

care & maintenance

the product: quartz agglomerate

Quartz agglomerate is a material produced in the form of slabs of 304 x 140 cm using Bretonstone® system technology and a special process of "vacuum vibrocompression process". The slabs are manufactured by mixing pure quartz (about 94% in weight) with inert bonding agent (6%) and pigments.

Quartzforms has the ideal characteristics for use in the sector of public and private furnishings. Quartzforms slabs preserve their own original physical-mechanical properties, which are:

- anti-scratch, wear resistant, chemical resistant, stain resistant, moisture resistant and hygienic thanks to the non-porous surface;
- high resistance to mechanical stresses substantially superior to that of natural stone such as compression, flexural, impact and thermal shock;
- absorption of liquids basically inexistent;
- high resistance to compression and flexion;
- uniformed colouring, indispensable in the field of furnishings for the creation of kitchen counters and bathroom tops and furnishings in general;
- easy maintenance (does not require the application of any kind of treatment);
- long-term availability;
- good dimensional and chromatic stability;
- vast range of colours to meet all possible needs.

indications for maintenance

Quartzforms products are highly compacted and non-porous surface, thus requiring no special treatment. Quartzforms products do not absorb liquids, smells or food fats. Since they are not porous, they do not allow the proliferation of bacteria, resist acids, are easy to clean and hygienic. Quartzforms products are resistant to stains and wear and tear, scores, scratches and light bangs.

Although the material is resistant to high temperatures, it should still be protected with potholders to avoid the direct contact of the saucepan or kitchenware surfaces when they have just come off the stove. Indeed, direct contact with overheated objects or flames might result in permanent marks due to the heating of the resin or cracks created by the thermal shock. The counter should never be used as an ironing board.

Although resistant to scores and scratches, if its original appearance is to be preserved, the use of chopping boards is always to be advised.

Furthermore, the work tops should never be overloaded with weights exceeding 50 kg (do not stand or sit on the counter) and make sure blunt objects do not fall on it (knives, bottles, saucepans, working tools, etc) which, owing to their shape, may cause cracks that are difficult if not impossible to repair.

advice for cleaning polished surfaces

Everyday cleaning

Use a soft cloth moistened with water and neutral detergent.

For persistent stains

Aggressive acid-based detergents such as Viakal, Aiax bagno, Cif, etc. may also be used.

Thanks to the outstanding compactness of the material, the rough side of kitchen sponges may also be used. Avoid cleaning the surfaces with denatured alcohol which might leave streaks that are difficult to remove when it dries.

Unsuitable products

Avoid cleaning the surface with products containing bleach or those with a high basic pH which, if applied extensively, might create whitish streaks.

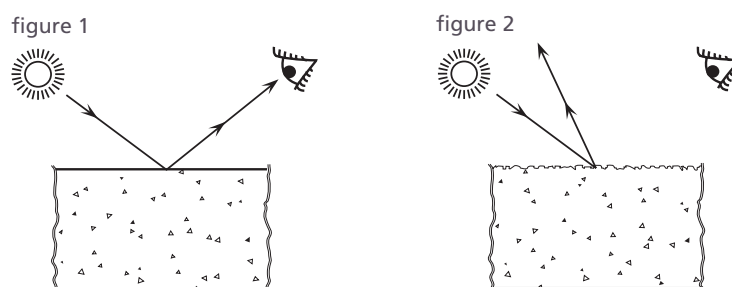
Other products that might harm the surface are tricetilene, industrial solvents, hydrofluoric acid, caustic soda, and varnish solvents.

advice for cleaning honed brushed surfaces

The smoothing and sandblasting of the surfaces to obtain brushed, surface is done mechanically with the appropriate equipment that carries out the mechanical working process needed to obtain the various finishes by removing part of the material.

The resulting surfaces therefore have *knurls* or degrees of unevenness that are evident to varying degrees, so that the material does not reflect the light like a polished surface (fig. 1) but is opaque and rough to the touch (fig. 2).

If one observes the two figures describing a polished and a smooth finish, one can see that the polished surface counter is perfectly rectilinear while the one with the opaque surface has an irregular line. This is why the surfaces finished so they have a brushed surface may have problems regarding dirtiness. Indeed, the dirt particles on the *polished* surface are easy to remove since no physical obstacle is keeping them back, while on the other surface there may be deposits on the micro-knurls or small bumps that are more difficult to remove.



QUARTZFORMS

Everyday cleaning

Any detergents usually used for polished surfaces may be used. Coloured liquids that come into contact with the surface should be cleaned immediately, when the stain is still *fresh*.

The agglomerate material of quartz does not absorb liquid substances and the dirt that might be retained by the micro-knurling does not penetrate the material and can therefore always be removed. In the case of more persistent dirt, acid-based aggressive detergents may also be used. Avoid cleaning the surface with denatured alcohol which leaves streaks that are difficult to remove when it dries.

Scale-marks

(remains of aqueduct water) we recommend cleaning with Viakal (or other acid-based anti-scale detergents) which may be used for prolonged periods of time.

Greasy or fatty substance stains

Grease-removal detergents for the kitchen may be used but once the stain has been removed, the area must be rinsed thoroughly with water. "Grease-removal" products are usually "basic" and, if left to act on a quartz agglomerate for a long time they might change the surface, leaving stains (they react with the resin content).

physical properties of quartz agglomerates

characteristics	norme di riferimento	risultati
density	ASTM C 97	2.27 - 2.48
flexural strenght (Modulus of rupture)	ATM C 880	7.74 - 7.82 PSI (wet) 4.87 - 8.31 PSI (dry)
water absorption	ASTM C 97	.005 - .02 %
compressive strenght	ASTM C 170	22.08 - 29.89 PSI (wet) 15.76 - 29.89 PSI (dry)
breaking load	ASTM 648	1207 1340 Lbs
coefficient of thermal expansion	ASTM C 531-0	20.1 to 31.9 20° to 100°C AT (10-6/C-1)
hardness	EN 101	6 - 7 Moh's Scale
tensile strenght	ASTM D 638	17.8 MPa
resistance to deep abrasion	ASTM C241	58 - 63 Index
wear resistance of the surface (abrasive power Index)	ASTM C 501	113 to 212
slip resistance	DIN 51130	V classification wet pendulum
resistance to chemical acids	ASTM C 560	not affected
bacteria & fungal resistance	ASTM G 21	no growth
toxicity	compiles with the standard 51 NSF/ANSI - food equipment materials; solid surfaces for splash zones	
suitability for use in kitchen benchtops	EMPFEHLUNG XII BGVV	suitable

resistance to use of domestic products

product	effect
Aiax bagno	no visible effect
Spic & span	no visible effect
Mastro lindo	no visible effect
Cif multiuse	no visible effect
Cif with bleach	no visible effect
Finish dishwasher liquid	light streaks
Fornet	no visible effect
Drago pulisan	no visible effect
Smac brillacciaio	no visible effect
Baysan multiuso	no visible effect
Denatured alcohol	no visible effect
Lyso-form kitchen	no visible effect
Viakal	no visible effect
Vetril	no visible effect
Vim liquid	no visible effect

resistance to stains

product	effect
acetic acid (10% aqueous solution)	no visible effect
acetone	no visible effect
ammonia (10% solution)	no visible effect
red wine	no visible effect
citric acid(10% aqueous solution)	no visible effect
detergent solution	no visible effect
coffee (applied 80°)	no visible effect
chloramine t (2,5%aqueous solution)	no visible effect
black marker	mark
ethanol (48% aqueous solution)	no visible effect
ethyl-butyl acetane (1:1)	no visible effect
olive oil	no visible effect
coca cola	no visible effect
sodium bicarbonate	no visible effect
sodium chloride (10% aqueous solution)	no visible effect
tea (applied at 80°)	no visible effect
condensed milk	no visible effect
light beer	no visible effect