Availability and Technical Information

staron®
Solid Surfaces

Creative Versatility

Staron® decorative sheets, bowls and sinks enable designers and architects to bring their ideas to life free of complication and constriction. For further information regarding the technical processes and design benefits listed below simply visit staron.com.

Seamless design

With the use of specialist adhesives, panels of Staron® can be bonded together so that the molecules of each panel edge combine to form a truly seamless joint. This capability enables the creation of aesthetically pleasing shapes that appear to have been carved from one single piece of material. It also provides practical advantages as noted in the Practical Functionality section.

Surface finishes

Three Staron® finishes are available – Matt, Satin and Gloss. Matt is recommended for surfaces subject to prolonged use or harsh environments. Satin provides a high lustre and requires slightly more maintenance. Gloss offers a highly reflective finish and requires the most care. For this reason, gloss finish is recommended primarily for low traffic areas, wall panelling and lighter colour décors. Lighter colour décors do not highlight scuffs and scratches as much as dark colours.

Pearl particulate designs

Some Staron® décors have highly reflective pearl particulates suspended within the material which reflect light in a fascinating way. As the object is viewed from different angles or if the light source is moving, the pearl particulates will change the way they reflect the light.

Solid core

Unlike some decorative materials, Staron® offers solid colour and patterning across its surface and right through to its core. This ensures all machined areas will flawlessly and consistently showcase the surface design.

Cutting and shaping

Staron® can be machined using woodworking tools into any shape and edge profile, making it ideal for bespoke furniture designs, seamless cladding and even fine art sculptures.

Thermoforming

This highly specialist curved shaping technique involves Staron® material being placed into a specially designed oven and heated to a temperature between 145°C and 175°C. The acuteness of the formed radii depends on material thickness and décor (the Tempest® range is not recommended for thermoforming with acute radii). Thermoforming provides the designer opportunities to create truly unique shapes for both aesthetic and practical solutions.

Inlaying

Contrasting Staron® colours can be flawlessly bonded together through the process of inlaying to create a striking finish.

Engraving

Lettering and logos can be engraved into Staron's surface to add greater standout. This can be further enhanced through the use of backlighting.

Backlighting

Some Staron® décors have light transmittance properties that allow a light source on one side of a sheet to be seen on the other side. The level of light transmittance is affected by thickness and décor selection. Engraving can be used to enhance the visual impact of backlighting.

Sublimation

This high temperature printing technique involves the use of specialist machinery to press special dyes into the Staron® surface. Unlike other printing methods, the resulting design is embedded into the Staron® surface and therefore retains its colour and can be sanded or polished as required.

The techniques of inlaying, engraving, backlighting and sublimation are all ideal for corporate branding.

Practical Functionality

Staron® decorative sheets, bowls and sinks provide a host of practical features that provide long-term value and safety. For further information regarding the functional characteristics and benefits listed below simply visit staron.com.

Safe material

Staron® is chemically inert and so is completely safe in all applications. For example, it is perfect for use as a work surface and the preparation of food. It is also perfect as a laboratory work surface, because its inert chemical status means Staron® does not interfere with any chemical test a laboratory is carrying out.

100% waterproof

Staron® is completely non-porous. The benefits of this characteristic are numerous. Because it is waterproof, Staron® will not absorb moisture. This means with a simple cleaning regime, bacteria is not able to develop on its surface, making Staron® one of the most hygienic decorative surfaces available. It also means Staron® is perfect for use in all areas, including wet rooms, without any fear of material degradation.

Seamless design

As noted in the Creative Versatility section, with the use of specialist adhesives, panels of Staron® can be bonded together so that the molecules of each panel edge combine to form a truly seamless joint. This characteristic means that joint gaps, in which bacteria can develop, are eliminated.

Fire-retardant

All Staron® solid white décors have achieved a Euro class B certification. All other Staron® décors have achieved a Euro class C rating.

Long-term durability

Staron® has significant strength and durability. For example, it has been successfully bomb-blast tested and is classed as compliant with the stringent requirements of the UK's Department for Transport ASIAD document for wall panelling systems used in UK airports.

Maintenance, repairs and the environment

Staron® is very easy to clean and maintain. Please refer to the 'How to care for your solid surfaces' leaflet for more details of day to day cleaning, maintenance advice and warranty details.

In the unlikely event a Staron® surface suffers serious impact, any damaged areas can be restored to their original condition by a trained fabricator. This repairable characteristic of Staron® is environmentally very beneficial. Most other decorative surfaces have to be scrapped when they have been damaged, leading to costly and wasteful replacements. But a well-designed Staron® installation can be maintained for decades, leading to fantastic whole life cost savings.

Several Staron® décors have SCS material content certification which verifies that Staron® is working responsibly to minimise any environmental impact during its manufacturing process by using recycled materials.

Certification

SCScertified RECYCLED CONTENT

GREENGUARD

GREENGUARD GOLD

KSA ISO 9001 CERTIFIED

ISO 14001 REGISTERED DNV MGMT SYS. RvA C024 DNV Certification B.V., The Netherlands

OHSAS 18001 DNV

Staron® 10 Year Warranty

Each Staron® installation will have a limited warranty, provided the conditions noted on the Staron® website (staron.com) are met.

Performance Properties

Properties	Staron® Solid Surface Solid, Sanded, Aspen, Pebble, Quarry, Metallic, Supreme™ Typical Results	Staron® Solid Surface Tempest® Typical Results
Tensile strength	6,000 psi	3,500 psi
Tensile modulus	600,000 psi	786,000 psi
Flexural strength	10,000 psi	6,500 psi
Flexural modulus	1,000,000 psi	950,000 psi
Elongation	0.50%	0.50%
Hardness	92 Rockwell 'M' Scale 65 Barcol Impressor	88 Rockwell 'M' Scale 54 Barcol Impressor
Thermal expansion	2.0 x 10-5 in/in F°	2.3 x 10-5 in/in F° 3.6 x 10-5 m/m °C
Gloss (60 Gardner)	Between 5 - 20	Between 10 - 75
Color stability	No change-200hrs	Pass
Stain resistance	Pass Rating 41	Pass
Abrasion resistance	Pass	-
Cleanability and wear	-	Pass
Boiling water surface resistance	No effect	No effect
High temperature resistance	No effect	No effect
IZOD Impact resistance (notched)	0.28 ft.lbf/in	0.28 ft.lbf/in
Ball drop 1/2" (12.3 mm) sheet	144" w/ 1/2 lb ball, No failure	1/2 lb ball No failure, 93+
Fungi and Bacterial resistance	No growth	No growth
Specific gravity	Solid colors 1.72 Patterened colors 1.69	1.6
Water absorption	0.04%, (1/2", 24hrs) 0.11%, (1/8", 24hrs)	0.04%, (1/2", 24hrs)
Flammability Flame spread Smoke density	Class A / Class 1 10 10	Class A / Class 1 - -
Radiant heat resistance	No visual effect	
Toxicity	84.4g (Solid Color) 81.8g (Patterned Color)	- -
Food Equipment Materials	Approved	Approved

Chemical Resistance

We conducted chemical tests on various typical contaminations. These contaminents were dropped onto the surface and covered with glass plates for 16 hours. The Staron® Solid Surface was then scrubbed with damp pads and detergent and then tested for the results. Most pollutants can easily be removed from the surface with a damp pad with a neutral detergent.

The residue from the following chemical reagents can be removed with a wet Scotch-Brite® pad and bleaching cleanser.

- Acetic acid *(10%)*
- Acetone
- Ammonia
- Ammonium hydroxide *(5,28%)*
- Amyl acetate
- Amyl alcohol
- B-4 body conditioner
- Ball point pen
- Benzene
- Bleach *(household type)*
- Blood
- Butyl alcohol
- Calcium thiocyanate *(78%)*
- Carbon disulfide
- Carbon tetrachloride
- Cigarette *(nicotine and tar)*
- Citric acid *(10%)*
- Coffee
- Cooking oils
- Cottonseed oil
- Crystal Violet *(Biochemical colorants)*
- Cupra ammonia
- Dishwashing liquid/powders
- Ethanol
- Ethyl acetate
- Ethyl ether
- Formaldehde
- Gasoline
- Gentian violet
- Grape juice
- Hair dyes
- Household soaps
- Hydrochloric acid (20,30,37%)
- Hydrogen peroxide
- Iodine *(1%)*
- Ketchup
- Lemon juice
- Lipstick
- Mercurochrome (2%)
- Methanol
- Methyl ethyl ketone
- Methyl orange (1%)
- Methyl red (1%)
- Methylene Blue (Biochemical colorants)
- Mineral oil
- Mustard
- N-hexane
- Nail polish
- Naphthalene
- Olive oil
- Pencil lead
- Perchloric acid
- Permanent marker pen
- Potassium hydroxide solution (5, 10, 25, 40%)
- Povidon-iodine(PVP-I) 'Betadine' solution
- Shoe polish
- Soapless detergents
- Sodium bisulfate
- Sodium hydroxide solution (5,10,25,40%)
- Sodium sulfate
- Soy sauce
- Sugar (sucrose)
- Sulfuric acid (25,33,60%)
- Tea
- Tetrahydrofuran
- Toluene
- Tomato juice
- Urea (6%)
- Uric acid
- Vinegar
- Washable inks
- Wine
- Xylene
- Zinc Chloride

Note: A Biochemical colorant is a dyeing material. It may leave a stain on Staron® instantly.
When Staron® is exposed to a biochemical colorant, please remove it within a few minutes with acetone.

The following chemical reagents may cause damage that requires sanding for complete removal. Frequent and/or prolonged exposure to these reagents should be avoided.

- 3M Avagard™ D
- Acetic acid (90,98%)
- Acid drain cleansers
- Acridine Orange (Biochemical colorants)
- Chlorobenzene
- Chloroform (100%)
- Chromic trioxide acid
- Cresol
- Dioxane
- Equalizing mix (50/50)
- Ethyl acetate
- Film developer
- Formic acid (50,90%)
- Furfural
- Giemsa (Biochemical colorants)
- Glacial acetic acid
- Hydrofluoric acid (48%)
- Luralite mix (50/50)
- Methylene chloride based products such as paint removers, brush cleansers and some metal cleansers
- Nitric acid (25,30,70%)
- Phenol (40,85%)
- Phosphoric acid (75,90%)
- Safranin (Biochemical colorants)
- Sulfuric acid (77,96%)
- Trichloroacetic acid (10,50%)

Staron® Availability

Staron® Colour		Sheet Sizes			Certifications		Translucency
		6mm 2500mm x 760mm	12mm 3680mm x 760mm	12mm 1840mm x 760mm	SCS	Euro FR Class	
SOLID							
Solid Bright White	BW 010	●	●	●	●	B	
Solid Fog	SF 020	-	●	●	-	C	
Solid Natural	SV 041	-	●	●	-	C	
Solid Pearl	SP 011	●	●	●	-	C	
Solid Pure White	SP 016	-	●	●	-	B	
Solid Quasar White	SQ 019	●	●	●	●	B	
SUPER SOLID							
Super Solid Bliss	SB 022	-	●	●	-	C	
Super Solid California Poppy	SC 052	-	●	●	-	C	●
Super Solid Dazzling White	SD 001	-	●	●	-	B	
Super Solid Oasis	SO 064	-	●	●	-	C	
Super Solid Onyx	ON 095	●	●	●	-	C	
Super Solid Steel	ST 023	-	●	●	-	C	
Super Solid Sunflower	SS 042	-	●	●	●	C	
Super Solid Univers	SU 053	-	●	●	-	C	
SANDED							
Sanded Birch	SB 412	-	●	●	-	C	
Sanded Clay	SC 475	-	●	●	-	C	
Sanded Cornmeal	SC 433	-	●	●	-	C	
Sanded Cream	SM 421	-	●	●	-	C	
Sanded Dark Nebula	DN 421	-	●	●	-	C	
Sanded Dover	SD 413	-	●	●	-	C	
Sanded Goose	SG 428	-	●	●	-	C	
Sanded Grey	SG 420	-	●	●	-	C	
Sanded Heron	SH 428	-	●	●	●	C	
Sanded Icicle	SI 414	-	●	●	-	C	
Sanded Meadow	SM 465	-	●	●	-	C	
Sanded Mocha	SM 453	-	●	●	-	C	
Sanded Onyx	SO 423	●	●	●	-	C	
Sanded Sahara	SS 440	-	●	●	-	C	
Sanded Stratus	SS 418	-	●	●	-	C	
Sanded Taupe	ST 486	-	●	●	-	C	
Sanded Tundra	ST 482	-	●	●	-	C	
Sanded Vermillion	SV 430	-	●	●	-	C	
ASPEN							
Aspen Alder	AA 625	-	●	●	●	C	
Aspen Brown	AB 632	-	●	●	-	C	
Aspen Cliff	AC 652	-	●	●	●	C	
Aspen Concrete	AC 629	-	●	●	-	C	
Aspen Glacier	AG 612	●	●	●	-	C	
Aspen Glow	AG 636	-	●	●	-	C	
Aspen Lily	AL 645	-	●	●	●	C	
Aspen Pepper	AP 640	-	●	●	●	C	
Aspen Pond	AP 665	-	●	●	-	C	
Aspen Snow	AS 610	-	●	●	-	C	
EARTHEN							
Earthen Bark	QL 257	-	●	●	-	C	
Earthen Stratum	QL 287	-	●	●	-	C	

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		6mm 2500mm x 760mm	12mm 3680mm x 760mm	12mm 1840mm x 760mm	SCS	Euro FR Class	
PEBBLE							
Pebble Blue	PB 870	-	●	●	-	C	
Pebble Boulder	PB 852	-	●	●	-	C	
Pebble Collina Mirage	PM 879	-	●	●	-	C	
Pebble Ebony	PE 814	-	●	●	●	C	
Pebble Flan	PF 870	-	●	●	-	C	
Pebble Gold	PG 840	-	●	●	-	C	
Pebble Grey	PG 810	-	●	●	-	C	
Pebble Ice	PI 811	-	●	●	-	C	
Pebble Saratoga	PS 820	-	●	●	-	C	
Pebble Swan	PS 813	-	●	●	-	C	
Pebble Tea Rose	PT 845	-	●	●	-	C	
Pebble Terrain	PT 857	-	●	●	-	C	
METALLIC							
Metallic Galaxy	EG 595	-	●	●	-	C	
Metallic Yukon	EY 510	-	●	●	-	C	
QUARRY							
Quarry Oyster	TO 310	-	●	●	-	C	
Quarry Starred (NEW)	QS 288	-	●	●	-	C	
Quarry Terrazzo Venezia	NT 150	-	●	●	-	C	
SUPREME™							
Supreme Ash Concrete	VA 129	-	●	●	-	C	
Supreme Beige Granite	VB 172	-	●	●	-	C	
Supreme Cloudbank	VC 118	-	●	●	-	C	
Supreme Concerto	VC 157	-	●	●	-	C	
Supreme Cotton White	VC 110	-	●	●	-	C	●
Supreme Dandelion	VD 175	-	●	●	-	C	
Supreme Dawn	VD 126	-	●	●	-	C	
Supreme Delphi	VD 111	-	●	●	-	C	●
Supreme Magnolia	VM 143	-	●	●	-	C	
Supreme Natural Bridge	VN 144	-	●	●	-	C	
Supreme Ocean View	VO 171	-	●	●	-	C	●
Supreme Urban Grey	VU 127	-	●	●	-	C	
TEMPEST®							
Tempest Bamboo	FB 173	-	●	●	-	C	
Tempest Bronzestar	FB 154	-	●	●	-	C	
Tempest Caviar	FC 188	-	●	●	-	C	
Tempest Genesis	FG 174	-	●	●	-	C	
Tempest Glimmer	FG 144	-	●	●	-	C	
Tempest Horizon	FH 114	-	●	●	●	C	
Tempest Igneous	FI 187	-	●	●	-	C	
Tempest Meteor	FM 111	-	●	●	-	C	
Tempest Mystic	FM 178	-	●	●	-	C	
Tempest Peak	FP 100	-	●	●	-	C	
Tempest Polar	FP 111	-	●	●	-	C	
Tempest Radiance (Shimmer)	FR 148	-	●	●	-	C	
Tempest Silvercloud	FS 122	-	●	●	-	C	
Tempest Whippoorwill	FW 145	-	●	●	-	C	
Tempest Zenith	FZ 184	-	●	●	-	C	