





Samsung Staron® Solid Surfaces in Healthcare

HYGIENIC HEALING DURABLE



Staron® Solid Surfaces in Healthcare

Staron® Solid Surfaces is created by technology leader Samsung, and is comprised of a natural and pure mineral derived from bauxite ore and blended with an advanced pure acrylic resin, resulting in the world's premium surface material. Staron® Solid Surfaces is suitable for endless applications in a commercial or residential project. With a smooth finish and a range of over 80 colours to select from, Staron® is both aesthetically and functionally pleasing.

Staron® offers a **warm, soft and soothing** feel to the skin. It does not feel 'cold' like many other surfaces do. Staron® also offers a hygienic finish that abolishes cross contamination, perfect for dental surgeries, hospitals and aged care facilities. Staron® prevents the growth of mould or mildew, providing a clean surface solution.

The **thermoformability** of Staron® allows for designs of ergonomically friendly applications for wheelchair access. The non-porous and slip resistant nature of Staron® also means it can be used in and around showers and bathtubs by creating curves for easy access. The seamless nature of Staron® adds **heightened hygiene and eliminates dirt trapping crevices**, that is essential in this type of industry.

Staron® also extends itself to fully integrated dentistry bowls, baby baths or sinks and vanities - with no open joins, just one continuous surface. Create monolithic wall surfaces, toilet partitions, food preparation kitchenettes and nurses stations - the possibilities are endless.

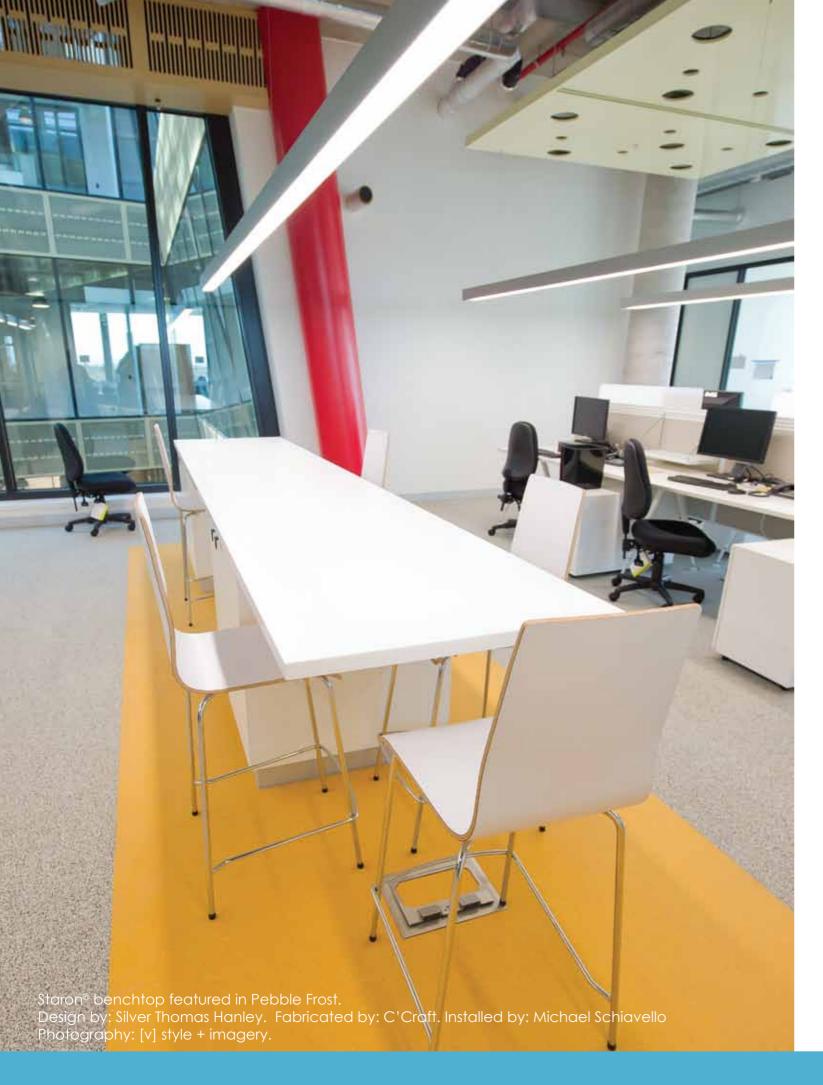
Staron® is renewable, meaning that after years of use it can be sanded to be restored back to its original condition. Staron® can be formed and moulded into any shape or design imaginable. It can be sculpted to fit around curves or be carved into logos, designs or sculptures.

Staron® can be inlaid, creating a blend of colours into one piece. The flexibility of Staron® extends to limitless edge profiles; drop down edges, and splash backs. All this comes in an environmentally sustainable material, with a **10 Year Warranty by Samsung**.

Contents	Pages
Staron Creates a Protective Environment	4-5
Hygienic Application Solutions	6-7
Staron Colour Versatility	8-9
Environmental Sustainability	10-11
Integrated Staron Sinks & Vanities	12-13
Technically Advanced	14-15



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Staron® Creates a Protective Environment

Prevent Cross Contamination

The non-porous nature of Staron® means that no bacteria or germ will penetrate the material. With proper cleaning, any bacteria sitting on the surface is wiped away and the risk of cross contamination is eliminated. With no open joins or dirt trapping crevices present, Staron® provides a heightened hygienic level to the environment that it is used in.

Stain Resistance & Durability

The stain resistance of Staron® ensures that it performs functionally and aesthetically for many years to come. Because the surface of Staron® can be renewed by wiping, scrubbing or sanding – all the most common healthcare stains can be removed. Blood, betadine and X-ray developer fluid can all be removed easily – even after left for hours on the surface.

Chemical Resistance

The chemical resistance of Staron® makes it suitable to be used in hospitals, laboratories, healthcare facilities and dental surgeries. View page 14 to see the results of a chemical resistance test.

Hygiene

The non porous nature of Staron® makes it hygienic for any surface in an environment that needs to be kept sterilised and clean. Staron will ensure that other viruses, germs or bacteria do not infect patients when they come into contact with the material. Staron® also prevents the growth of mould and mildew, making it the perfect surface solution for wet areas.

Thermoforming

One of the great advantages of Staron® is that it can be moulded and curved into any design or structure through a process called thermoforming. This process allows three-dimensional designs to come to life. Virtually any shape can be formed with Staron®. This creative process of design can result in endless interesting design possibilities. Wall panels can be curved, benchtops can join inconspicuously around soft curves, and custom design vanities can be a feature with smooth rounded designs.

Warm and Inviting

Unlike other cold materials such as stainless steel that are used quite often in the healthcare industry, Staron® is warm, smooth and inviting to touch. It creates a tranquil and calming environment to promote healing at a time when it is needed.

10-Year Limited Warranty

Staron® is backed by a Samsung 10-Year Warranty for peace of mind.



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Hygienic Application Solutions with Staron® Solid Surfaces



NURSES' STATIONS / RECEPTION

Staron® is available in an extensive selection of colours to make the first entry point of a hospital, aged care facility or dental surgery feel warm and inviting to patients and visitors. Staron® can be thermoformed for curves, and it can also be inlayed using multiple colours to create interest. Computers and equipment can be housed in custom designed Staron® hubs and storage spaces. The hygienic and durable qualities of Staron® also means that it is suitable for these high traffic areas.

OPERATING THEATRES

The hygienic and low maintenance of Staron® makes it the perfect solution for use in operating theatre walls, countertops, integrated sinks and vanities. Wash basins can also be custom designed and thermoformed to fit the space and requirements. The non-porous nature of Staron® also resists stains such as blood and betadine commonly found in operating theatres.



Staron® can be used for wall cladding, tables, bed headboards, bedside tables or any other type of furniture. Staron® can also be used to create integrated solutions for televisions, electrical cords and plugs, oxygen and monitor systems and more. The cleanliness of Staron® also creates a safe environment for patients, visitors and healthcare staff. Staron® can also extend to patient bathrooms for vanity bowls, vanity tops, even shower walls and thermoformed floors to allow wheelchair access.

LABORATORIES

Staron® can be shaped and formed to create workspaces and areas that are suited and organised for laboratory work. Shelves, sinks and storage compartments can be designed to ensure that the requirements of the staff are met for a productive workspace. The non-porous and seamless nature of Staron® also ensures that samples and tests are not contaminated. No open joins means that dirt trapping crevices are totally abolished for a hygienic and healthy work surface that is also safe for staff.

WALL PANELLING

Staron® can be used for hygienic wall panels throughout a hospital with no open joins. The surface continues in one monolithic finish. Wall panels can be used in corridors, patient rooms, elevators and more. Staron® can also be used in exterior cladding due to its non-porous and durable nature.

DENTAL SURGERIES

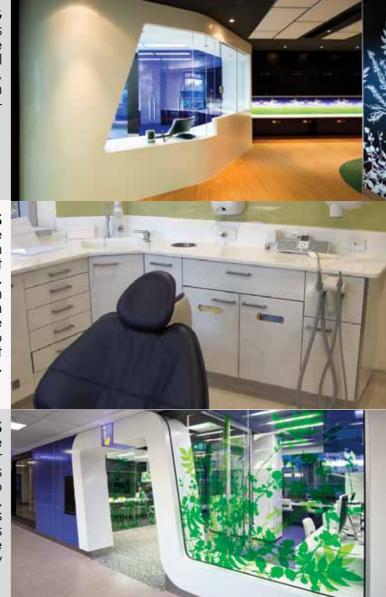
From the reception desk and through the examination room – Staron® can be used in many applications. Create seamless desks that continue all the way up to a reception area. Coffee and side tables can be created for an inviting patient waiting area. In the examination room, integrated basins can continue to the countertops in one monolithic surface with no open joins for crevice elimination. The end result is a beautiful finish that is functional and hygienic.

MATERNITY & PAEDIATRICS

The vivid colours of Staron® can be used to create a welcoming and interestesting surrounding for healthcare facilities that are designed for infants and children. Inlay different colours of Staron® to create artistic and colourful walls and furniture. The thermoformable nature of Staron® also allows for the design of change tables, wall panels and play areas with one monolithic surface that is durable, easy to clean and aesthetically pleasing.

KIOSKS / CAFETERIAS

Staron® meets NSF51 National Sanitation Foundation Accreditation for safe food hygiene, which means it is a practical surface for commercial kitchens. The surface will not promote the growth of bacteria when exposed to food, so it is a suitable surface for all food contact areas. Use Staron® for coffee kiosks, cafeterias, café table tops and more. Staron® can even be used as a surface solution for florist and gift kiosks.

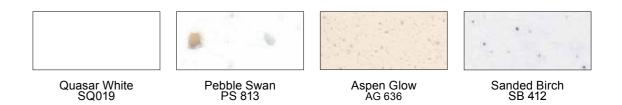






Staron® Colours for Healing

Staron® offers an extensive selection of warm colours to make any healthcare application feel inviting and calming to create an environment that promotes a feeling of ease and comfort to encourage healing.



Staron[®] Colours for a Positive Atmosphere

Staron® offers vivid colours to create a space for hospitals designed for infant and child care that will make them feel at ease and at home with a happy palette of colours surrounding them.

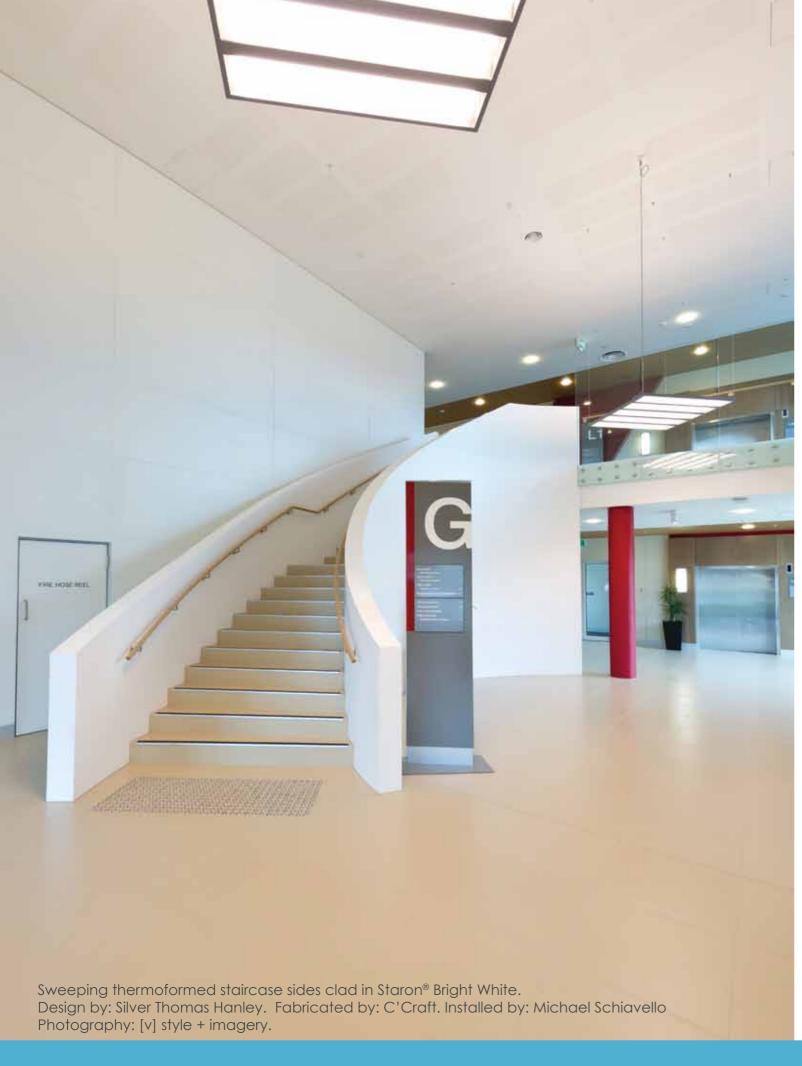


Over 80 Staron® Colours to Select From

Staron® has an extensive colour palette to select from to suit the space and environment and application that is being specified. Visit **staron.com.au** to view the entire range.



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Environmental Sustainability



Staron® is non-toxic creating a safe environment for nature, people and animals. It has GREENGUARD Indoor Air Quality Certification, and also meets the more stringent GREENGUARD for Children & Schools Certification. The renewable nature of Staron® also extends its life span creating less need for waste.

The Encore Collection offers a selection of colours with a guaranteed percentage of pre-consumer recycled resin and chip content for heightened sustainability in design. The below 18 colours have been certified by Scientific Certification Systems, a leader in certifying independent environmental claims - recognising Staron® for the use of recycled material.









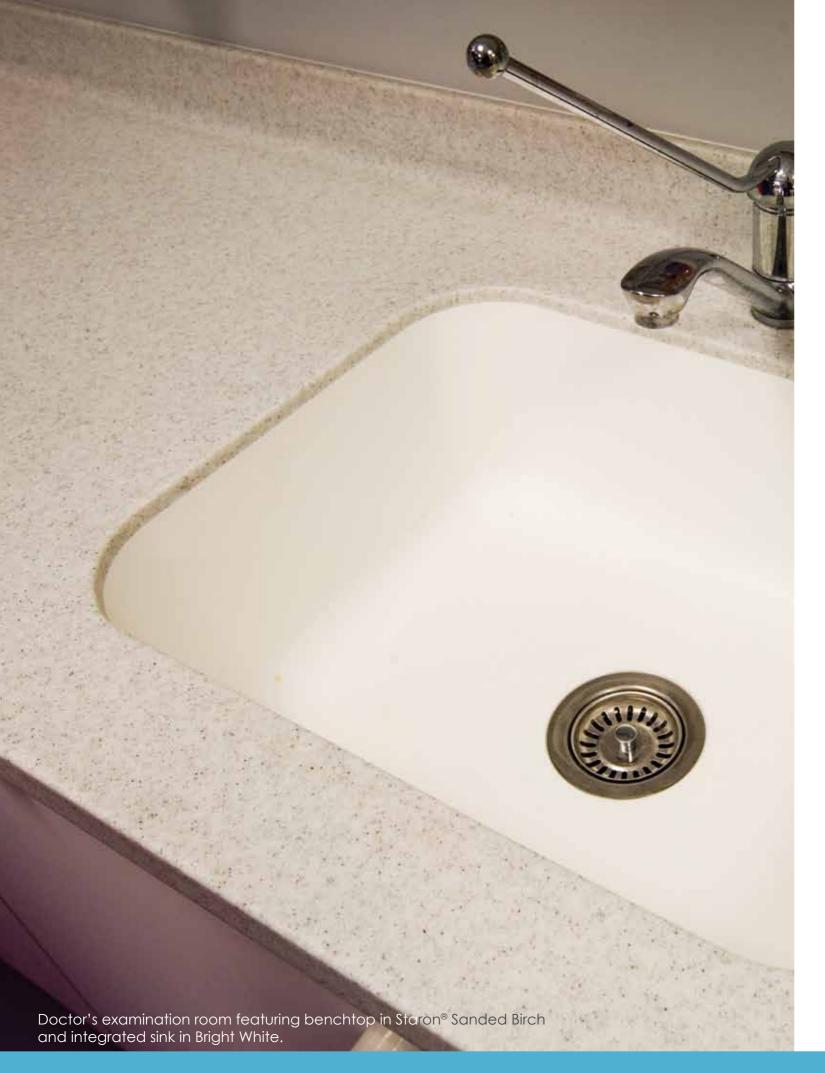








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Integrated Staron® Sinks

Staron® has a selection of standard kitchen sinks and vanity bowls. Custom designed sinks can also be made to create baby baths or sinks to a specific size. Staron® sinks are joined to the Staron® benchtop with a special Staron® adhesive, and sanded. The result is a monolithic surface that continues from the bench to the sink in one smooth and continuous surface. No open joins and no dirt trapping crevices.

Staron® Standard Integrated Kitchen Sinks



Staron® Standard Integrated Bathroom Vanity Bowls



Sinks available in colour Bright White. Pearl available by special order. A1181 and A3181 standard colours include: Bright White and Pearl. All dimensions listed are internal measurements. For all other full sink measurements visit www.staron.com.au *650mm benchtop width required. ^Right sink is deeper than left sink. Depth shown is the measurement of the deeper sink.

Tile Cove & Splashback



Extend your benchspace to continue to the sink, splashback and even clad to your cabinetry for an integrated and monolithic finish that continues with no open joins. A tile cove offers a smooth and clean finish at the back of your benchtop, where the benchtop meets the splashback. A 10mm tile cove will eliminate dirt and germ crevices and allow a smooth join to your splashback. Add a Staron® splashback for a seamless kitchen benchtop with no open joins.

12 13

BACTERIAL RESISTANCE

Test method: ASTM G 22 (Determining Resistance of Plastics to Bacteria)

Strains: Pseudomonas Aeruginosa (ATCC 13388)

Culture condition: 96.8 +/- 1.8°F(36 +/- 1°C), 90%RH, 21 days

Culture Time	0 WEEK	1 WEEK	2 WEEKS	3 WEEKS
RESULT	0	0	0	0

CHEMICAL RESISTANCE

Test method: Apply 3 drops of each chemical reagent on the surfaces of Staron® Solid Surfaces. Expose the sample for 16 hours; covered with glass plate and uncovered. Check the surface and scrub the surface with a wet Scotch-Brite® Pad and bleaching cleanser such as Ajax®.

Test Result: THE RESIDUE FROM THE FOLLOWING CHEMICAL REAGENTS CAN BE REMOVED WITH A WET SCOTCH-BRITE PAD AND BLEACHING CLEANSER.

Formaldehde

Gentian violet

Grape juice

Gasoline

Hair dyes

Acetic acid (10%)
Acetone Ammonium hydroxide (5,28%)
Ammonia
Amyl alcohol
Amyl acetate
Ball point pen
Benzene
Bleach (household type)
Blood
Butyl alcohol
B-4 body conditioner
Calcium thiocyanate (78%)

Household soaps Hydrogen peroxide Hydrochloric acid (20,30,37%) lodine (1%) Ketchup Lemon juice Lipstick² Mercurochrome (2%) Methyl ethyl ketone Methýl red (1%) Methanol Methyl orange (1%) Mustard Mineral oil Nail polish Naphthalene N-hexane Olive oil Perchloric acid

Pencil lead
Permanent
detergents
Shoe polish
Sodium bisu
Soy sauce
Sulfuric acid
Sodium hyd
(5,10,25,40%
Sodium sulfa
Sugar (sucra
Sulfuric acid
Tetrahydrofa
Tea
Toluene Ure
Tomato juic
Uric acid
Vinegar
Washable ir
Wine

Permanent marker pen Soapless detergents Shoe polish Sodium bisulfate Sov sauce Sulfuric acid (25,33,60%) Sodium hydroxide solution (5,10,25,40%) Sodium sulfate Sugar (sucrose) Sulfuric acid (25,33,60%) Tetrahydrofuran Tea Toluene Urea (6%) Tomato juice Uric acid Vinegar Washable inks Wine Xylene Zinc Chloride

DURABILITY

Ethyl acetate

Ethyl ether

Properties	Tensile Strength	Flexural Strength	Flexural Modulus	Elongation	Gloss [60 Gardner]	Abrasian Resistance
Test Procedure	ASTM D 638	ASTM D 790	ASTM D 790	ASTM D 638	NEMA LD-3	ANSI Z 124
Result	6,000 psi	10,000 psi	1,000,000 psi	0.50%	5-20	Pass

Technically Advanced

FIRE RESISTANCE

<u>AS/NZS 1530.3:1999</u> Fire Testing - Simultaneous determination of ignitability, flame propagation, heat release and smoke release.

Test Method: Staron® has been tested in accordance with **Australian Standard 1530**, method for fire tests on building components and structures, Part 3: Simultaneous determination of ignitability, flame propagation, heat release and smoke release, 1999. For the test, each sample was clamped to the specimen holder in four places.

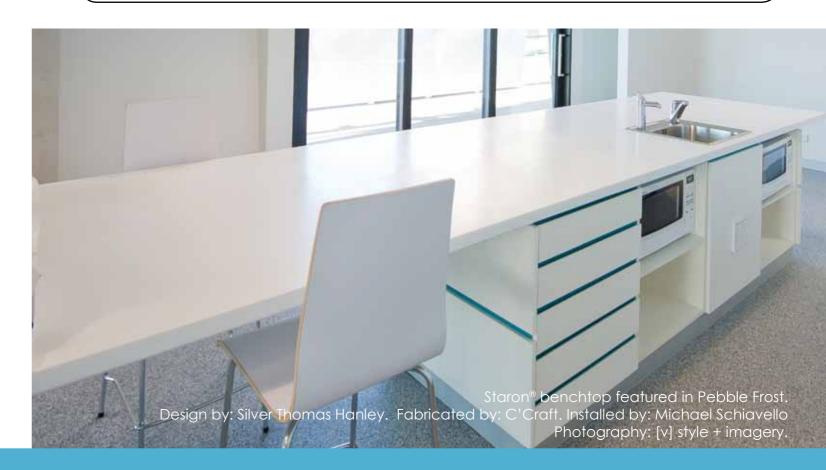
Test Result:

Ignitability	Spread of Flame	Heat Evolved	Smoke Developed
Index	Index	Index	Index
(0-20)	(0-10)	(0-10)	(0-10)
11	0	2	

Staron® has also been tested within accordance of: <u>AS/NZ 3837</u> - Wall & Ceiling Linings Cone Calorimeter Test.

SLIP RESISTANCE

Staron® has been tested within accordance of **AS/NZS 4586**. For full test results visit staron.com.au



14 15







