



SAMSUNG SDI

Kitchen

Architectural Manual

Radianz[®]
Quartz Surfaces



Radianz infuses life into kitchen designs

Radianz Quartz was born out of the fusion of pure natural Quartz and Samsung's technological intelligence.

Radianz, the name itself can uplift the quality.

Production of natural beauty

To represent the natural feel of nature, the main component of Radianz is natural materials. High-quality Quartz brings depth to an interior.

Pollution and hygiene

Radianz Quartz is processed in a vacuum with no gaps for contamination and bacterial growth making it a hygienic material. In addition, contaminants can be easily removed with common household detergents. As easy to maintain material, Radianz is gaining favor with many users.

Scratches

Radianz's main ingredient is hi-quality Natural Quartz with good surface hardness that rarely scratches. The hardness of a mineral is measured in Mohs scale. The main raw material Quartz that is used in Radianz is "7", which is softer than a diamond (hardness 10) but is much harder than most natural stones and marbles (4-6) and is a strong, practical material.

 COUNTERTOP

Radianz,
5 special features

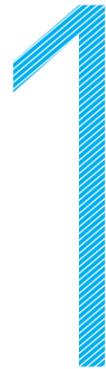


Radianz Quartz is the birth a new masterpiece, a moment when purity of nature meets art.

Radianz Quartz combines natural quartz crystals with unsaturated polyester resins prepared by compression molding and vacuumed into a high-quality building material.

Radianz Quartz is produced with 99.9% purity natural quartz as the main ingredient. It is scratch resistant, durable and eco-friendly. Radianz is used as an excellent material for counter tops, sinks, kitchen systems (kitchen furniture), and interior finishes. It is a premium material with excellent transparency and offers a luxurious natural texture and sophistication for interior spaces.





ELEGANT COLORS AND TEXTURES

It holds the beauty of the natural world.
Experience the pristine purity of its natural colors.

Radianz Quartz not only uses the natural material as the main component but expresses the deep textures of hi-quality Quartz and elevate the quality of the interior.
Radianz Quartz takes the pure, natural ingredients and creates an interior material that highlights nature's color, luster, and texture. Experience the comfort of soft natural colors.



Ruvo K-binets in Korea



Kusshand in Korea



Kusshand in Korea

RADIANZ Information



Purity of 99.9% natural quartz



Samsung technology



Birth of Radianz

Natural Quartz

Quartz is one of the hardest minerals in nature. It is softer than a diamond but harder than natural stones and solid surface. It is widely used as a high quality interior material that holds the beauty of pure natural colors and patterns.

KITCHEN



CES Kitchen in U.S.A



Raemian Apartment in Korea



Hillstate Apartment in Korea

DRAMATIC DIMENSIONS 2

Inspirational Radianz Noble Collection

Inspired by the concept of nature, the Radianz Noble collection is a shining artful masterpiece. The Noble Radianz collection is hi-quality engineered stone whose reliefs create a dramatic richness and stable quality.

It's glamorous and comfortable depth is achieved through the harmonious use of natural silica (Quartz) and transparent pearlescent metallics. It is an ambition motivated by the pursuit of pure beauty.



Ruvo K-binnet in Korea



Ruvo K-binnet in Korea

RADIANZ Information



Combination of futurism and class

- Utilizing the Quartz metallic grafting technique, we produce a decorative splendor.
- Using patented coating and pattern techniques to create dramatic light reflecting effects.
- Our own differentiated technology and specialty equipment to create a luxuriou product.

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LOW MAINTENANCE

Our aim is to create easy to maintain clean kitchens

Radianz Quartz is easy to maintain because it is non-porous and chemical resistance is outstanding. Separate coating or polishing is not required. Simply wipe the surface with a wet cloth to remove contaminants. It is easy to maintain a clean kitchen.



Kusshand in Korea



Asan Traplace in Korea



Kitchen in Korea



Ruvo K-binnet in Korea

RADIANZ Information



Removing contaminants test

• **Test method**
ANSI Z124.6 (Stain Resistance)
 Scrub (General wipe strength) brush was used to apply contaminants to the surface of Radianz.

• **Results of passed test**
 Black Crayon,
 Black Liquid Shoe Polish,
 Blue Washable Ink,
 Gentian Violet Solution,
 Beet Juice, Grape Juice, Lipstick,
 Hair Dye, Iodine Solution,
 Wet Tea Bag

RESISTANT TO CONTAMINATION AND SAFE MATERIAL

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Smart material for a comfortable kitchen, meet Radianz

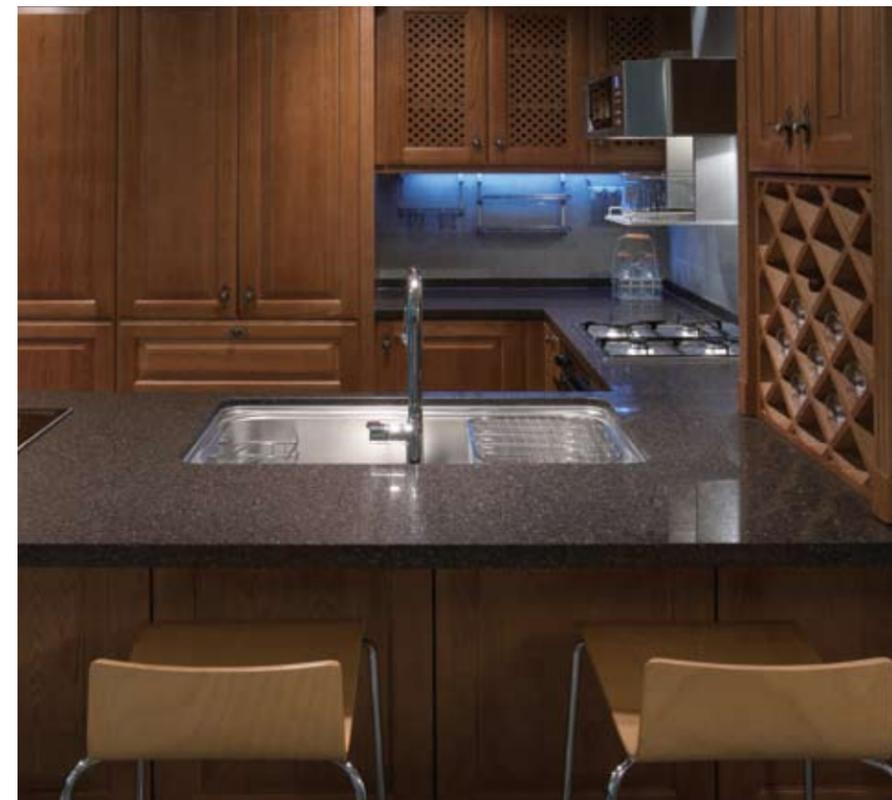
Radianz Quartz is recognized as an eco-friendly and sanitary product that is harmless to the human body. There is no risk of exposure to environmental hormones and heavy metals. In addition, as a chemical free material that has low water absorption compared to other natural stones and marbles. It is not susceptible to fungi or bacterial growth and is hygienic.

Water absorption

RADIANZ	0.05
Granite	0.3
Marble	0.3



Kitchen in Korea



Kusshand in Korea

RADIANZ Information



Bacterial growth test

Even after exposing Radianz to bacteria over a long period of time, tests confirm there is no proliferation.

• Test

ASTM G22 :
Determining resistance of plastics to bacteria

Strains :
Pseudomonas aeruginosa (ATCC 13388)

Culture condition :
36 +/-1°C, 85%RH, 21day

• Results of passed test



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STRONG ROBUSTNESS TO EXTERNAL INFLUENCES

Reliably strong against physical impact

Many unexpected accidents, both large and small, happen in the kitchen during use. The robustness of Radianz and its impact resistant material can keep your kitchen intact. Our attention to your needs in the Kitchen is making a big difference in the way Radianz is developed.



Asan Traplace in Korea



HANSSEM Kitchen Furniture in Korea



RADIANZ Information

Compressive strength and durability

The high compressive strength and durability of Radianz will further enhance the stability of the kitchen. Radianz Quartz can sustain external impact from heavy or hot cookware and pressure, sharp utensils, knives, etc. It has strong resistance to scratches and will keep your kitchen intact. Compared to natural stone and marble kitchen countertops, Radianz is a superior material.

Endurance

RADIANZ	500
Granite	150
Marble	140

Compressive strength (hardness)

RADIANZ	1800
Granite	1500
Marble	1250

KITCHEN



Samsung Electronics in Korea



Samsung Electronics in Korea



Samsung Electronics in Korea



Asan Traplace in Korea



Kitchen in U.S.A

Eco-friendly certified Radianz, meet us in a kitchen that is environmentally safe.

Radianz Quartz is Greenguard Indoor Air Quality Control certified. In addition, Radianz received eco-SCS certification for minimizing hazardous substances in the environment and various operations of environmental management systems. We strive to not only protect the environment but also provide healthy life to human beings.



Maintaining Radianz



• How to remove contaminants

- Use non-abrasive household cleaners to wash off contaminants
- Do not use abrasive cleaners or wax on the surface of Radianz. Otherwise, you may reduce the gloss on the surface.

• Cleaners that should not be used:

Cleaners for removing floor coatings, thinners, alkaline detergents, cleaners and waxes containing abrasives and strong chemicals (hydrochloric acid, sodium hydroxide, potassium hydroxide, etc) should not be used. If the mentioned items are found on this product, wash it off immediately with water.



• How to remove water stains

- Use a soft cloth and household detergent to wipe the stains to get a clean.
- If the above method does not work, use a lime scale remover to clear the surface.
- Be cautious when rubbing the surface or wiping it with a heavily abrasive cloth. Scratches can occur or you can affect the gloss.



• Prevent thermal shock

- Radianz Quartz has excellent heat resistance and does not affect the material if there is no direct heat applied to the surface

(Heat at 150°C or less). However, instantaneous and direct heat, similar to natural stone products, can damage the surface. Keep flames from the stove away from the product, as well as, hot pots, clay pots and heated pedestals of cookware. Use placemats underneath hot cookware.



• Scratch protection

- Radianz Quartz has harder surface than natural granite and does not scratch easily. But keep knives, iron sponges and rigid materials off the surface. When using a knife, use a chopping board.

Radianz product usage and specifications

- Residential : Kitchen furniture, counter tops, vanity tops, porches, floors and other interior finishings.
- Commercial : Counter tops, tables tops, bars, public halls floors, walls, stairs, and other interior finishings.

Thickness(mm)	Width(mm)	Length(mm)	Weight(kg)
20	1,520	3,100	235

Size (length) Please contact us for other product details.

Chemical testing results



If Radianz comes in contact with alkaline substances, there is a possibility it will stain. Be aware of substances that contain colorants which can contaminate the surface.

We conducted chemical tests on various surface contaminations prone to exist in Kitchen. These contaminants were dropped onto the surface and covered with glass plates for 16 hours. Surfaces of these areas were then scrubbed with damp pads with detergent and tested for the results.

Contaminants	Result
<ul style="list-style-type: none"> • Coffee • Wine • Soy • Coke • Milk • Orange juice • Olive oil • Mayonnaise • Whisky • Ketchup • Vinegar • Tea 	Most pollutants can be easily removed from the surface with damp pad with neutral detergent.

Comparison of Radianz and granite

Radianz retains the colors and textures of natural Quartz.

It is also an improved product quality with technical know-how, and enhances an interior space.

Distinction	RADIANZ	Granite	Marble
Contamination resistant	★ ★ ★	★ ★	★
Wear resistant	★ ★ ★	★ ★ ★	★
Chemical resistance	★ ★ ★	★ ★	★
Non-porous (particle gaps)	★ ★ ★	★	★
Flexural strength	★ ★ ★	★ ★	★
Color consistency	★ ★ ★	★ ★	★
Crack-free sheet condition	★ ★ ★	★ ★ ★	★
Easy to maintain	★ ★ ★	★ ★	★

★★★ : Excellent ★★ : Good ★ : Fair

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