in laboratorio: per la Torre Unipol SAI verranno utilizzati 16088 mq di grès porcellanato Active™. Abbiamo quindi verificato l'efficacia dei materiali Silver ground/Cloudy core Active™ e Antracite ground/Sharp core Active™ nella fotodegradazione degli ossidi di azoto (inquinante di riferimento per l'Organizzazione mondiale della Sanità), con 8 ore di luce.



materiali in grado di compensare 59 kg/anno di ossidi di azoto

equivalenti a oltre 200000 mq di aree verdi

Prof. Claudia L. Bianchi

Milano, 21 settembre 2016

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FROM
WASTE
TO
PAPER

This sixteenth is printed on **ICG**  **PAPER**

The discarded paper material from Iris Ceramica Group has found new life, transforming into recycled paper for our stationery. A tangible gesture that embodies the Group's commitment to sustainability, in line with the best ESG practices.

irisceramicagroup.com

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