

Pure Health[®] Ceramic

ORION



VIRUS AND BACTERIA SELF-SHIELDING SYSTEM

The innovative Pure Health tiles are made of ceramic containing titanium dioxide, the number one ally of self-sanitization. Indeed, TiO_2 is able to eliminate 99% of bacteria and, thanks to the action of light, acts using a process similar to plant photosynthesis, which uses chlorophyll. With 1 m^2 of Pure Health tiles exposed to daylight, nitrogen dioxide and monoxide are eliminated in eight hours, purifying up to 72 m^3 of air.

The innovative properties of Pure Health ceramics arise primarily from the firing process. Indeed, it is known that titanium dioxide loses its **photocatalytic properties** at 900° as it transforms from anatase to rutile. The technicians at Pure Health have managed to create a system that prevents the loss of its anti-pollution properties, allowing the tiles to be fired at 1130° and therefore combining mechanical resistance to effective pollution reduction.

Pure Health ceramics can be used:

- **In outdoor environments:** buildings, patios, walkways, etc.
- **In indoor areas:** bathrooms, kitchens and other rooms.
- **For public areas:** squares, pavements, roundabouts, hospitals, schools, airports.

THE PURE HEALTH CERAMICS RANGE

The Pure Health Ceramics Collection is characterized by impeccable style and design as well as the effective self-sanitizing action. Made of Gres porcelain stoneware, Pure Health ceramics are durable, waterproof and faithfully reproduce the look of natural stones and precious marbles, with strong mechanical properties and high aesthetic value.

Gres Porcelain, suitable for all uses, provides exceptional technical quality thanks to its special surface treatment, making it an eternal material even when used outdoors. It is made in both the traditional "full body" type and the more innovative "glazed" type, more suitable for the residential market.

Pure Health ceramics are available in five different colours: grey, beige, brown, green and black. The product size formats are: 30×30 and 30×60 . The decorations, laths of all types, and mosaics make Pure Health ceramics well suited to every need.

GREY



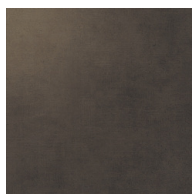
30x30/30x60

BEIGE



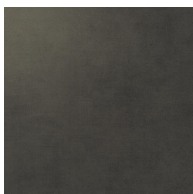
30x30/30x60

BROWN



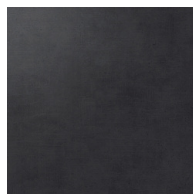
30x30/30x60

GREEN



30x30/30x60

BLACK



30x30/30x60

MOSAIC

















GRES FINE GLAZED PORCELAIN

EN1 4411 ANNEX G Bla GL

TECHNICAL FEATURES

TECHNICAL FEATURES	REGULATIONS	VALUE REQUIRED BY THE REGULATIONS			PH CERAMIC VALUE
DIMENSIONS	UNI EN ISO 10545-2	Length and width $\pm 0.6\%$ max Thickness $\pm 0.5\%$ max Edge straightness $\pm 0.5\%$ max Rectangularity $\pm 0.6\%$ max Surface flatness $\pm 0.5\%$ max			Compliant Only for the 1 st choice
 WATER ABSORPTION %	UNI EN ISO 10545-3 ASTM C373	0,5% 3,0%			0,1% 0,1%
 BENDING STRENGTH	UNI EN ISO 10545-4 ASTM C648	35 N/mm ² 250 lbs			37 N/mm ² 410 lbs
 BREAKING STRENGTH	UNI EN ISO 10545-4	1300 N			1700 N
 FROST RESISTANCE	UNI EN ISO 10545-12 ASTM C1026	No sample must show alterations to the surface Resistant			No frost Resistant
 RESISTANCE TO CHEMICALS	UNI EN ISO 10545-13 ASTM C650	Household chemicals Acids and Bases Resistant	GB GLB	GA GLA Resistant	
 RESISTANCE TO STAINS	UNI EN ISO 10545-14	1	•	5	5
 THERMAL EXPANSION {from +20° + 100°}	UNI EN ISO 10545-8		•		8,5x10 ⁻⁶ °C ⁻¹
 RESISTANCE TO THERMAL SHOCK	UNI EN ISO 10545-9 ASTM C484	The samples must show no visible defects Resistant			Resistant Resistant
 COLOUR FASTNESS TO LIGHT (UV)	DIN 51094	There must be no noticeable colour variation			No alteration
 ABRASION RESISTANCE	UNI EN ISO 10545-7	1	•	5	4 • 5
 AVERAGE COEFFICIENT OF FRICTION (VALUE FOR UNPOLISHED MATERIALS)	ASTM C1028 B.C.R.A DIN 51130	Dry Wet Dry Wet		0,60 0,60 0,40 0,40	0,70 0,70 0,71 0,65 R9*
 Cd AND Pb RELEASE	UNI EN ISO 10545-15	Cd Pb		0,07 mg/dm ² 0,80 mg/dm ²	<0,006 mg/dm ² <0,037 mg/dm ²

* only for specified items

