



SAMSUNG SDI

Office & Workspace

Architectural Manual

Radianz[®]
Quartz Surfaces



Radianz, simply being around makes it special

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

The name alone "Radianz" will enhance your 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 an easy-to-maintain material, Radianz is gaining favor with many users.

Scratches

Radianz's main ingredient is high-quality Natural Quartz with good surface hardness that rarely scratches. The hardness of a mineral is measured in Mohs scale. The mainraw 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.

RADIANZ, MAKES A SPECIAL SPACE

Radianz, creating a special space for you.

Radianz Quartz is made of pure 99.9% natural quartz as its main ingredient combined with unsaturated polyester resins and mineral pigments. It is fused together by a compression molding process to create an eco-friendly building material. It is scratch resistant and durable.

Radianz is resistant to contaminants making it 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.



Purity of 99.9% natural Quartz

Samsung technology

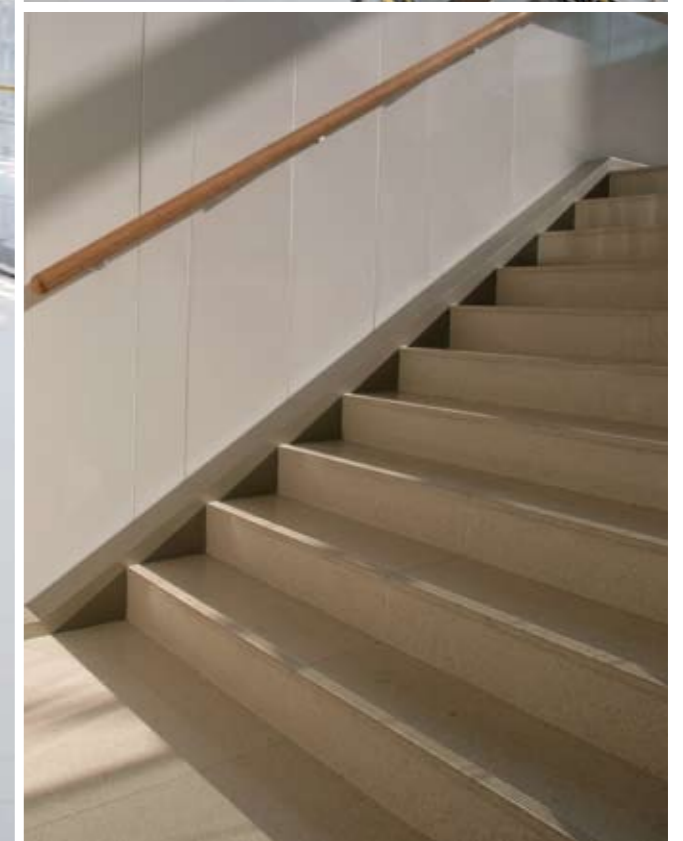
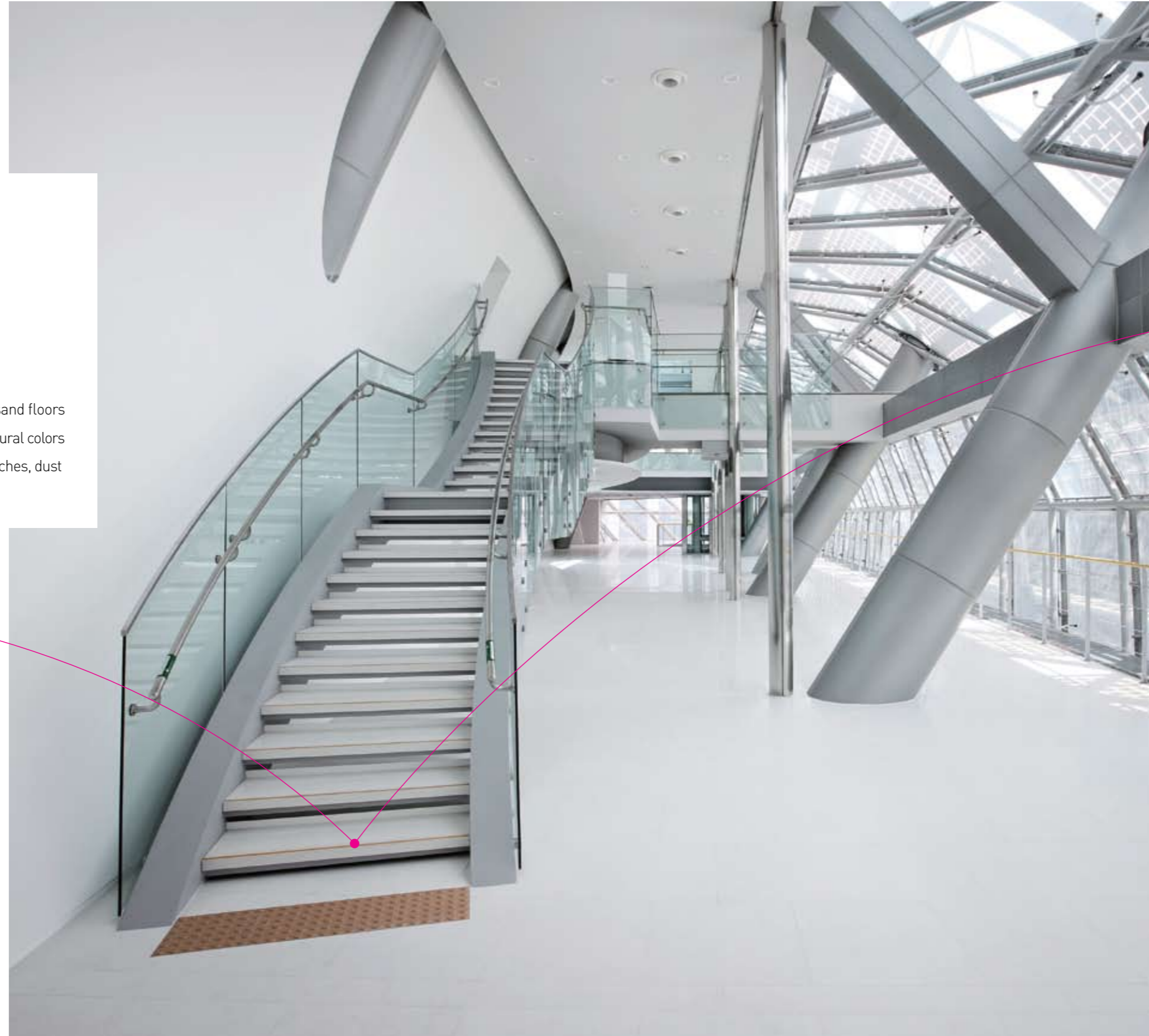
Birth of Radianz



STAIRWAY

Elegant spaces created by Radianz

Radianz is a robust material to use on stairs and floors of public spaces. It can reproduce the soft natural colors and is distinguished by its resistance to scratches, dust and fade over an extended period of time.



Seoul Metropolitan Government in Korea

Samsung SDI Chemical in Korea



 FLOOR

Yeosu EXPO Korean-Pavillion in Korea

Elegant spaces created by Radianz

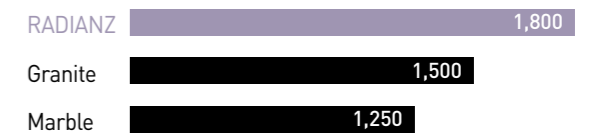
Radianz Quartz used as flooring material in publicspaces can simultaneously bring luxury and comfort to a space.

It is a handy material for lobbies, reception halls and dining rooms. In addition, the natural colors produce a beautiful atmosphere and the robustness of the product can resist scratches and contamination in high traffic spaces.



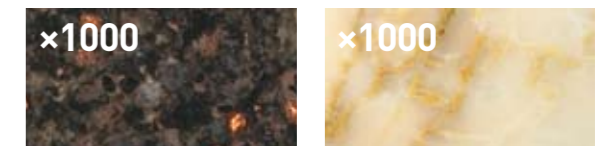
Yeosu EXPO Korean-Pavillion in Korea

Compressive strength (hardness)



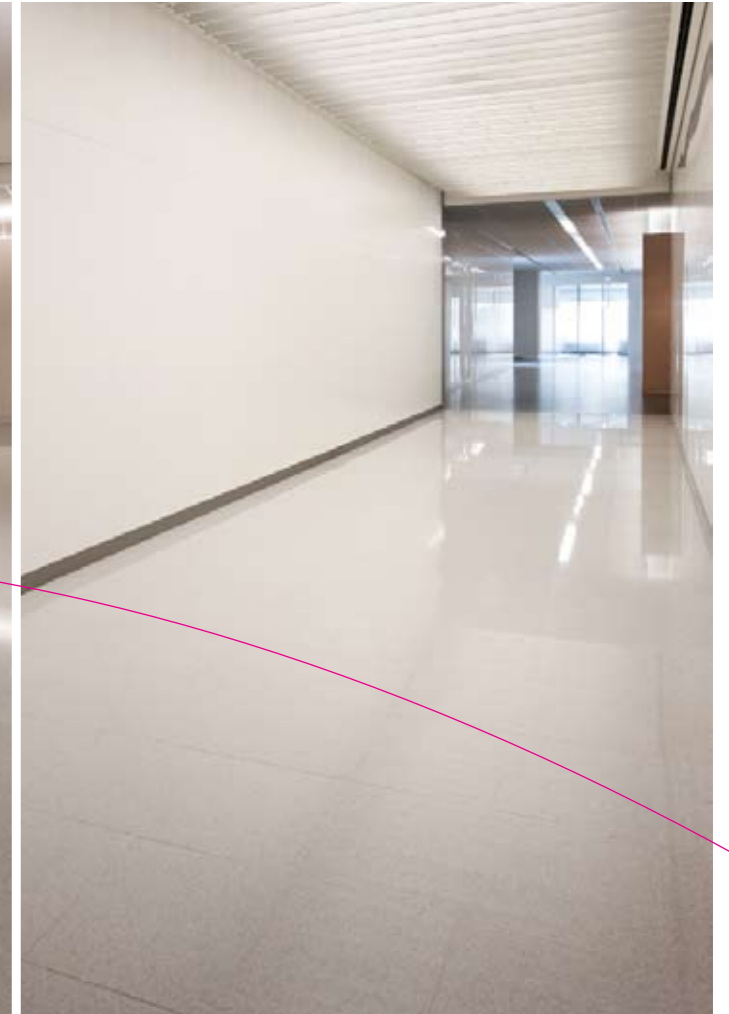
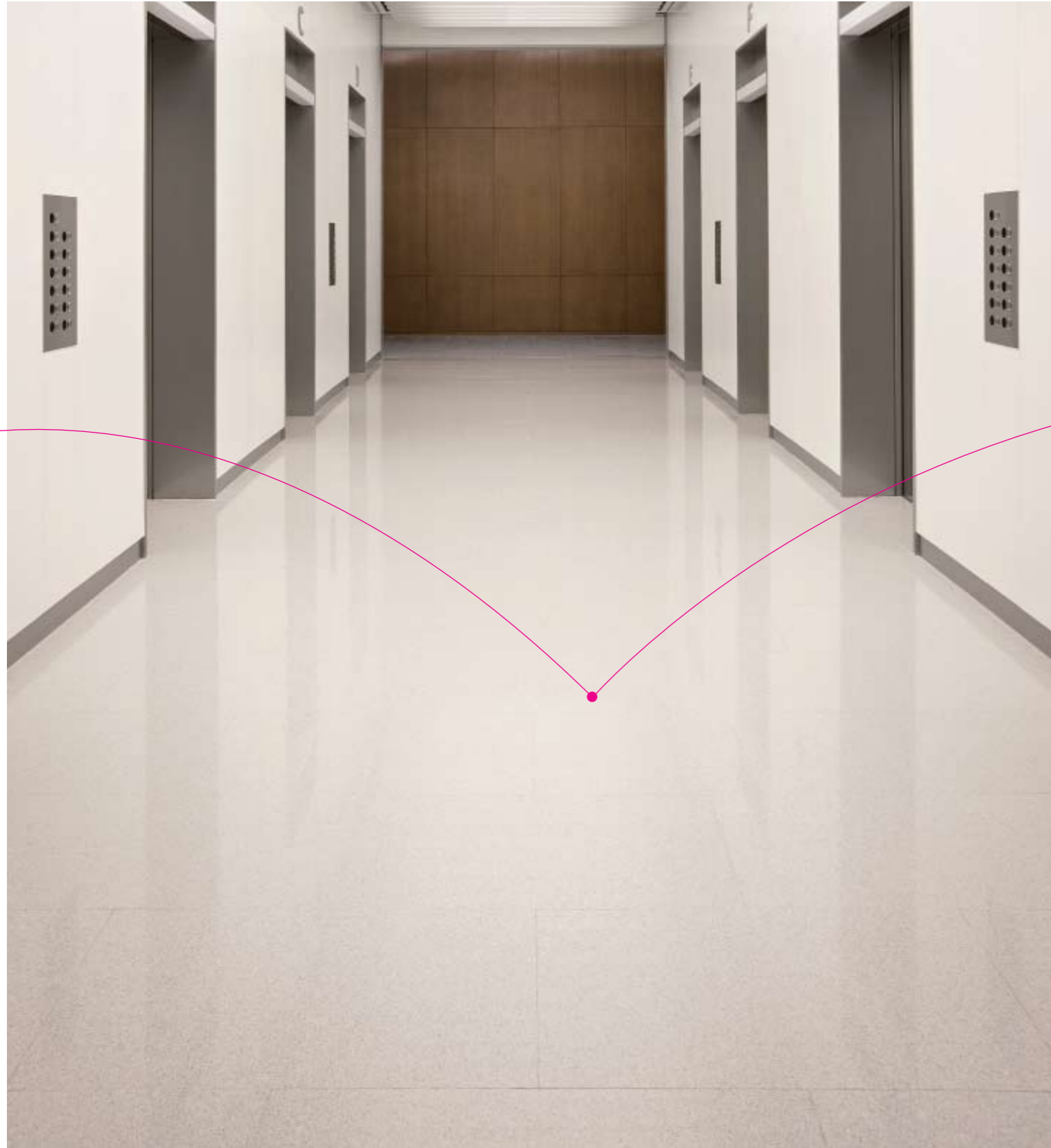
Comparison of surface expansion

Radianz, when compared to a typical granite surfaces, is uniform and dense which helps to resist contamination and scratches.



RADIANZ

Granite



Samsung Electronics in Korea



Porch floor in Korea



Porch floor in Korea

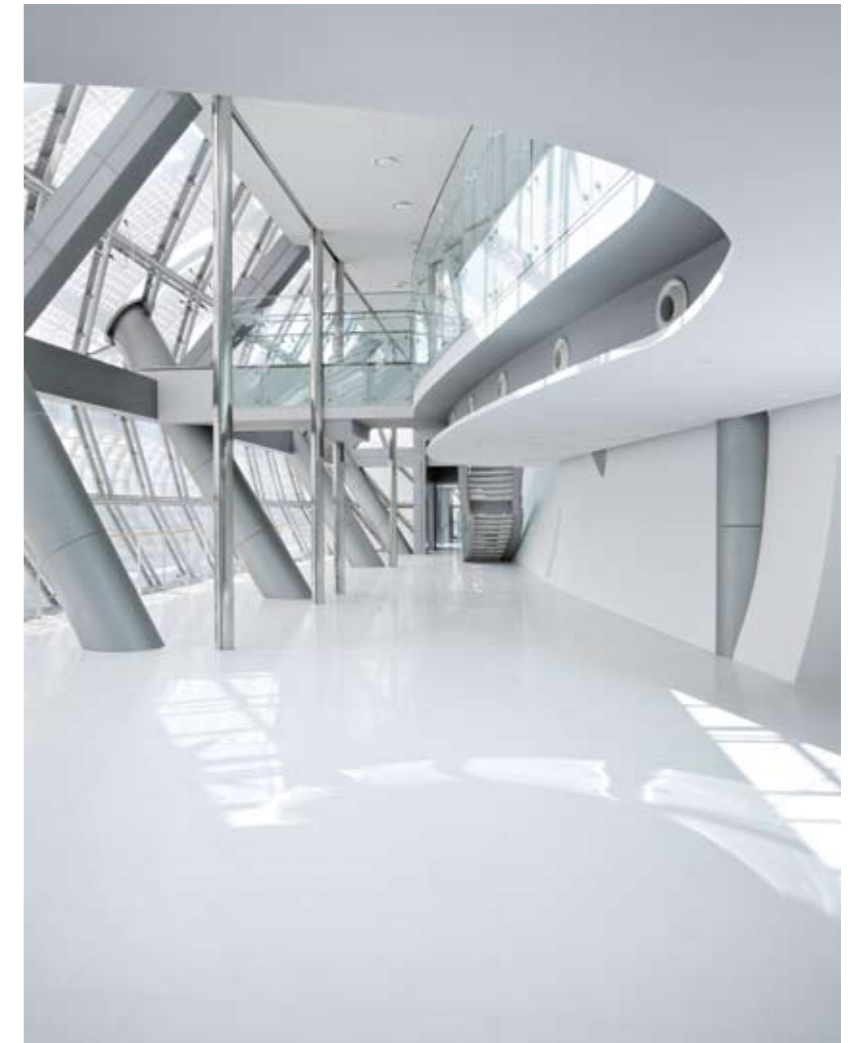
HALL & LOBBY

Meet the comfortable spaces created by Radianz

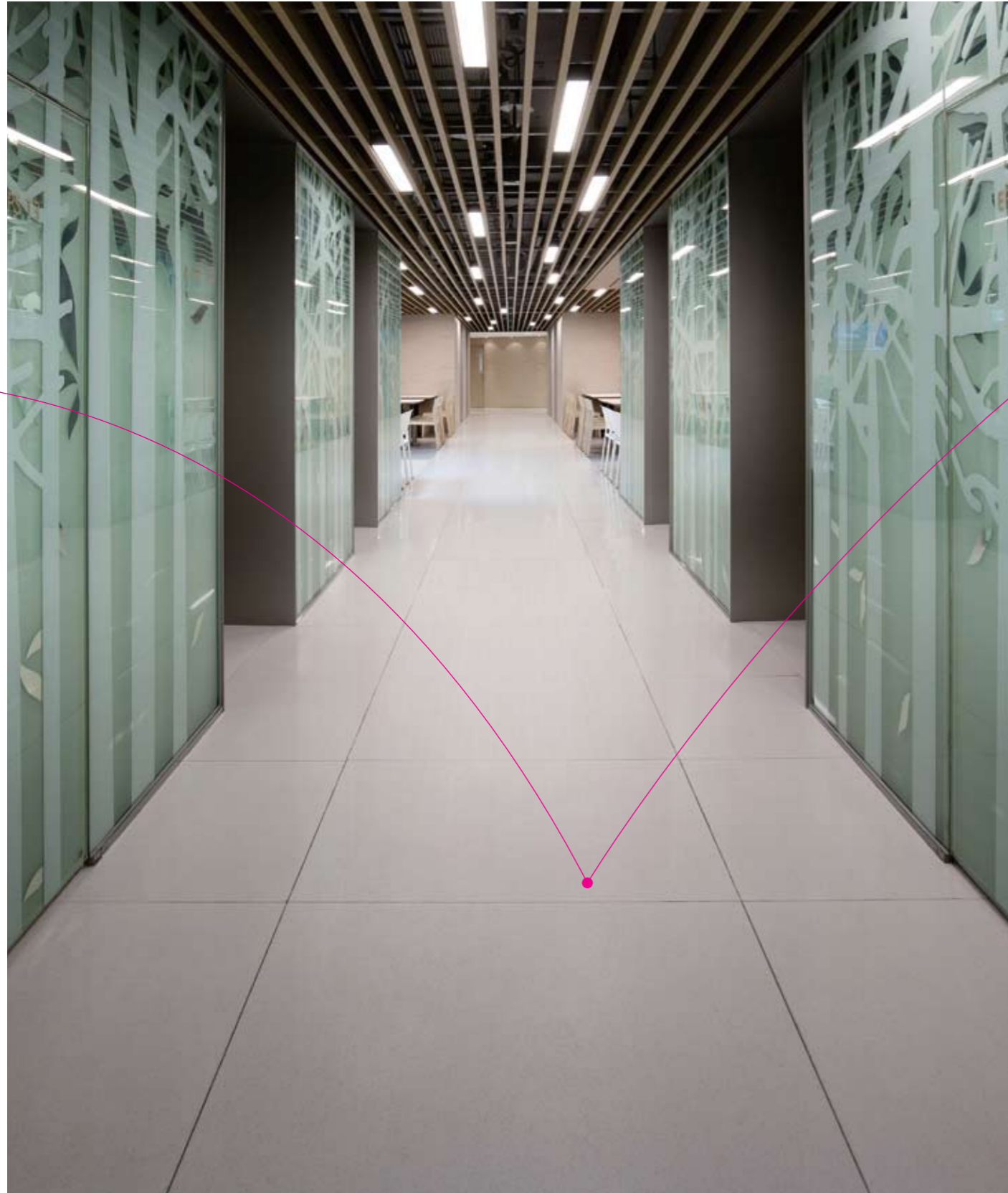
Radianz Quartz is strong and durable and widely used as an interior wall or flooring material. It is manufactured by compression molding in a vacuum and is extremely dense and hard. It is close to "0" absorption and easy to clean. It is also stain resistant and is an effective material for interior environments of public facilities.



Seoul Metropolitan Government in Korea



Seoul Metropolitan Government in Korea



Samsunglife HQ in Korea



Samsunglife HQ in Korea





Ecoplex in Korea



Ecoplex in Korea

WASHROOM

Pollutant resistant sanitary space created by Radianz

Radianz Quartz is manufactured in a vacuum that has almost no gaps. Contamination does not occur easily. The non-porous nature of the material resists any bacterial growth.

In addition, it is easy to maintain by using common house hold detergents with water to remove any surface contaminants. For facilities like public restrooms where there is exposure to a lot of traffic and can be difficult to manage, use Radianz to create a pleasant and sanitary environment.



Water absorption

RADIANZ	0.05
Granite	0.3
Marble	0.3

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"> • Ball point pen • Marker • Crayon • Magic ink • Juice • Coffee • Shoe polish • 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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