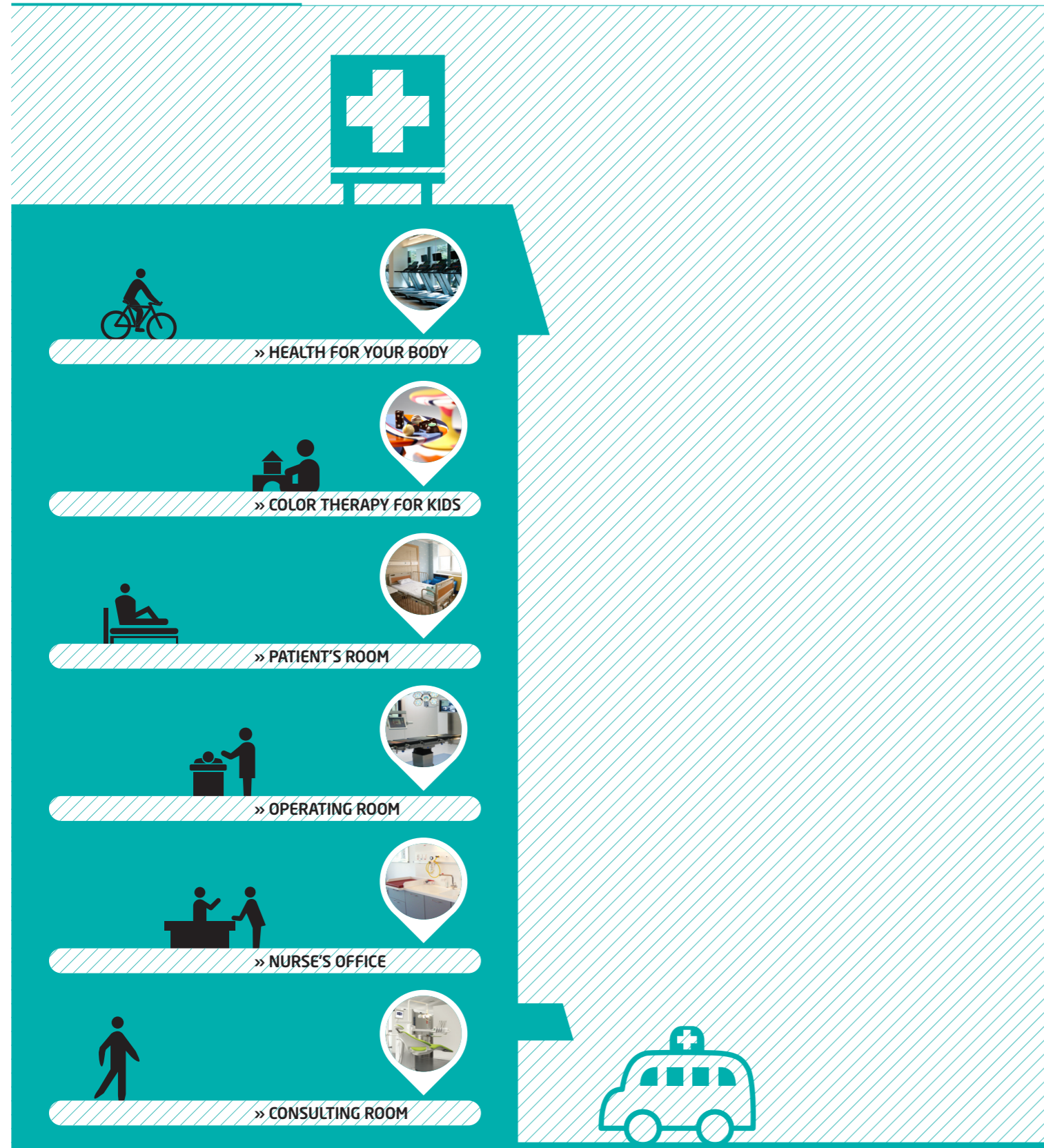


SAMSUNG

Health Care

Architectural Manual

staron[®]
Solid Surfaces



Best medical service, a reliable space, Staron makes it for you

Strict quality control

Cheil Industries has strict quality control standards in order to supply superior products. We will present Staron's consistent properties and satisfy you with a stable quality.

Non-porous highly hygienic material

Unlike natural stone surfaces, Staron is non-porous and impervious to moisture, making them highly resistant to bacterial growth. Most pollutants can be easily removed from the surface with soap and water.

Excellent durability

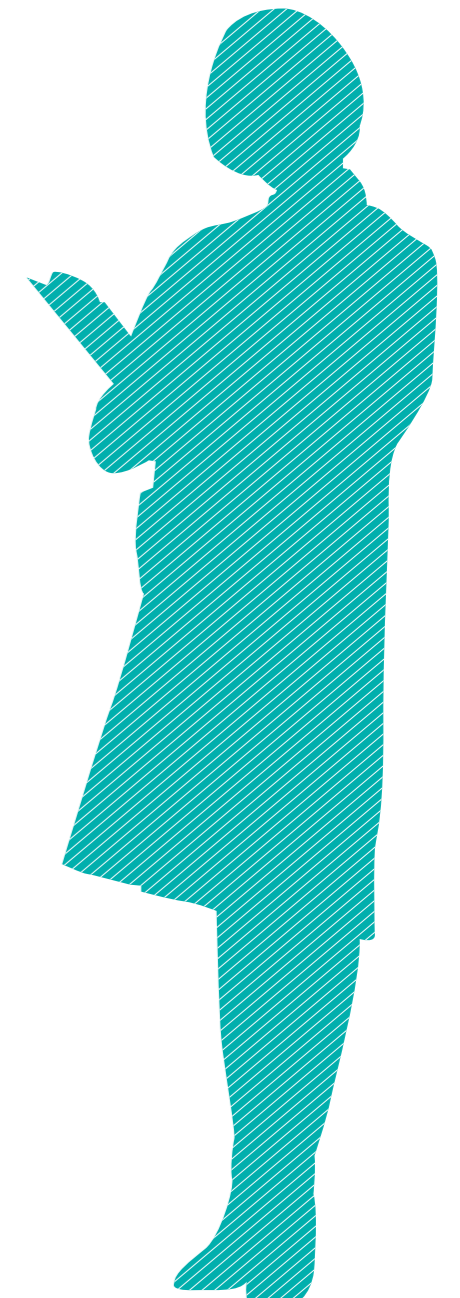
Staron is made of all-acrylic materials and when compared to laminates or plastics, it exceeds in strength and long-term durability. In addition, in case of contamination or damage, it can be easily repaired as if new.

Excellent workability and implementation of various designs

Staron is extremely durable but also can be easily handled by using wood working tools and thermo processes to create various cuts and shapes. In addition, with the use of adhesives, seamless joints can be created. It also works harmoniously with other materials such as wood and metals and offer endless possibilities.

Eco-friendly certification

Buildings with hazardous building materials can be fatal to a patient with weakened immune systems. Staron is certified eco-SCS and can be used with confidence.





STARON, Can innovate your mind

Use Staron to offer the best medical service and safe environment.

Staron solid surface can be applied in various ways in the hospital. Not only can the material be easily formed to the desired shape but because of its contaminant resistant surfaces, it is a useful material to use in hospital interiors. For patients that spend long periods of time in the hospital, the environmentally friendly material is beneficial for the stability of the patient's health and peace of mind.





A walk through hospital

Staron can facilitate the various shapes of hospital interiors. With the adhesive process, forms can be integrated into a seamless shape, reducing crevices that can spread contamination and protect patients from germs. The non-porous surfaces resist mold growth and germs from growing below the surface. The characteristics of this material are sanitary and are essential for materials used in the interiors of hospitals.



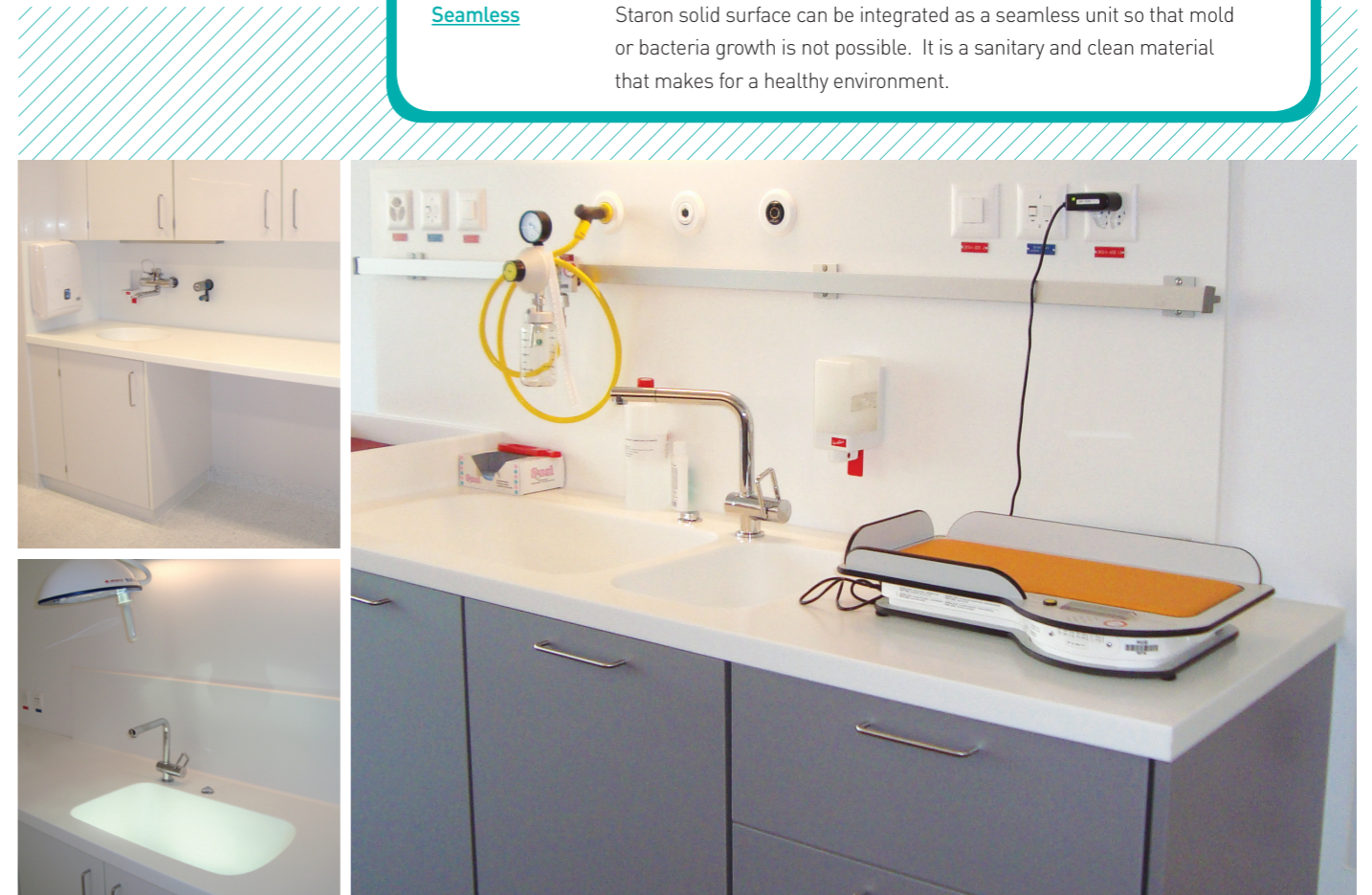
Dmacc Dental in U.S.A

How to do
STARON

Easy to clean

Chemical resistant Staron solid surface is frequently used in hospitals because chemical contaminants can be easily removed from the surface of the material.

Seamless Staron solid surface can be integrated as a seamless unit so that mold or bacteria growth is not possible. It is a sanitary and clean material that makes for a healthy environment.



Kantonsspital's Neonatal intensive care unit in Germany

Chemical testing

chemical	result	chemical	result
Ammonia		Citric Acid 10%	
Blood	TEST OK	Benzene	
Ethanol		Gentian Violet	TEST OK
Aceton		Disinfectant	

Seamless





St.Joe's Healcare in U.S.A

How to do STARON

- Non-porous material** (Icon: Water droplet)
- water** (Icon: Water droplet)
- Easy to safety** (Icon: Person)

Non-porous material Unlike other finishes of natural stone, Staron has a non-porous surface that is water resistant. It prevents any bacterial growth and makes it easy to manage surface contaminates.

We are committed to making safe spaces for the most important moments.

Staron solid surface is a safe interior material for hospitals where hygiene and eco-friendly environments are a top priority.



Operation Room in Taiwan



Samsung Medical Center in Korea



Bacterial resistance

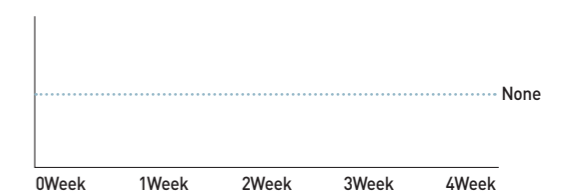
🧪 Test result

A popular bacteria Pseudomonas Aeruginosa was applied to the surface of Staron and left there for 4 weeks to grow. When the area was tested for bacterial growth, the results showed no bacterial proliferation.

- **ASTM G22**
Determining resistance of plastics to bacteria
- **Strains**
Pseudomonas aeruginosa (ATCC 13388)
- **Culture Condition**
96.8 +/-1.8°F (36+/-1°C), 90%RH, 21day



📊 Observed growth on specimen





Samsung Human Resources Development Center in Korea

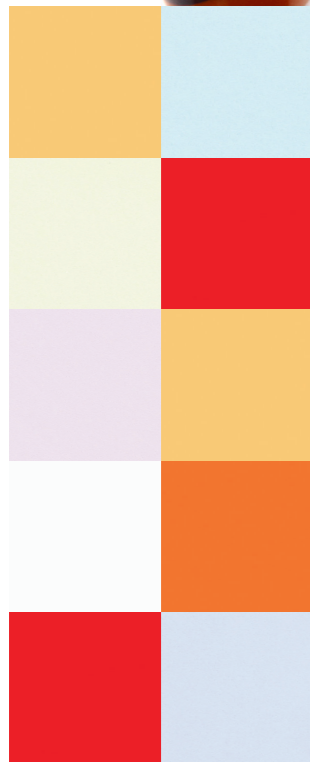
STARON, Make up your life

Staron is with you in the relaxing retreat spaces

We are more conscious of our health and healthy living. Staron is with you to make those healthy choices. Staron protects you with our safe, environmentally friendly building materials that reduce hazardous substances and help you live a healthy lifestyle.



Samsung Human Resources Development Center in Korea



Color therapy for kids, Staron is making it.

Staron is available in 300 special colors to preserve the balance of body of mind and assist in the emotional development of our children in their creative spaces. Staron's natural colors and patterns inspired from nature is an optimal choice for these spaces.

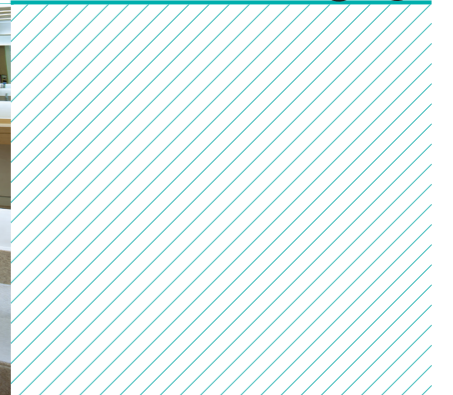


COLOR THERAPY

Using color therapy, you can bring balance to a person's mind and body.



Samsung Human Resources Development Center in Korea



Optimizing the maintenance to sustain a sanitary environment, Staron encourages a healthy life

Staron's interior material will protect your health with its sweat and dirt resistant surfaces that is easy to main and clean. From Tables to Sinks, and even exterior walls, Staron's variety of uses can keep you healthy.



Samsung Human Resources Development Center in Korea



Chemical testing results

We conducted chemical tests on various surface contaminations prone to exist in Hospital and health care space. 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

- Ammonia • Blood • Ethanol
- Disinfectant • Benzene • Aceton
- Citric Acid(10%) • Gentian Violet



Result

Most pollutants can be easily removed from the surface with damp pad with neutral detergent.

Comparing Staron to other products

Staron is durable but also easy to work with.

The differentiating advantages are its reliable quality and ease of use unlike other products.

Attributes	Staron solid surface	Polyester solid surface	Engineered stone	Granite	Stainless steel
Ease of maintenance/ Cleanability and repair	3	3	2	1	2
Does not support microbial growth	3	3	3	1	3
Nonporous smooth	3	3	3	1	3
Low flammability	3	2	3	3	3
Durable	3	3	3	3	3
Low VOC	3	3	3	3	3
Low smoke toxicity	3	1	3	3	3
Initial and life cycle cost effectiveness	3	3	3	1	2
Slip resistance-appropriate coefficient of friction	3	3	3	3	2
Ease of installation, demolition, replacement	3	3	1	1	2
Seamless appearance	3	3	1	1	3
Control of reflectivity	3	3	2	2	2
Option for color, pattern	3	3	3	2	2
Nontoxic, non-allergenic	3	3	3	3	3



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