

For  
Architect &  
Designer

**Samsung  
Staron &  
Radianz**



Samsung SDI Co.,Ltd. is a multinational member corporation of the Samsung Group since 1954 and has become one of the world's leading solid surface & quartz surface suppliers with its brands, Staron<sup>®</sup>, Tempest<sup>®</sup> and Radianz<sup>®</sup>.

Samsung SDI Co.,Ltd. have developed a proprietary technology for solid surface inspired from natural stone. It emulates the luxurious textures of nature but has excellent workability of high-tech construction materials.

Widely used for interiors of kitchen, bathroom, office spaces, and homes. The combination of high technology and high design in these materials can turn any remodeling project & new construction project into a fully-functional work of art. Samsung products are a top-of-the-line product which has been certified with ISO 9002 (International Quality Certification) and ISO 14000 (International Environmental Management certification). Furthermore, it has been certified with NSF51 (Food Zone), meeting the stringent standards for health and environmental science industries. Our high-quality solid surface & quartz surface are an integration of expertise and technology.



# staron®

Solid Surfaces

Your Story Teller

## Samsung Staron® Premium Solid Surface

The internal composition of Staron® is uniform and non-porous with luxurious soft textures. It is available in attractive natural textures of a wide range of colors and is a practical choice for kitchens, living rooms, bathrooms, and an artful addition to your living spaces.

The infinite design possibilities with Staron® can produce a variety of creative living spaces and cultures.



DEPENDABLE PERFORMANCE



KEEPING THE SURFACE HYGIENIC



DIMENSIONAL FLEXIBILITY



INFINITE RANGE OF COLORS



SEAMLESS



ILLUMINATING THE ENVIRONMENT



GLOBAL NETWORK



EXCELLENT QUALITY

### DEPENDABLE PERFORMANCE

Innovation meets superior standard  
Offering higher performance to suit commercial environments  
Homogenous material which allows the surface to be easily restored

### KEEPING THE SURFACE HYGIENIC

Designed with end-users in mind, your environment can be protected from the growth of bacteria or fungi  
Resistant to harsh chemicals  
Easy to maintain

## DEPENDABLE PERFORMANCE & KEEPING THE SURFACE HYGIENIC



\* HD Expo 2013, Las Vegas, USA



# DIMENSIONAL FLEXIBILITY & INFINITE RANGE OF COLORS



## DIMENSIONAL FLEXIBILITY

Bringing another layer of depth & sophistication  
Free forming of 3 dimensional representation is possible  
Excellent workability & precise expression of various design

## INFINITE RANGE OF COLORS

From natural to vivid palette tones, Staron® offers over 140 range of colors  
World's first "Jewel-like", Tempest®  
Collaboration with color trend experts to develop trendy color choices

\* HD Expo 2013, Las Vegas, USA



### SEAMLESS

Easily create variety of smooth forms that is like an artwork  
These subtle features increase the value of the completed design

### ILLUMINATING THE ENVIRONMENT

Excellent processability and backlighting to create various image and text related effects  
Brightness & Transparency can be adjusted by the modifying the thickness

# SEAMLESS & ILLUMINATING THE ENVIRONMENT

\* Milan Design Weeks 2013, Italy

#### GLOBAL NETWORK

Operating regional branch offices around the world in addition to global distribution networks

#### EXCELLENT QUALITY

High quality control policy & 10 years warranty  
Certified eco-friendly, Staron® creates for you a comfortable and safe environment

## GLOBAL NETWORK & EXCELLENT QUALITY



# STARON® BENEFITS



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# CASE STUDY



Healthcare



Hospitality



Retail



Restaurants



Workspace &  
Education



Wall-cladding



Kitchen & Bath



Creative Work





# HEALTHCARE



—  
Non-porous surfacing material

—  
Provide the highest material standard by eliminating the growth of germs, fungi or mold

—  
Maintain a hygienic setting with a touch of modern sophistication





**Hygienic**

- Non-porous surfacing material eliminates the growth of germs, fungi, or mold
- Seamless countertop installation provides another layer of assurance to prevent the growth of bacteria or fungi

**Dependable Standard**

- Class a fire rating standard
- Green-guard certified

**Enhancements**

- Incorporate unique colors and designs to bring elevate the environment
- Thermoforming allows 2D/3D designs

1 Samsung Medical Center  
 2 Operation Room, Taiwan  
 3 Reception, St. Joe's Healthcare, USA





1, 2 Samsung Medical Center  
3, 4 Wall, Wash Bowl, Geneva University Hospital, Geneva, Switzerland  
5 Riverside Dental, Queensland, Australia (Designed by Anthony Connor, Ego Squared Design)

6, 7 Nurse's Room Geneva University Hospital, Geneva, Switzerland  
8 Wall, Wash Bowl, Geneva University Hospital, Geneva, Switzerland  
9, 10 Wash bowl, Creche Les Tilleuls Prilly, Switzerland





1, 2 Wall, Furniture, Dental Hygiene School, Switzerland (Designed by Bern Smile)  
3 Riverside Dental, Queensland, Australia (Designed by Anthony Connor, Ego Squared Design)

4 Table, Nurse's Room, Medical Center, Switzerland  
5 Countertop, Bowl, Medical Center, Switzerland  
6 Furniture, Medical Center, Switzerland





1,2 DMACC



2



3

3 Wash Room, Prive Hospital, Trappes, France





# HOSPITALITY



Bring unparalleled design & style options to accentuate the decor space

Exceed beyond the original standard

Deliver warm ambience





**Innovative Designs**

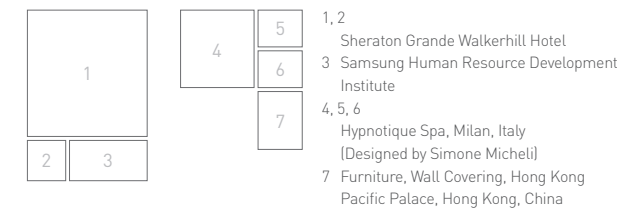
- Endless styling options
- Seamless surface material integration
- With over 140 color offerings, transform the area with a touch of vibrancy and sophistication

**Exceed Beyond the Original Standard**

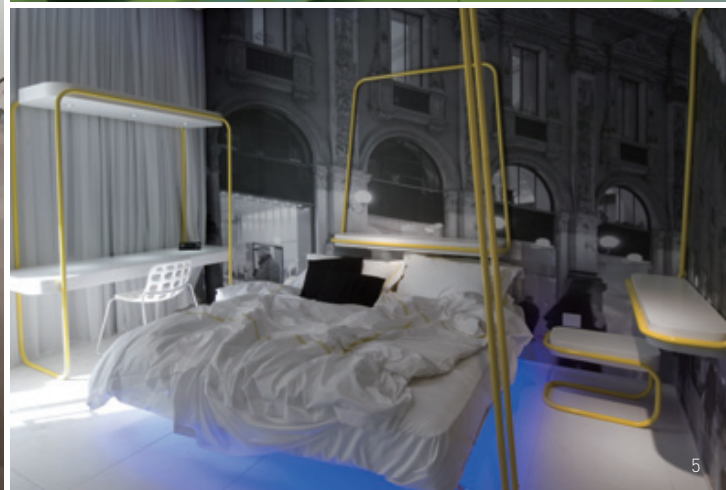
- Easy to restore keeping the surface completely new
- Resistant to hard impacts and scratches
- Staron® can be thermoformed to accomodate unique space offerings
- Resistant to high temperatures

**Warm Ambience**

- Make an unforgettable impression to prospective clients
- Accentuates the existing space



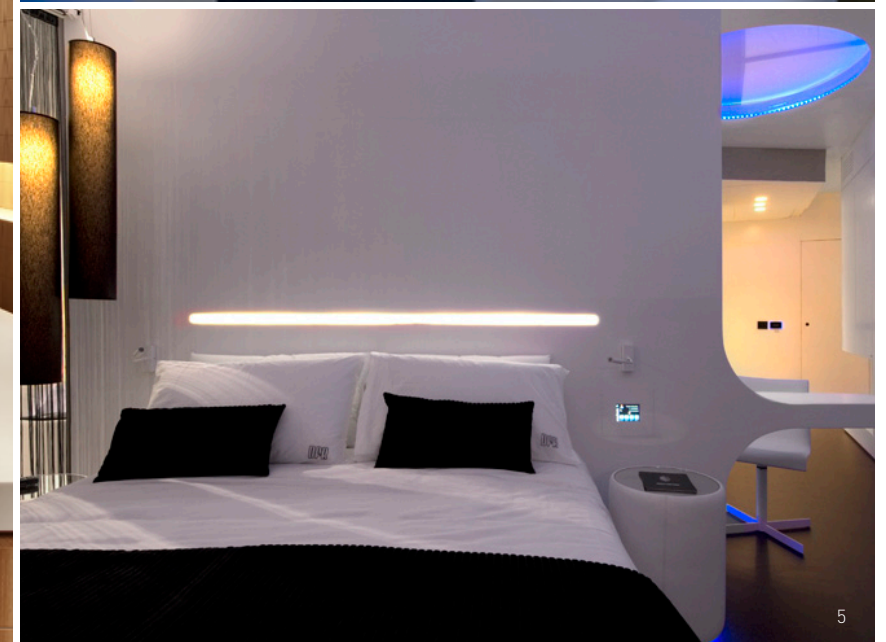




1, 2, 3 Samsung Human Resource Development Institute  
4, 5, 6, 7, 8 Town House, Milan, Italy (Designed by Simone Micheli)

9 Hotel Bar, Switzerland





1, 2, 3 Wall, Furniture, Sheraton Grande Walkerhill Hotel

4, 5 Furniture, Wall, Hotel, Italy (Designed by Emanuele Svegli)





1, 2, 3, 4 Samsung Human Resource Development Institute

5 Countertop, Wash Bowl, Svietti Hotel, Germany





# RETAIL



—  
Establish unique identity

—  
Durable solution

—  
Thermoformable





**Distinction**

- Showcase the items in a chic fashion to appeal to greater number of clients
- Depending on the use of color, it allows products to stand out. Or if only displaying one product, it creates a sleek space to highlight the product.
- Inspiring designs can further enhance corporate identity

**Durable Solution**

- Due to homogeneous color offerings, merchandising area can be easily restored
- Withstands against scratches

**Thermoformable**

- Apply conceptual designs into real-applications
- Incorporate unique shapes and design







1, 2 Kuho Fashion Showroom, Centum City  
3 Samsung D'light Showroom  
4 Heidi.com Showroom, London 100% Design 2013, UK (Designed by Zaha Hadid)

5 Beauty Salon, Luzern, Switzerland  
6, 7, 8 Moochi Kiosk, Sydney, Australia (Designed by Mima Design Pty Ltd.)  
9 Heidi.com Showroom, London 100% Design 2013, UK (Designed by Zaha Hadid)





1, 2, 3 The Public Transport Authority Information Centre, Perth, Australia [Designed by Iredale Pedersen Hook Architects]

4, 5 Gallery Cafe at Westfield, Chermside, Australia [Designed by NOSUCHstudio collective]





1, 2, 3 14th International Architecture Exhibition, Korean Pavilion, la Biennale di Venezia, Italy







1, 2, 3 Interior Wall, Furniture, Olympic Stadium, Berlin, Germany





1, 2, 3 Exhibition Booth, Shelf, Display, Smoking Lounge, Romania

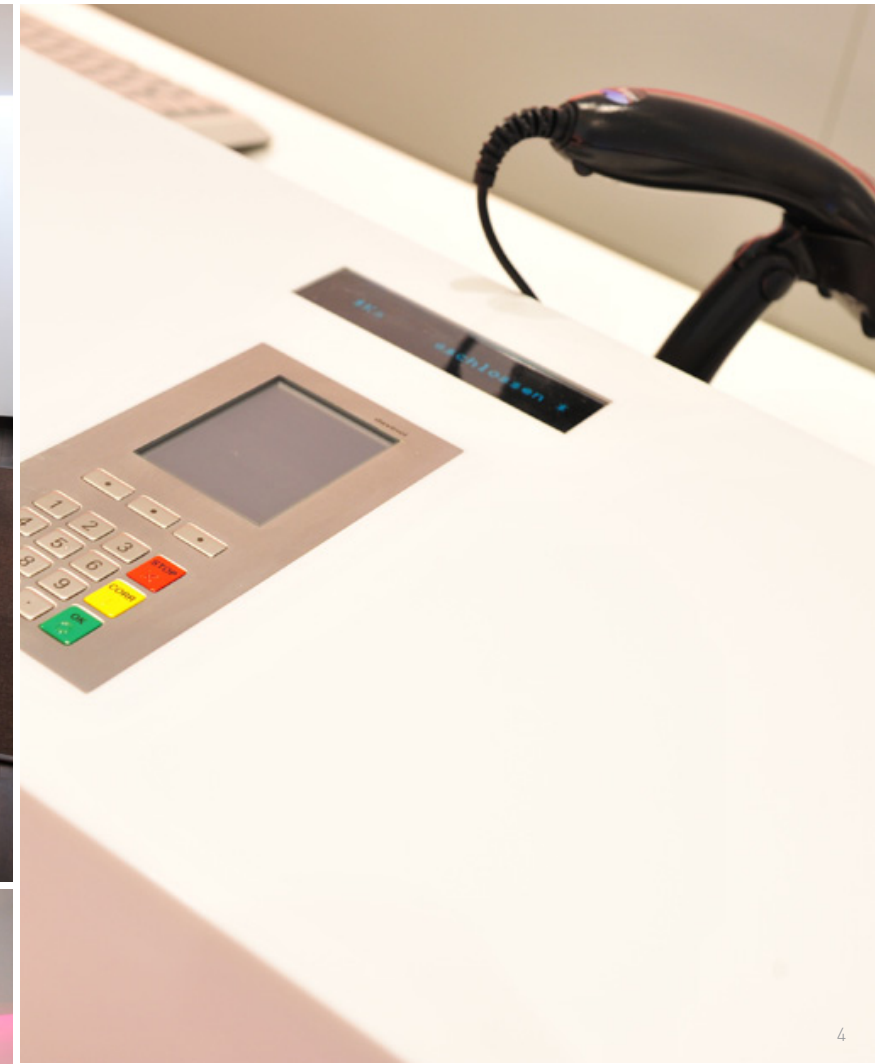




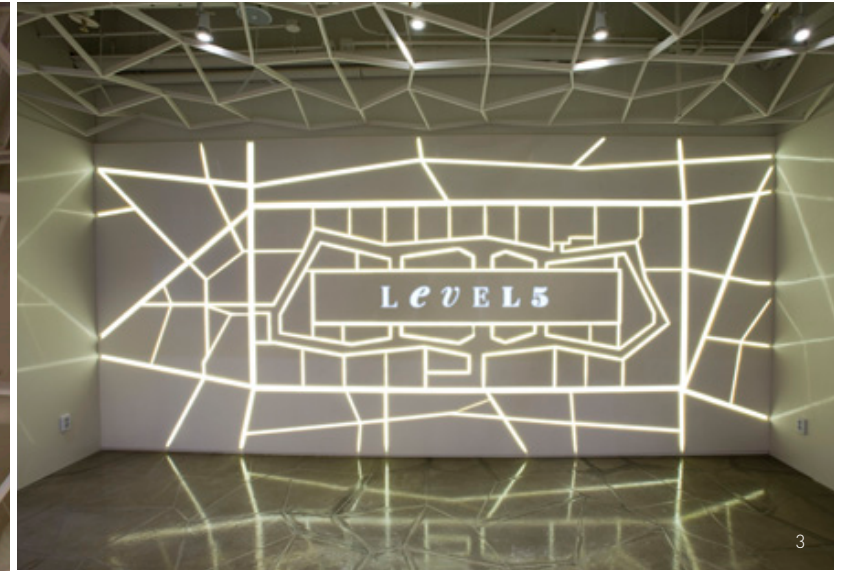
1 Stair, Wall, Sunrise, Switzerland  
2,3 Table, Shelf, Wall, Counter, Sunrise, Switzerland



4 Display, Sunrise, Switzerland  
5 Stair, Shelf, Wall, Counter, Sunrise, Switzerland







1, 2, 3, 4, 5 Deco Frame, Desk, Moon square Myungdong





1, 2, 3 Wall, Column, Countertop, Beauty Salon, Luzern, Switzerland



2



3





1, 2, 3 Wall, Display Stand, Sportalm, Dusseldorf, Germany

4, 5 Desk, Optic 2000 Avry Centre, Matran, Switzerland





1, 2, 3 Samsung D'light Showroom

4, 5 Display Stand, Journeys Friend, London, UK





1, 2, 3 Retail of Tomorrow, Heidi.com Shop, Switzerland (Designed by Zaha Hadid)





# RESTAURANTS



Spice up the dining room area with assortment of 140 color offerings

Designed with end-users in mind, Staron® is NSF 51 certified

Dependable solution





**Plateful of Colors**

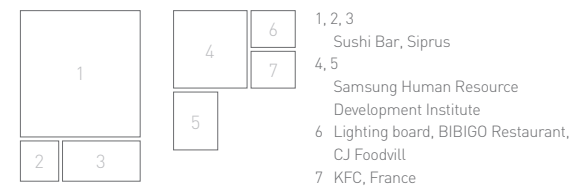
- From light to dark tone hues, Staron® can match with existing decor space and theme
- Deliver a modern approach to enhance the social and dining environment

**Meeting the Highest Standard**

- NSF 51 certified
- Class a fire rating certified
- SCS certified

**Dependable Solution**

- Non-porous surfacing material eliminates the growth of bacteria, fungi or mold
- Resistant to harsh chemicals
- Non-toxic material



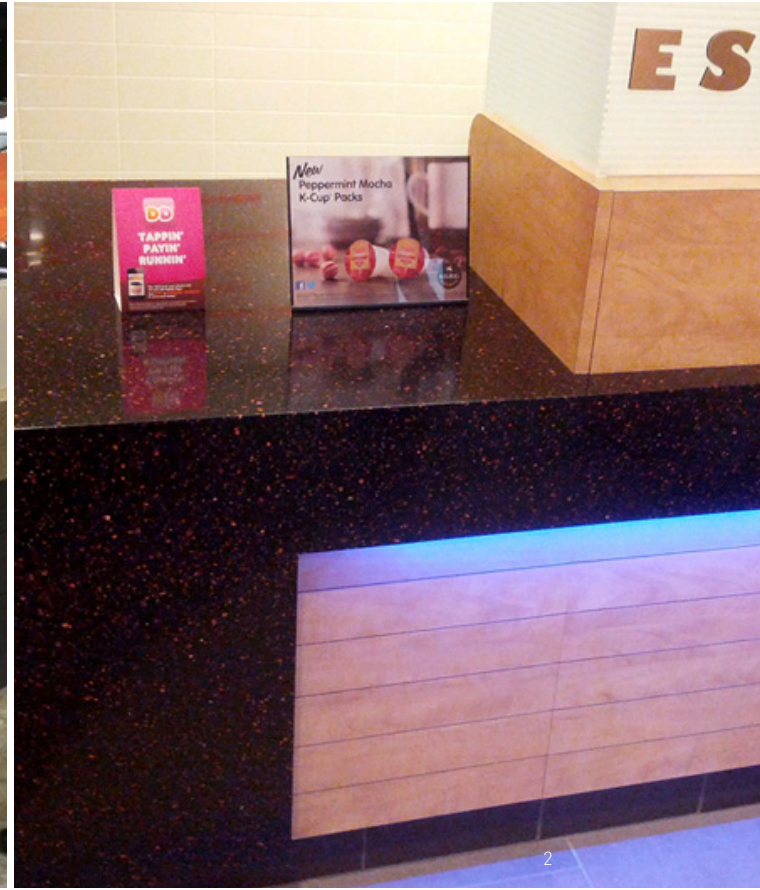




1, 2 Cafeteria, Raemian Gallery, Samsung C&T  
3 Food Court, The University of Edinburgh, UK  
4 Beluga Bar

5 Cafeteria, Samsung Electronics R5  
6, 7 Sushi Bar, EURŌSTA & Yo Sushi, London, UK  
8 Bar, Au Petit Grillon Corpataux





1, 2, 3, 4 Countertop, Dunkin Donuts, Washington DC, USA

5 Cafeteria, Edingburgh University, Scotland, UK





1 Mcdonalds, France



2 Countertop, Samsung Electronics R5

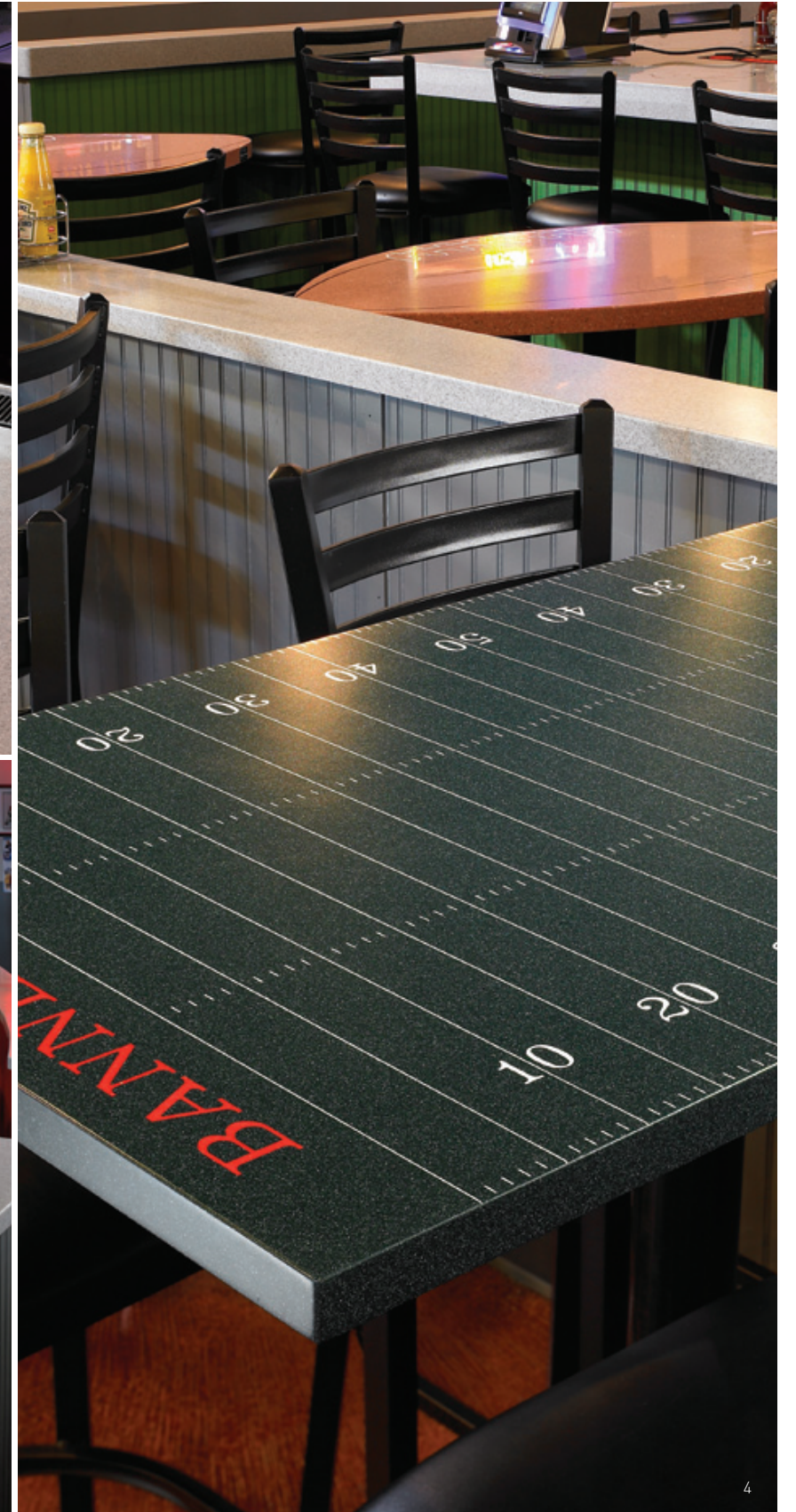


3, 4 Countertop, KFC, France



4









# WORKSPACE & EDUCATION



- Innovative design meets inspiring ideas
- Dependable solution
- Seamless integration





**Innovative Design Meets Inspiring Ideas**

- Provide a pleasant working environment

**Dependable Solution**

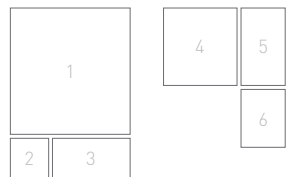
- Resistant to scratches  
- Each work station or desk area will have exact matching color, providing uniform design and color tone

**Seamless Integration**

- Conference room tables can be easily seamed together without inconspicuous joints



- 1 Dongdaemun Design Plaza & Park (Designed by Zaha Hadid)
- 2,3 Schaffhauser Kantonalbank, Thayngen, Switzerland (Designed by Gehri Architects)
- 4,5 Sky Lounge, Dongdaemun Design Plaza & Park (Designed by Zaha Hadid)
- 6 DP9 Office, London, UK (Designed by dMFK Architects)







1, 2 Meeting Area, Australia (Designed by Craig Yelland, Plus Architecture)  
3 Information counter, Library & Learning Centre, New Vienna University of Economics, Austria (Designed by Zaha Hadid Architects)  
4 Lobby, Meeting Area, Samsung Electronics R5

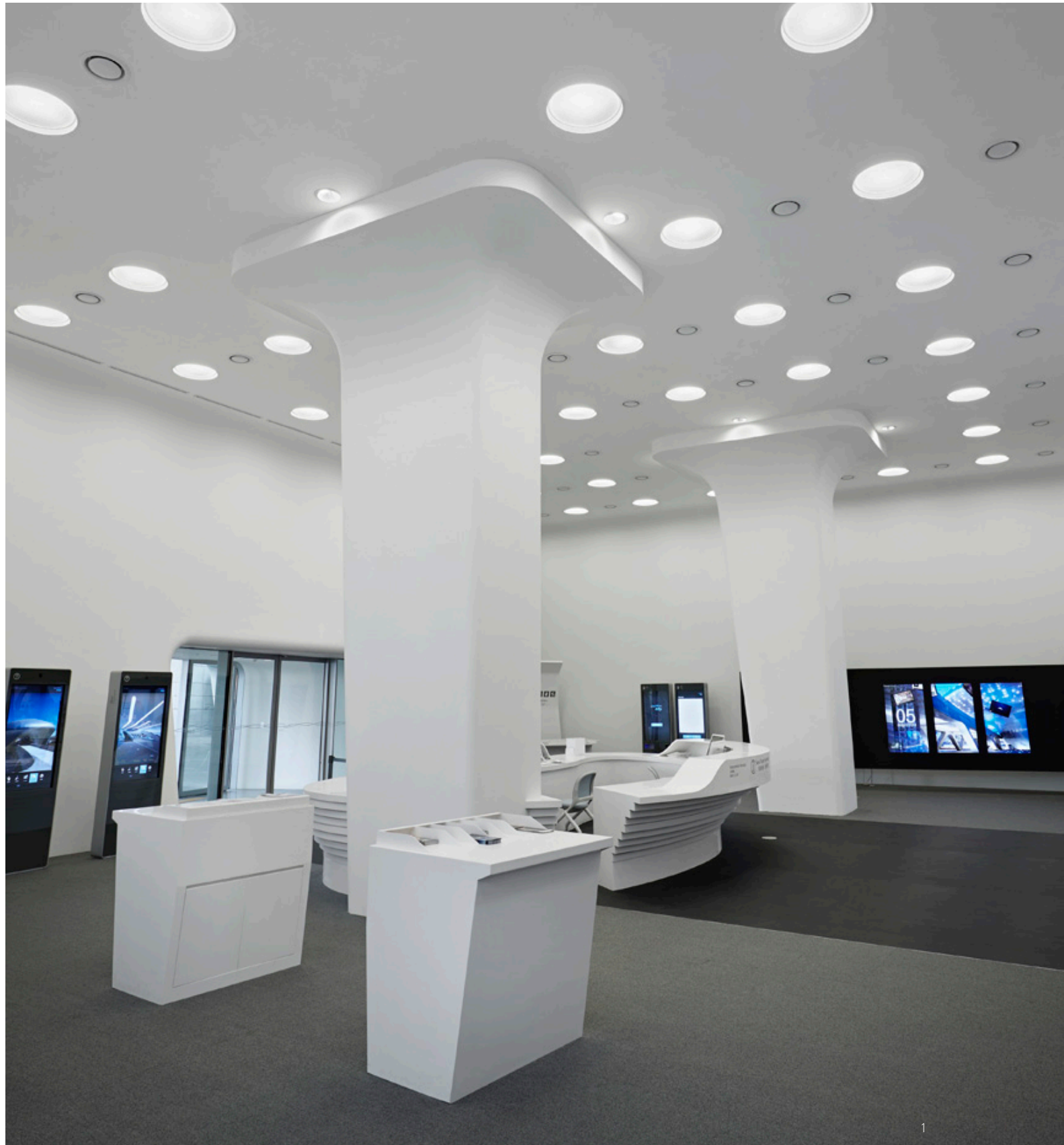
5 Lamkli Architecture Office, Switzerland  
6 Money Exchange, Eurostar, London, UK  
7, 8 Hall, Seoul City Hall





1, 2, 3 Reception, Australia (Designed by Penelope Kendal)

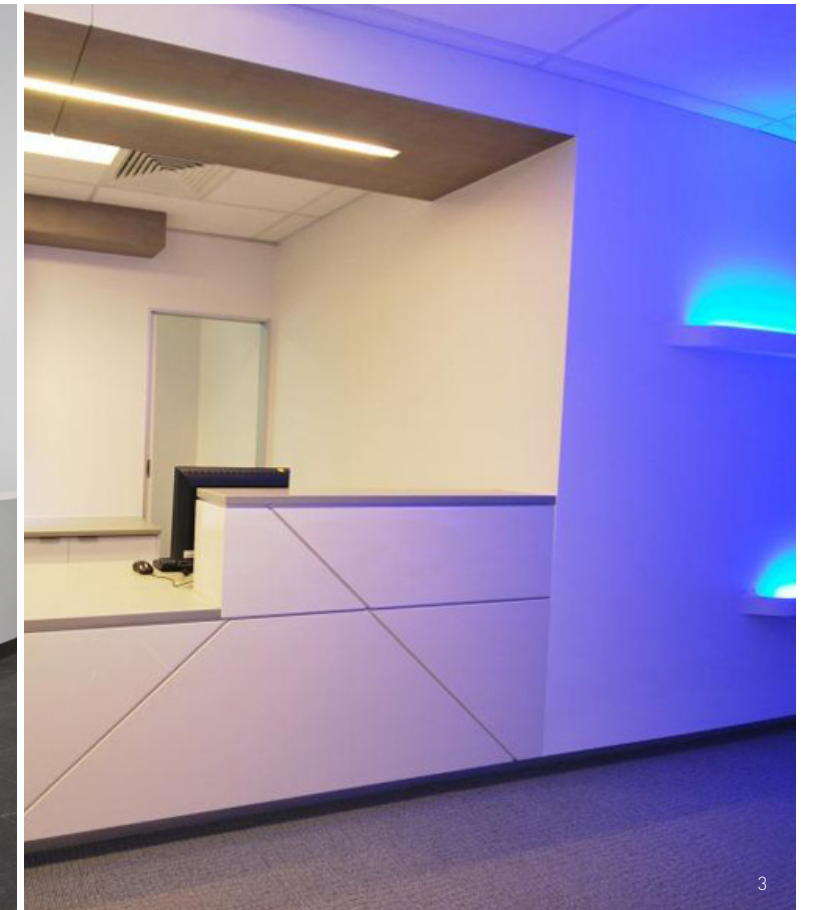




1 Dongdaemun Design Plaza & Park (Designed by Zaha Hadid)



2



3



4

2 Info Desk, Raemian Gallery, Samsung C&T, Seoul  
 3 Reception Desktop & Countertop, Australia (Designed by Harry Camm, Kdwdesign)  
 4 Milestone Student Hau, Vienna, Austria





1 School Science Lab, Launceston Christian School, Australia (Designed by Trisha Pickersgill, Prime Design)  
 2 Reception Desktop & Countertop, Australia (Designed by Harry Camm, Kdwdesign)

3 Print Station, The Western Centre for Health Research and Education, Australia (Designed by Melina Thomas & David Collins, Silver Thomas Hanley)





1

1 Wall Covering, Seout City Hall  
2,3 Wall Covering, Samsung Electronics R5



2

4 Wall, Pillar, Samsung Human Resource Development Institute



3



4





1, 2 Workspace, USA (Designed by Peter Carman), (Fabricated by Wave Surfaces)

3, 4 Info Desk, Incheon International Airport





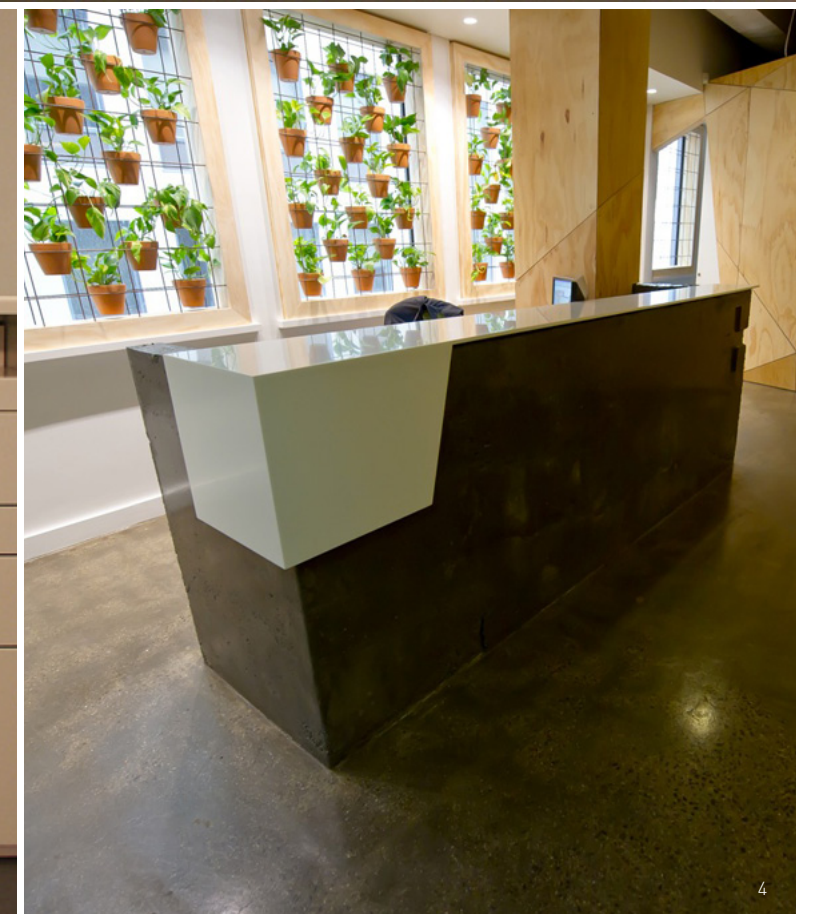
1 Furniture, NZZ Shop, Switzerland



2



3



4

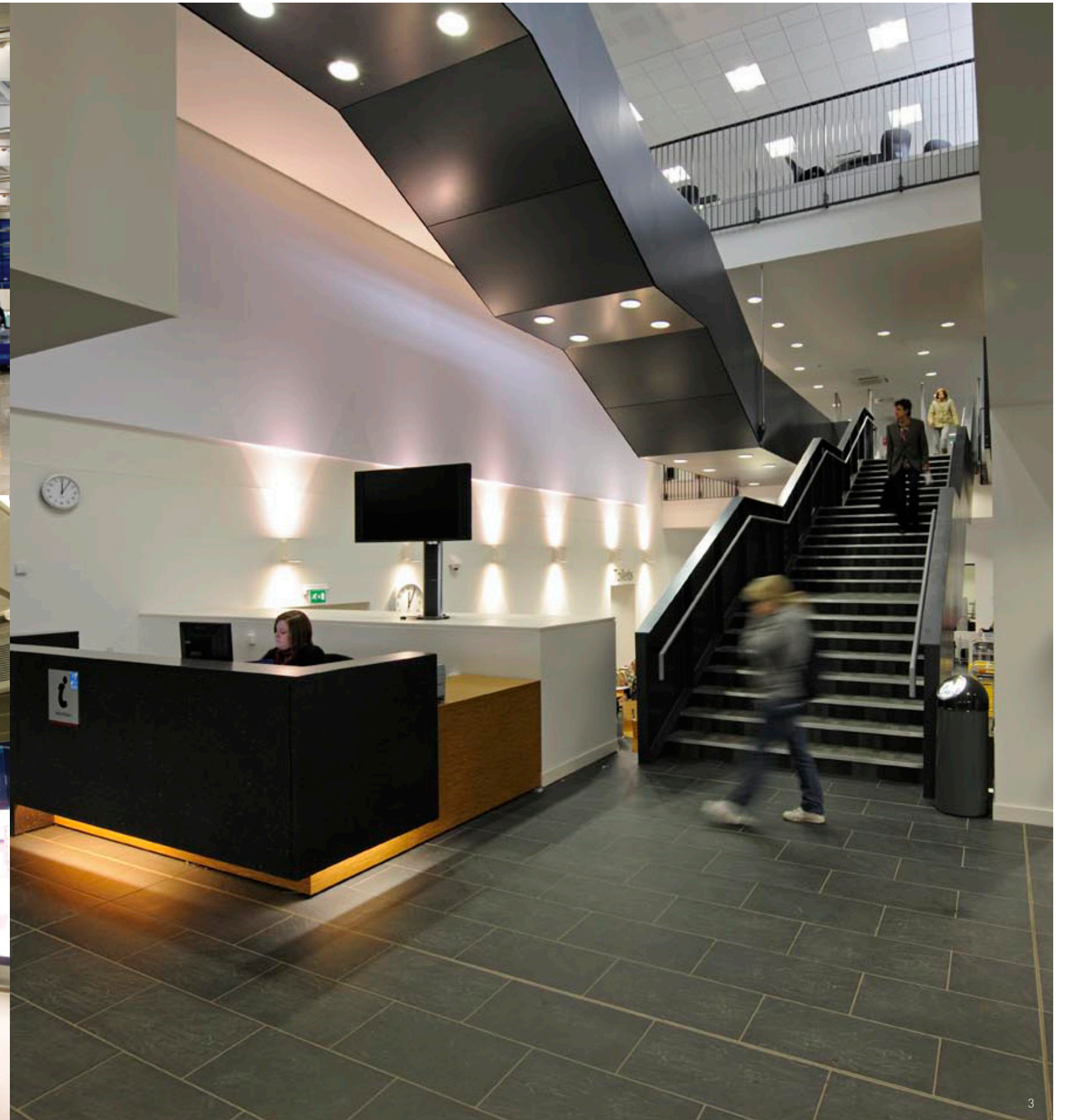
2, 3 Furniture, Raiffeisen Bank, Switzerland  
4 Reception Desk, Australia (Designed by Craig Yelland, Plus Architecture)





1, 2, 3, 4 Aerospace Museum, France





1 Heathrow International Airport, UK  
2 Money Exchange, Eurostar Station, UK

3 University of Edinburgh, UK





# WALL-CLADDING



-  
Versatile solution

-  
Make an impression with stylish interior design

-  
Push beyond the boundaries





**Versatile Solution**

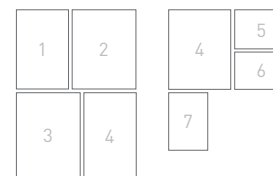
- Staron® is also available in (1/4") thickness for interior wall-cladding applications
- Resistant to scratches and harsh chemicals

**Make an Impression with Stylish Interior Design**

- Incorporate 2D/3D designs
- Panels may be thermoformed to accommodate curved walls or to wrap interior columns

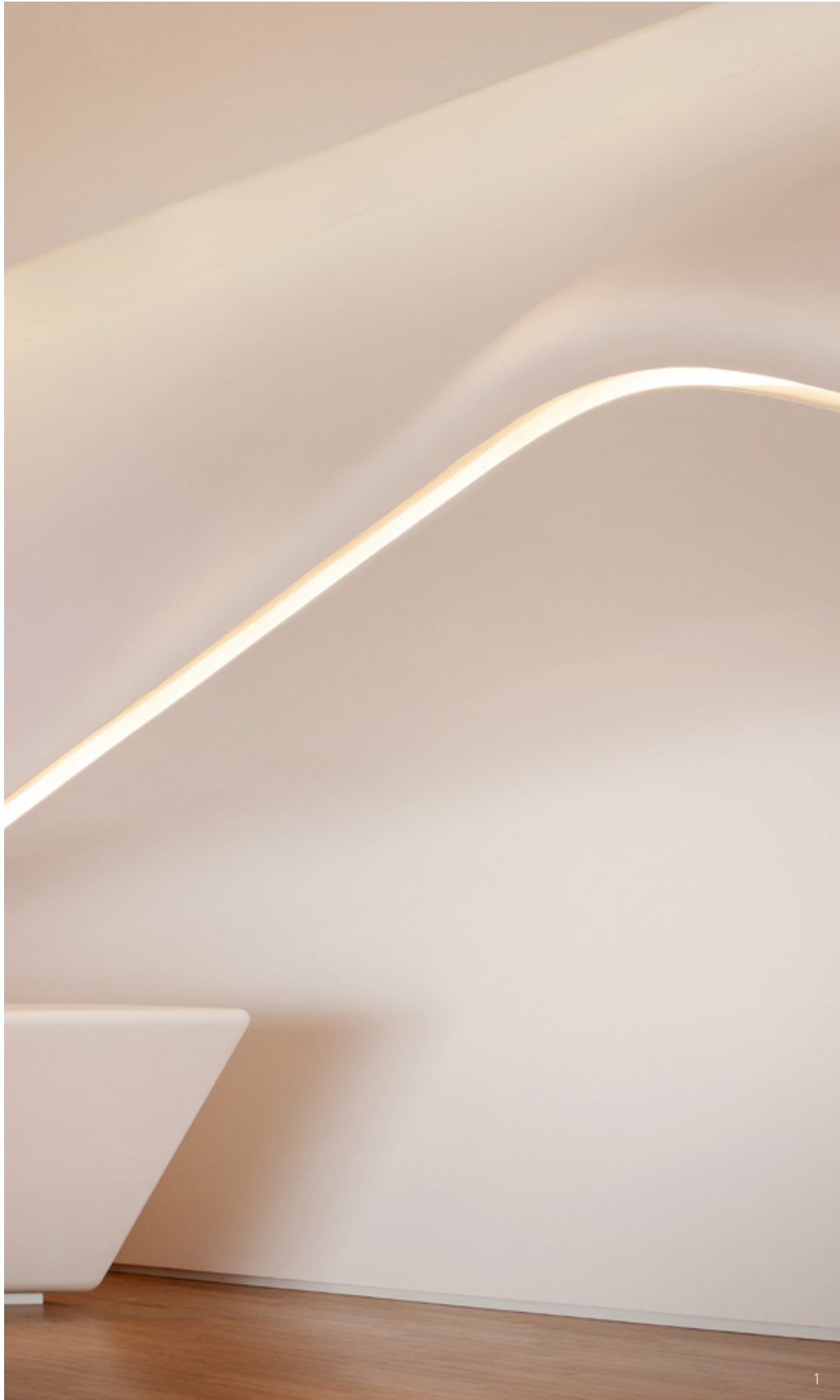
**Push Beyond the Boundaries**

- Staron® solid-surface material can create unlimited design possibilities



- 1 Library & Learning Centre, New Vienna University of Economics, Austria [Designed by Zaha Hadid Architects]
- 2 Seats Cubes, Milestone Student Hall, Vienna, Austria
- 3 Dongdaemun Design Plaza & Park [Designed by Zaha Hadid]
- 4 Seoul City Hall
- 5 Samsung Human Resource Development Institute
- 6 L'Archivolto Staron Gallery, Milan, Italy [Designed by Simone Micheli]
- 7 KUHO Fashion Shop
- 8 Deco Frame, Noon Square Myungdong





1, 2, 3, 4 Dongdaemun Design Plaza & Park (Designed by Zaha Hadid)





1, 2, 3, 4 Wall, L'Archivolto Staron Gallery, Milano, Italy [Designed by Simone Micheli]

5 Milano Design Week 2011, Milano, Italy [Designed by Corvino+Mulari]

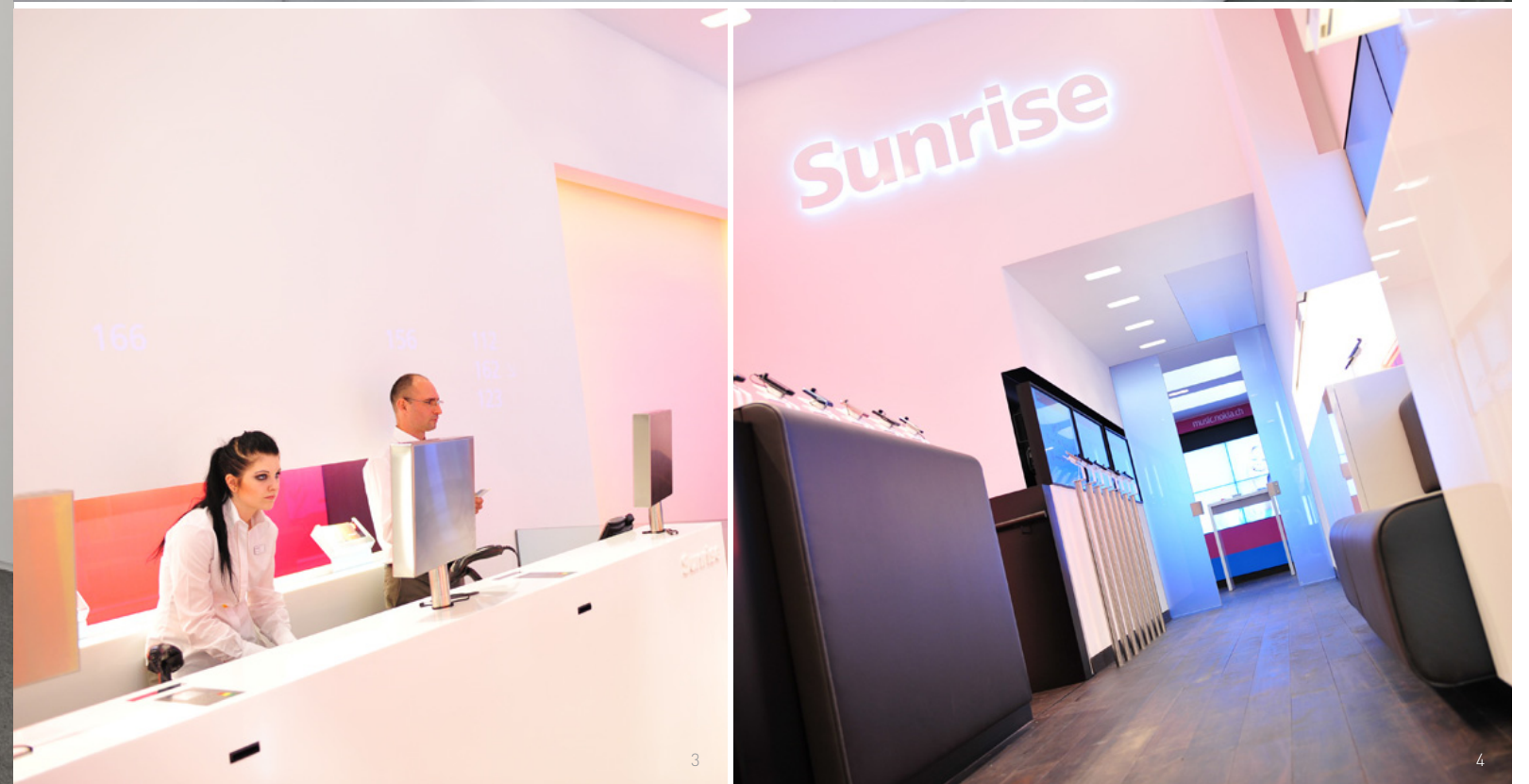




1 Hall Wall, Samsung Electronics R5



2



3

4

2 Wall Covering, Samsung Life HQ Office  
 3 Wall, Counter, Sunrise, Switzerland  
 4 Table, Shelf, Wall, Counter, Sunrise, Switzerland





1, 2, 3, 4 Samsung Human Resource Development Institute

5 Wall Covering, Renault Samsung Automobile





1, 2 Moscow Theater, Russia







## KITCHEN & BATH



Enhance the focal point of the social gathering area

Non-porous material

Timeless design





**Safe**

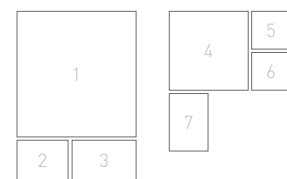
- Non-porous material that deters bacteria growth
- Easy to maintain a clean space

**Solid**

- Strong material that is not affected by temperature changes
- Easy surface restoration option that keeps the surface feeling "new"

**Diverse**

- Endless variety of styling forms
- Smooth seamless surface detailing of styled forms
- Beautiful color and patterns for assortment of design choices



1, 2  
Kitchen Countertop, Australia  
[Designed by Lenka Jankovocova,  
Find & Design]  
3  
Town House, Milan, Italy  
[Designed by Simone Micheli]  
4, 5  
Kitchen Countertop, Australia  
[Designed by Lenka Jankovocova,  
Find & Design]  
6, 7  
Kitchen Countertop, Sink, Salone  
Internazionale del Mobile 2010, Milan, Italy





1 Town House, Milan, Italy (Designed by Simone Micheli)



2 Kitchen countertop, Town House, Milano, Italy (Designed by Simone Micheli)



3, 4 Countertop, Euro Cucina 2010, Milano, Italy







1, 2 Countertop, Australia [Designed by Tony Warren, TMA Kitchen Design Pty Ltd]

3, 4 Sub Zero Showroom, Jakarta Design Center, Jakarta, Indonesia, Distributor\_PT.Techno  
5 Countertop, Australia [Designed by Lenka Jankovcova, Find&Design]





1, 2, 3, 4, 5 Countertop, Australia [Designed by Tony Warren, TMA Kitchen Design Pty Ltd]

6 Countertop, Salone Internazionale del Mobile 2010, Milano, Italy

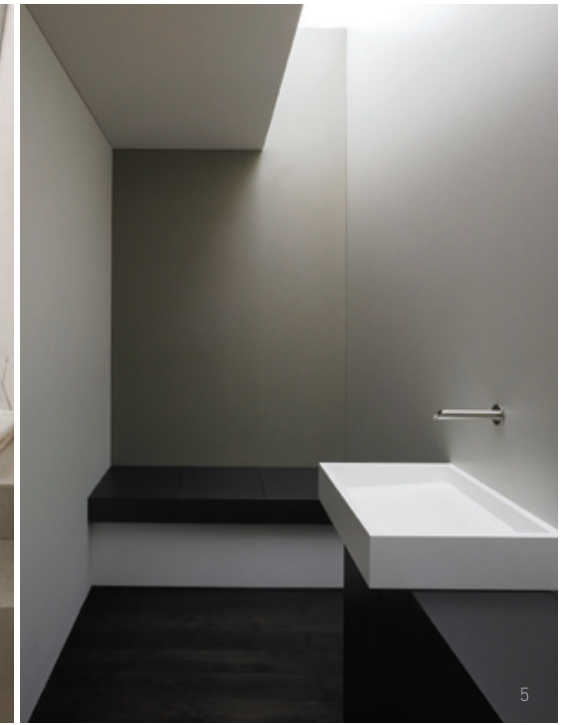




1, 2 Kitchen, Australia (Designed by Lee Hardcastle, Enigma Interiors)

3, 4 Countertop, Colombes, France  
5, 6 Countertop, Salone Internazionale del Mobile 2010, Milano, Italy





1 Wash Bowl, Countertop, Oesch Bad, Interlaken, Switzerland  
 2, 3 Wash Bow, Bathtub Dealim Bath  
 4 Bathtub, Wash Bowl, Sheraton Grande Walkerhill Hotel

5 HD Expo 2013, Las Vegas, USA  
 6 Wash Bowl, Switzerland (Designed by Stuber Team)  
 7 Shower Booth, Town House, Milan, Italy (Designed by Simone Micheli)

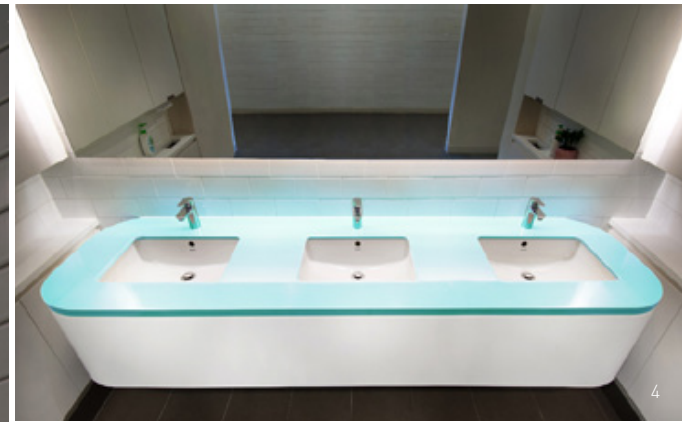




1 Bath tub, HD EXPO 2013, Las Vegas, USA  
2 Faucet, HD EXPO 2013, Las Vegas, USA

3, 4 Bowl, HD EXPO 2013, Las Vegas, USA

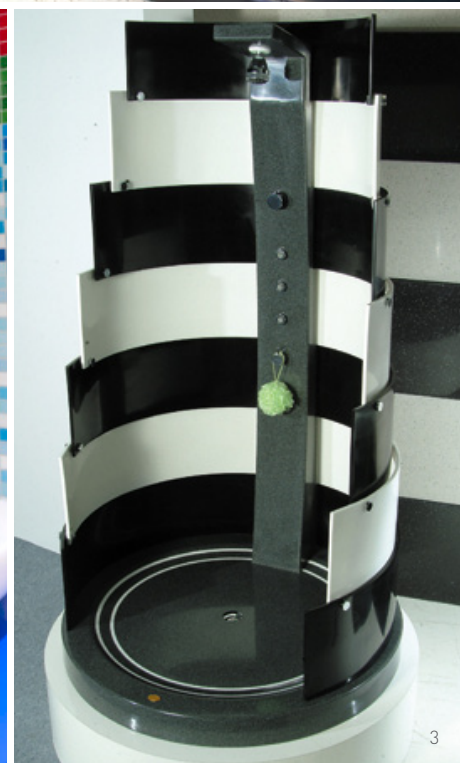




1 Wall, Daelim Apartment, Seoul  
2 Bath tub, Countertop, Wall, Lotte Apartment  
3 Wash Bowl, Samsung Human Resource Development Institute

4 Wash Bowl, Samsung Human Resource Development Institute  
5 Wash Bowl, Oesch Bad, Interlaken, Switzerland  
6 Wash Bowl, Samsung Office





1 Shower Booth, Town House, Milano, Italy [Designed by Simone Micheli]  
 2 The Rainbow Bathroom, Australia [Designed by Royston Wilson, Royston Wilson Design]

3 Shower Booth, Kyunghyang Housing Fair 2004  
 4 Heart Vanity, Australia [Designed by Kitchens by Kathie]





1, 2, 3 Bath tub, Furniture, Bowl, Axia collection





## CREATIVE WORK

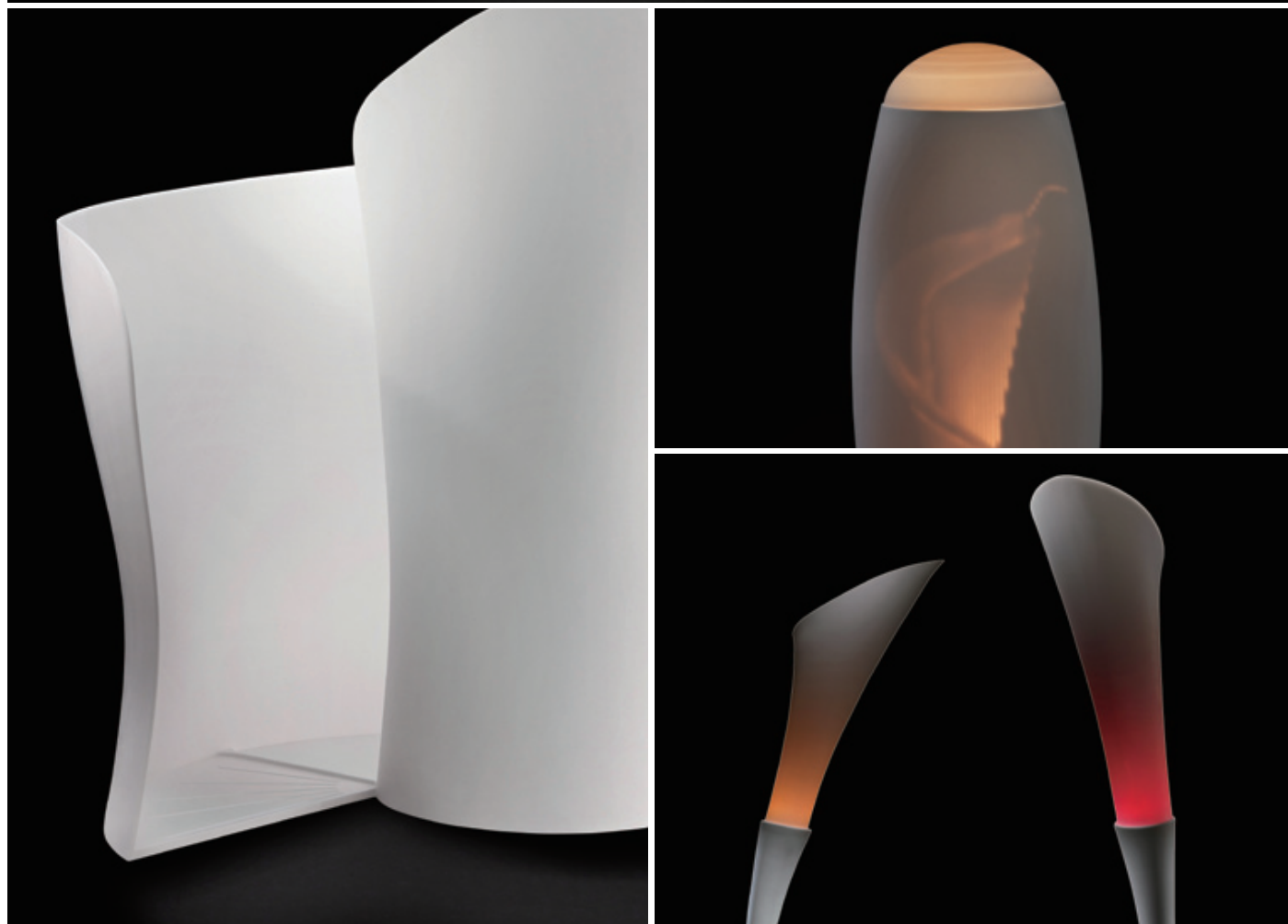


—  
Color range that is not limited by the times

—  
Design that is not limited in its form

—  
Distinctive designs utilizing light





**Color**

- Infinite color range

**Design**

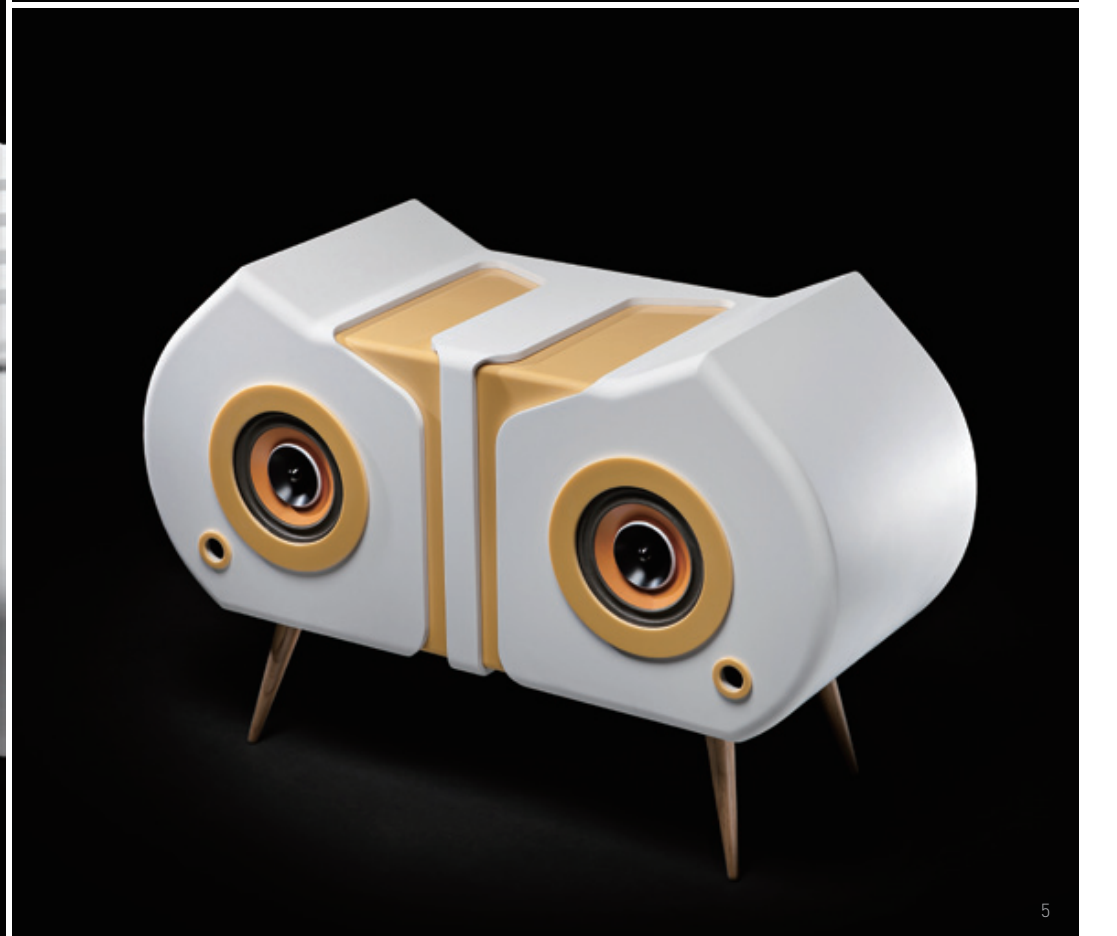
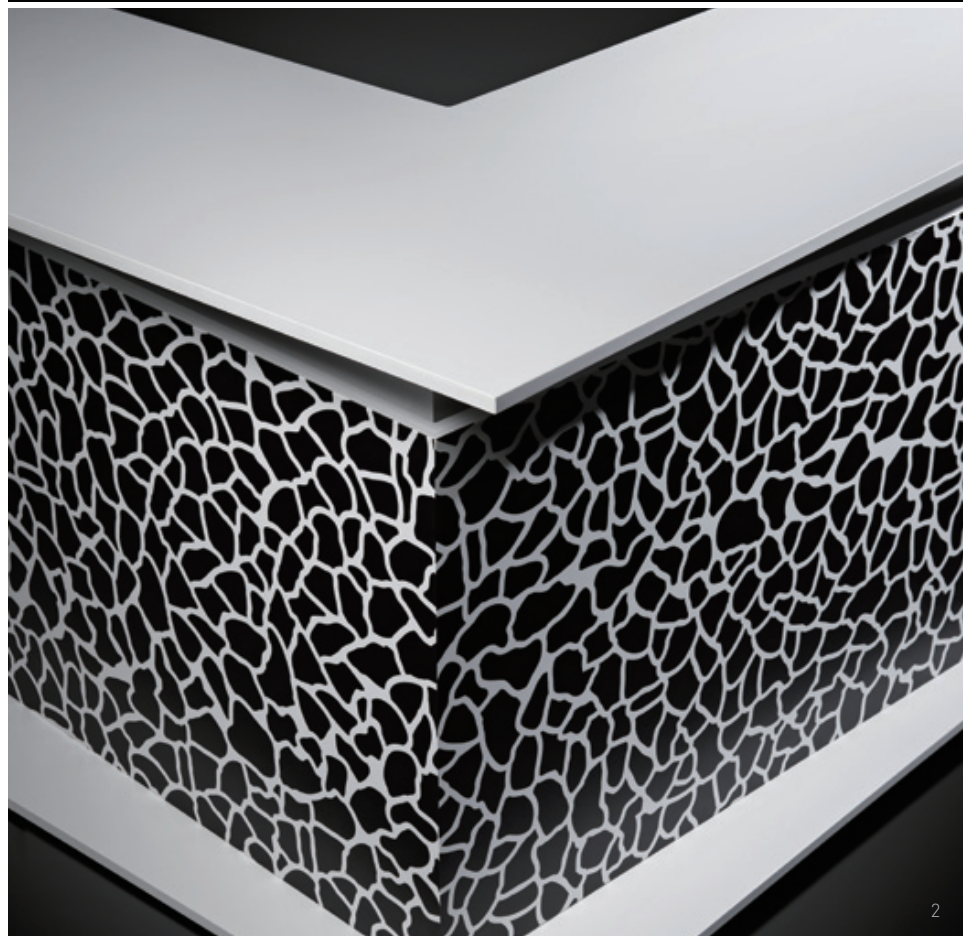
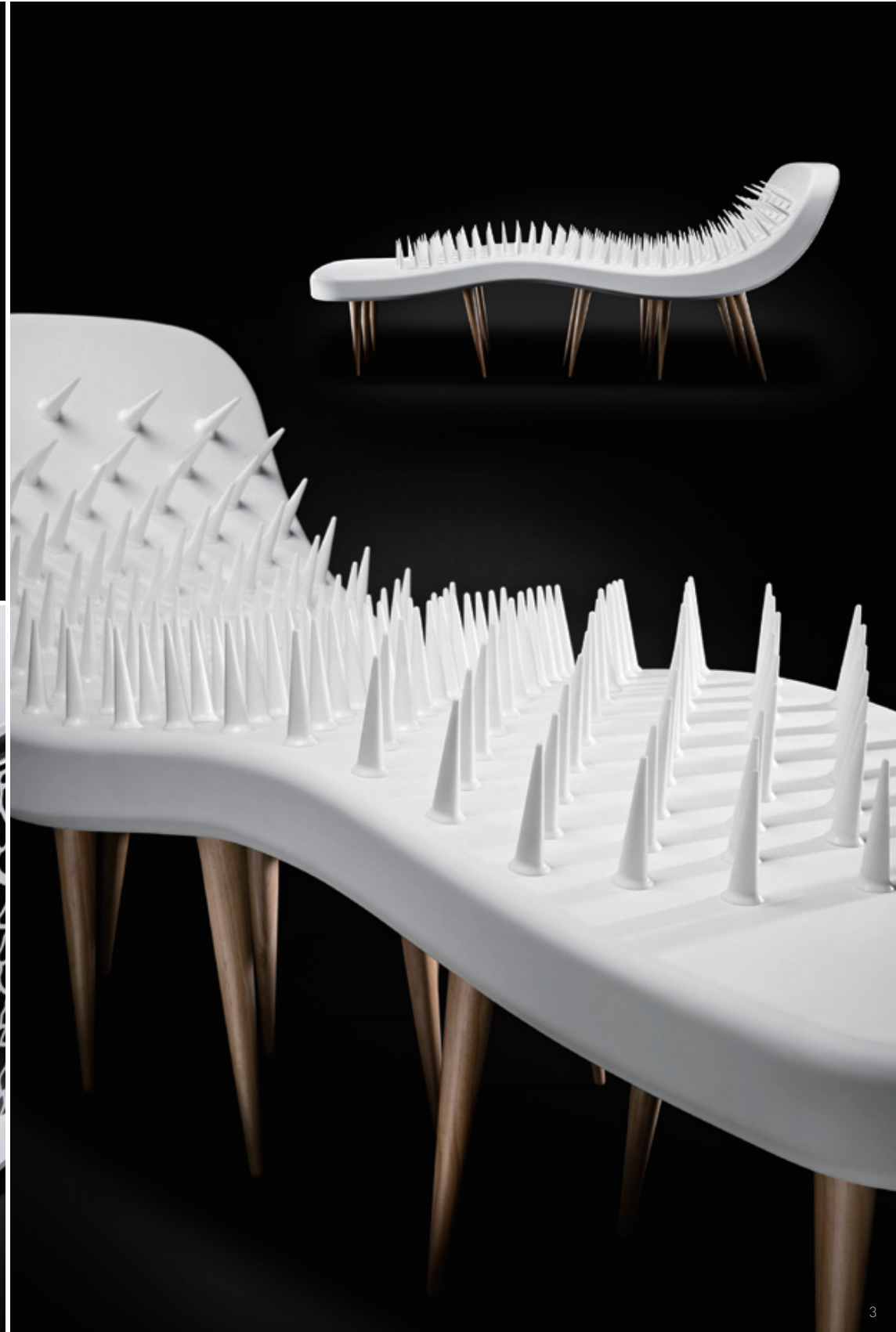
- CNC, thermoforming, seamless

**Light**

- Using light transmissions and its excellent processability, it is possible to express with a variety of texts and images

- |   |   |   |
|---|---|---|
| 1 | 5 | 6 |
| 2 | 3 | 7 |
|   | 4 |   |
- 1, 2, 3, 4  
HD Expo 2013, Las Vegas, USA
  - 5 Milan Design Week 2013, Milan, Italy  
[Designed by Mac Stopal]
  - 6 Milan Design Week 2012, Milan, Italy  
[Designed by Przemyslaw Mac Stopal]
  - 7 Lounge Furniture, Milan Design Week 2013,  
Milan, Italy  
[Designed by GLAD Ltd.]





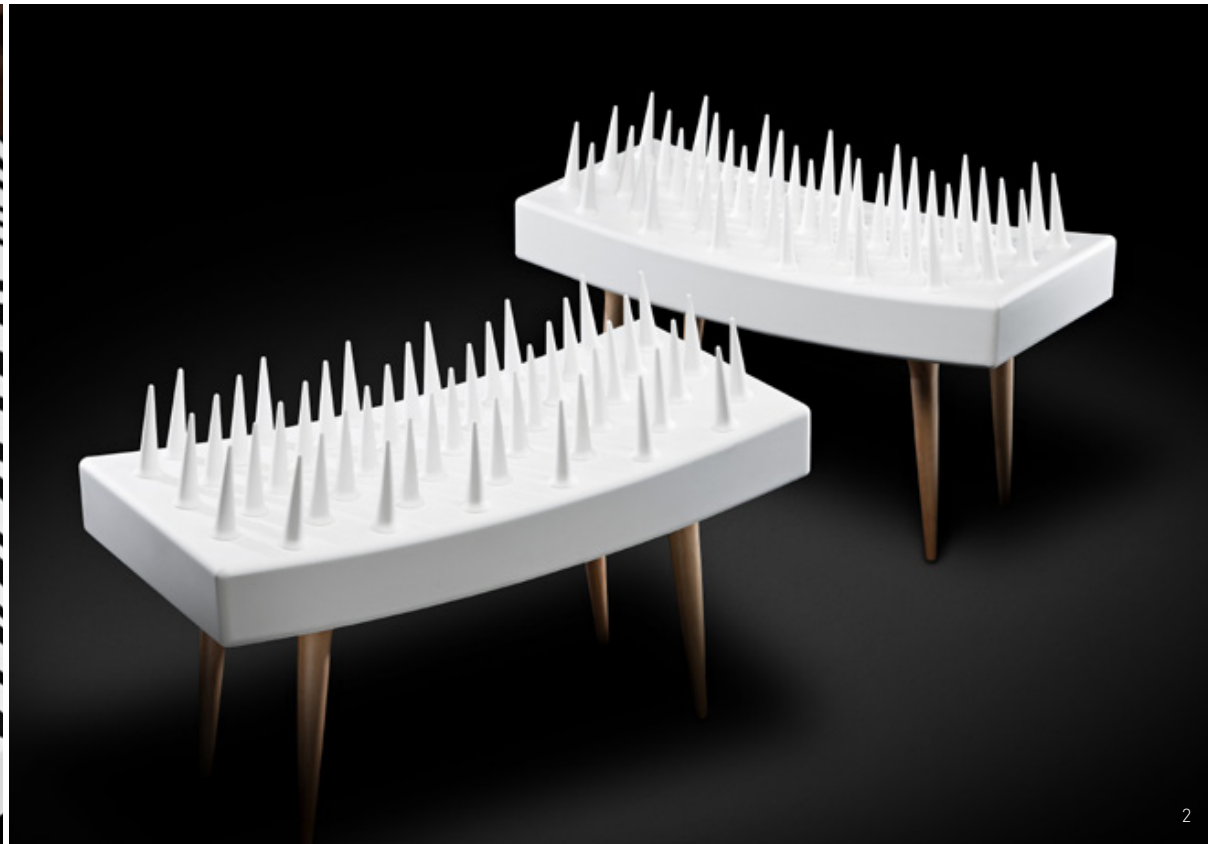
1 Zebra Sofa, HD Expo 2014, Las Vegas, USA  
2 Giraffe Bar Table, HD Expo 2014, Las Vegas, USA  
3 Hedgehog Sofa, HD Expo 2014, Las Vegas, USA

4 Humpback Whale Island Kitchen, HD Expo 2014, Las Vegas, USA  
5 Owl Speaker, HD Expo 2014, Las Vegas, USA





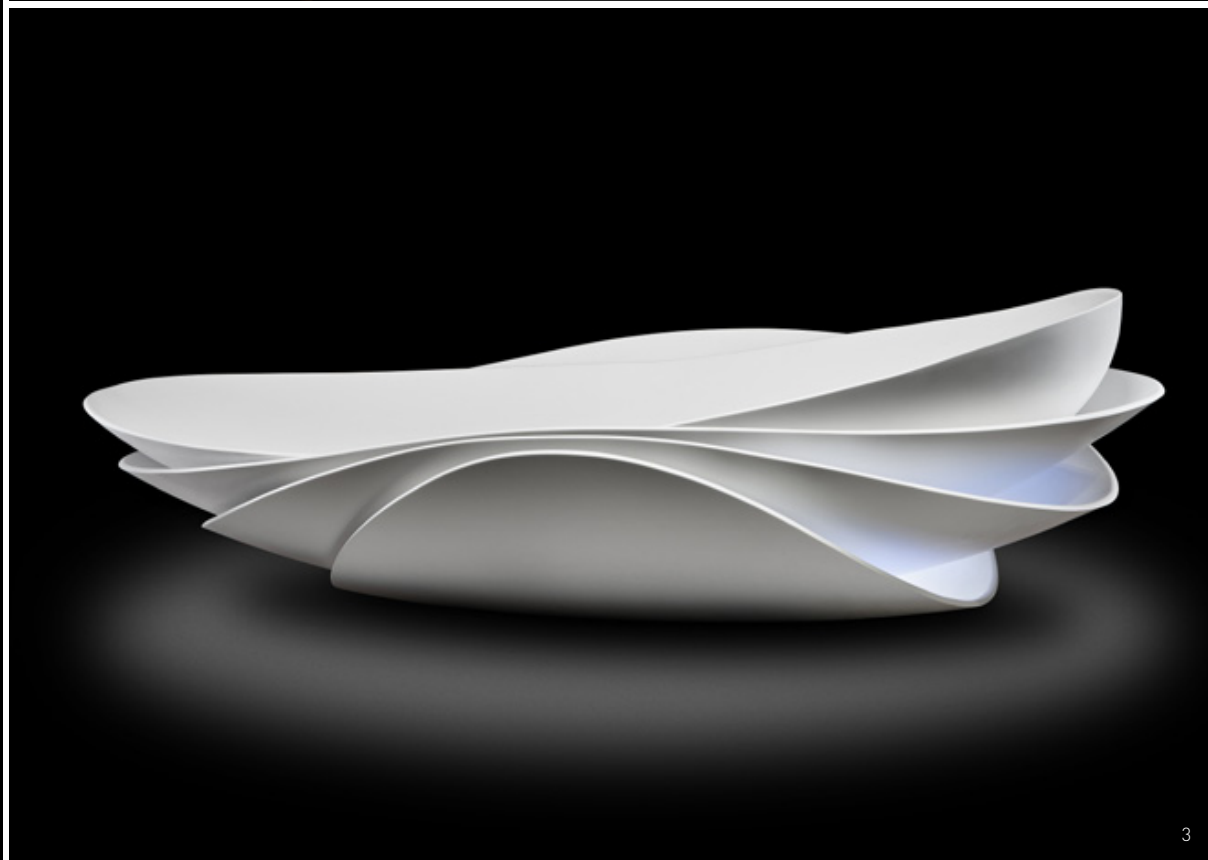
1



2



4



3



5

1 Zebra Table, 100% Design 2014, London, UK  
 2 Hedgehog Sofa, 100% Design 2014, London, UK  
 3 Armadillo Bathtub, 100% Design 2014, London, UK

4, 5 Killer Whale Kitchen Island, 100% Design 2014, London, UK





1



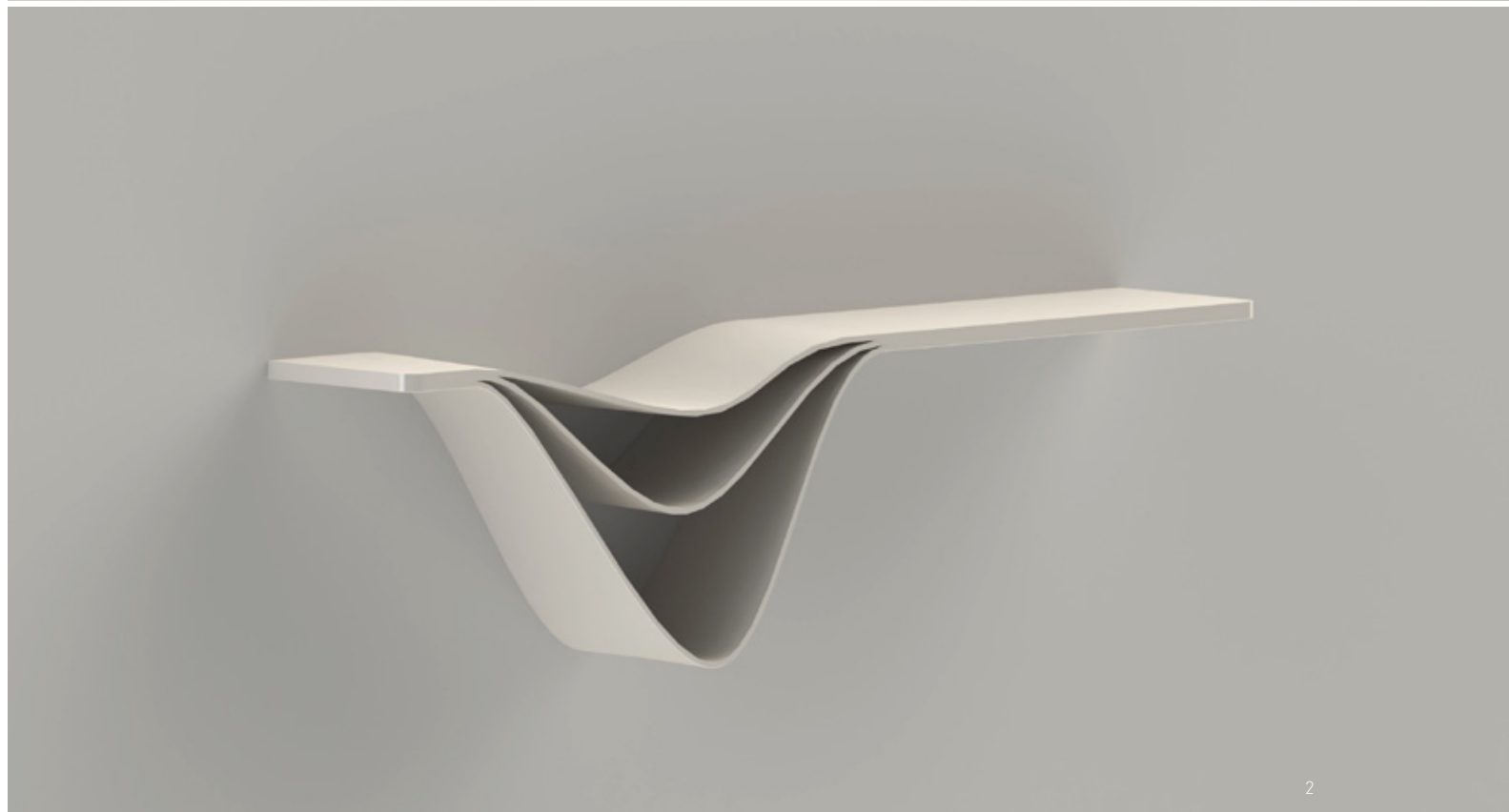
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3

1, 2, 3 'Retail of Tomorrow', 100% Design 2013, London, UK, Designed by Zaha Hadid Architects

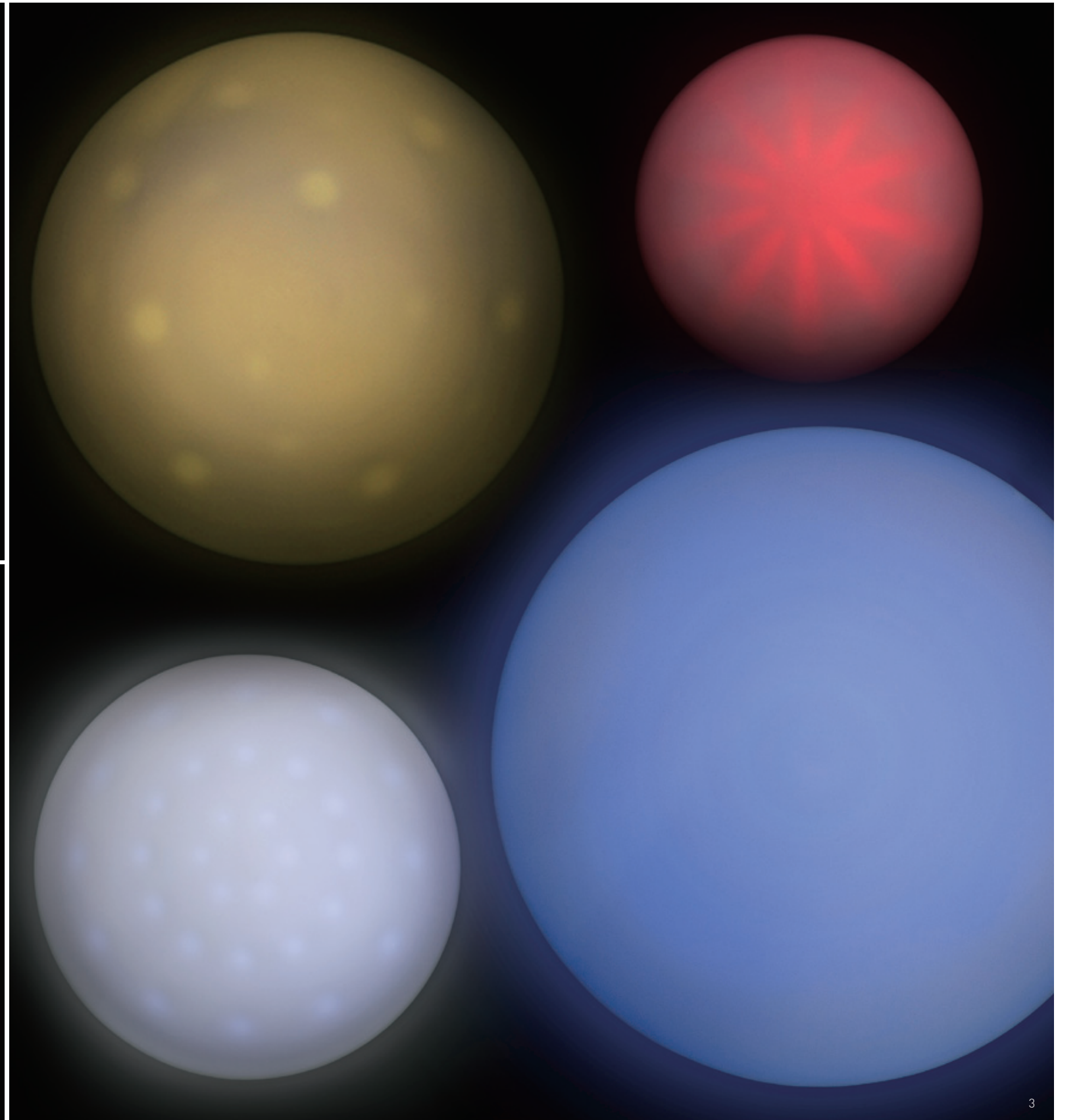




1 Crystal Wedge Table, Australia, design by Tommy Ashby  
2 Shelf, Australia (Designed by Callum Campbell Design)

3 Crystal Wedge Table, Australia (Design by Tommy Ashby)





1, 2, 3 Moon Pot Lighting 'Beauty of Korea', Milan Design Week 2013, Milano, Italy (Designed by Jihyun kim)





1, 2 Desk, Milan Design Week 2013, Milano, Italy [Designed by GLAD Ltd.]

3, 4 Lighting, Milan Design Week 2013, Milano, Italy [Designed by GLAD Ltd.]





1

1 'Zero Zero', L' Archivolto, Milan Design Week 2009, Milano, Italy (Designed by Ataurique)

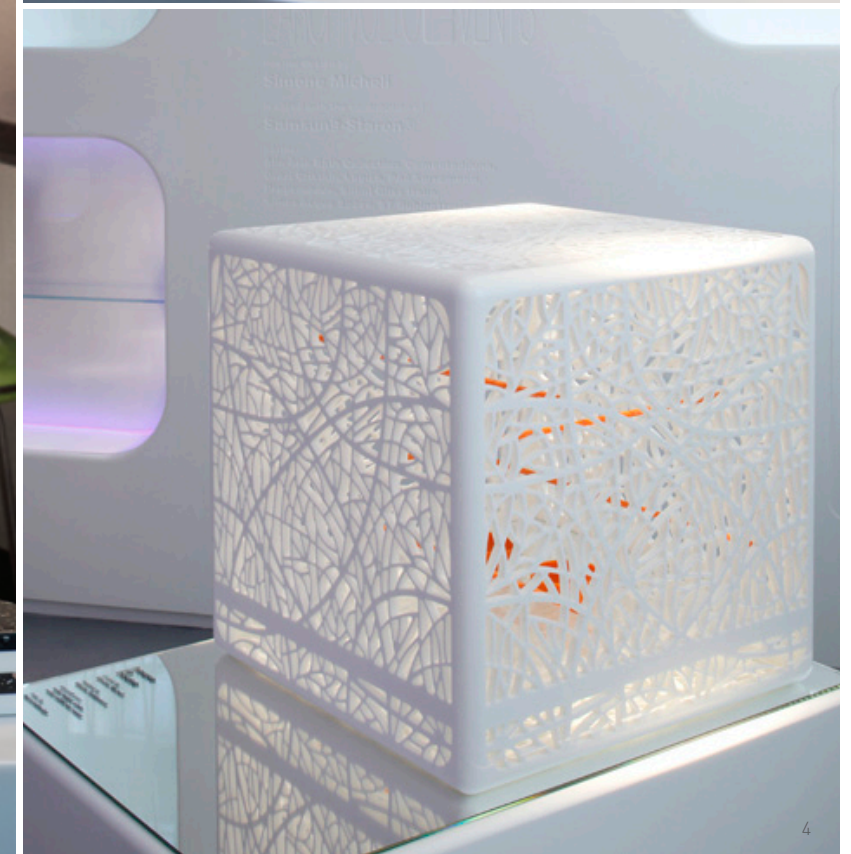


2

2, 3 L' Archivolto, Milan Design Week 2009, Milano, Italy (Designed by Peter Carman)  
4 'House in House', L' Archivolto, Milano, Italy, Project by Simone Micheli



3



4





1



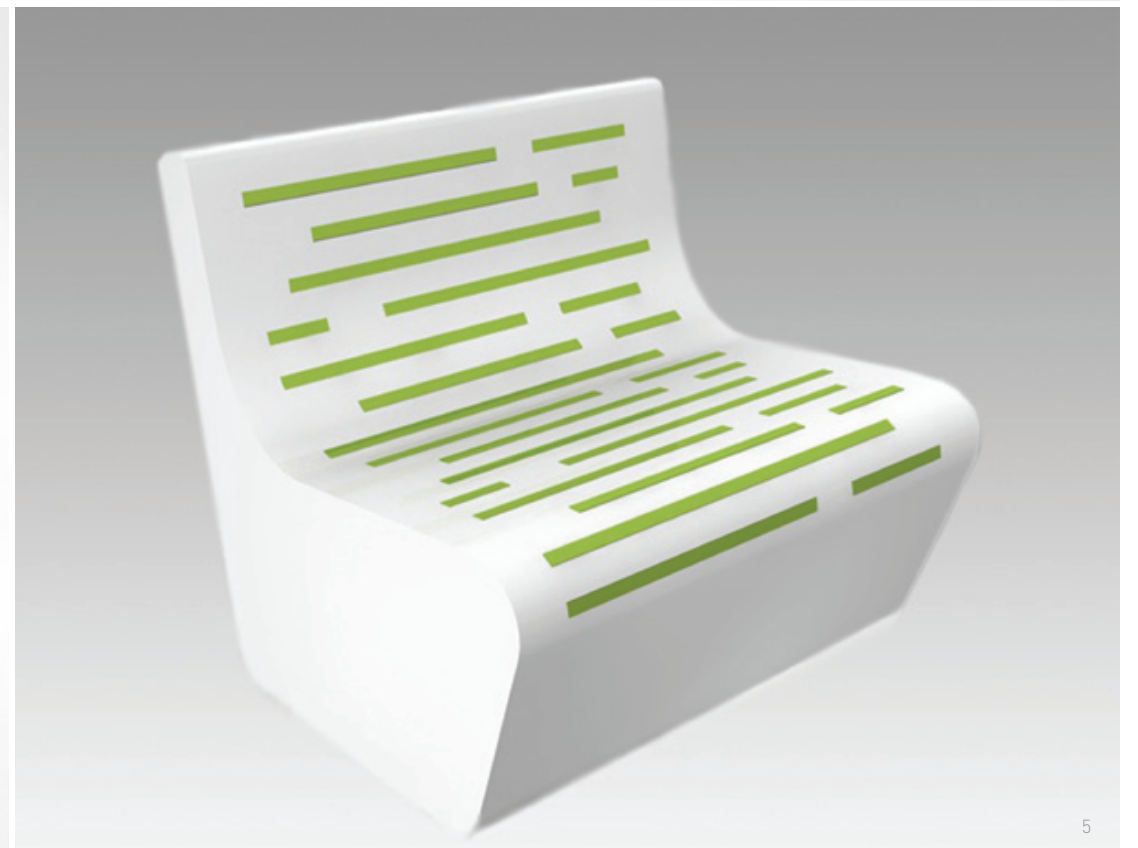
3



2



2



5

1, 2, 3, 4 'Zero Zero', L' Archivotto, Milan Design Week 2009, Milano, Italy [Designed by Bertina]

5 Bench, Milano Design Week 2011, Milano, Italy [Designed by Corvino+Muttari]





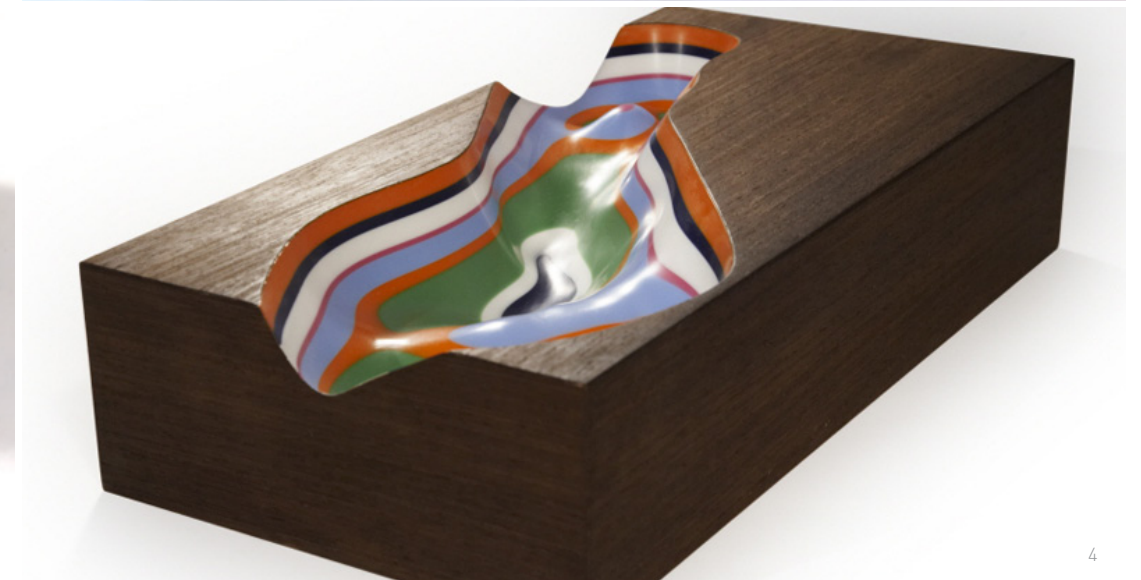
1



2



3



4

1, 2, 3, 4 Designed by Markus Benesch





1 Chair, HD EXPO 2013, Las Vegas, USA



2 Reception Desk, Seoul City Hall



3 High-End Speakers, Melbourne, Australia (Designed by Stuart Ralston, SGR Audio Pty Ltd)



# TECHNICAL DATA



## Specification

Pattern	Width (mm)	Thickness (mm)	Length (mm)
Solid, Sanded, Aspen	760	6	2,500
		9	3,070
		12	3,680
Pebble	760	9	3,070
		12	3,680
Quarry, Metallic, Tempest, Mosaic	760	12	3,680

## Certification

Staron®, a brand recognized for top quality and technology

- NSF 51 for Food Zone Sanitation Certification
- GREENGUARD Eco-certification
- HB Eco-certification
- ASTM E84 Certification
- ISO 9001 System Certification
- ISO 14001 System Certification
- NAHB for Sinks and Lavatories Certification
- IAPMO for Sinks and Lavatories Certification
- CSA for Sinks and Lavatories Certification



## Comparing Staron® to Other Products

Staron® is durable but also easy to work with. The differentiating advantages are its reliable quality.

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
Non-porous 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

## Chemical Testing Results

We conducted chemical tests on various surface contaminations prone to exist. 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

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



### Results

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



## Flame/Smoke Testing Results

Staron® was tested for fire/flammability which yielded the following results: 10 for flame spread, 10 for smoke density. Compared to other materials such as gypsum boards, laminates, and hardboards. Staron® has low flammability and safe for families and suitable. In addition, the smoke density is lower than most materials and responds quickly to fire retardants.

- **Testing method**

- ASTM E84 (Surface burning characteristics of building materials)

- **Staron® results**

- Class A (Flame spread 10, Smoke density 10)

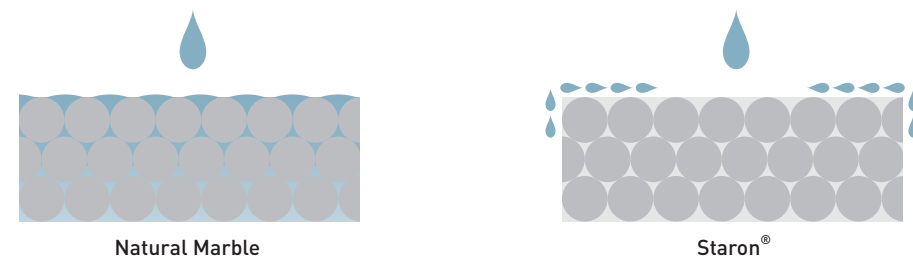
- **Other test results**

Item	Flame Spread	Smoke Density
Drywall (Gypsum board)	15	0
Wood particle board	155	200
Staron®	10	10
Glass fiber panels	70	500+
Laminates, plastics	70	35
Hard board	150	400

## Key Feature

### Hygienically safe material

Unlike natural stones, Staron®'s non-porous surfaces prevent bacteria or fungi growth, and has low moisture absorption rate.



## Bacterial Growth Testing Results

A common bacteria, pseudomonas aeruginosa, was applied to the surface of Staron® acrylic solid-surface and left untouched. After 4 weeks, the area was tested for bacterial growth; the results showed no bacterial proliferation.

- **Testing 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

- **Staron® results**

- Zero traces of growth

Culture Time	0 Week	1 Week	2 Week	3Week
Result	0	0	0	0

## Fungi Growth Testing Results

- **Testing method**

- ASTM G 21 (Determining resistance of synthetic polymeric materials of fungi)
- Strains: Aspergillus Niger (ATCC 9642)  
 Penicillium Pinophilum (ATCC 11797)  
 Chaetomium Globosum (ATCC 6205)  
 Gliocladium Virens (ATCC 9645)  
 Aureobasidium Pullulans (ATCC 15233)
- Culture condition: 84.2 +/- 1.8°F (29 +/- 1°C), 90%RH, 21 days

- **Staron® results**

- Zero traces of growth

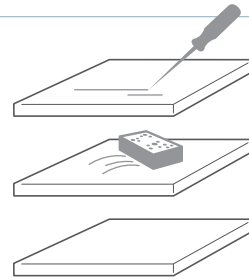
Culture Time	0 Week	1 Week	2 Week	3Week
Result	0	0	0	0



## Technical Solution

### Smart easy restoration material

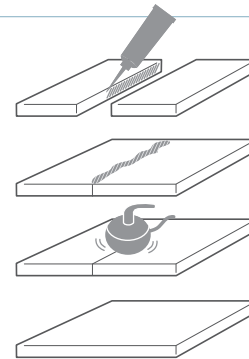
You can prolong the newness of your product over a long period of time with easy maintenance that will keep seamlessly.



### Invisible joints

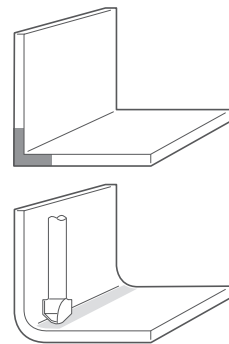
Use the adhesive Methacrylate to adhere the joints and sand the surface for visibly seamless completion of the construction.

When a color matched adhesive is used, seamless joints can be created with sanding.



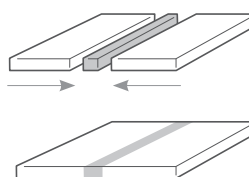
### Easy cutting edges

Staron® is easy to handle even on difficult, narrow or curved edges where wood working tools can be used to cut edges.



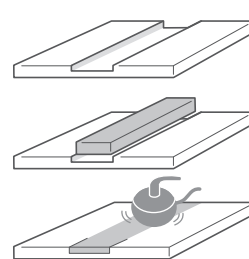
### Various processing methods 1

Staron® solid surface allows you to seamlessly integrate multiple colors that can be bonded together to create a new design pattern.



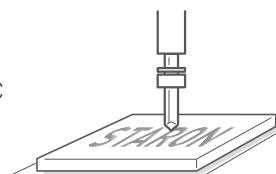
### Various processing methods 2

When adding letters or patterns, use an inlay technique by cutting out a similar shape on a board and place a different colored plate.



### Various processing methods 3

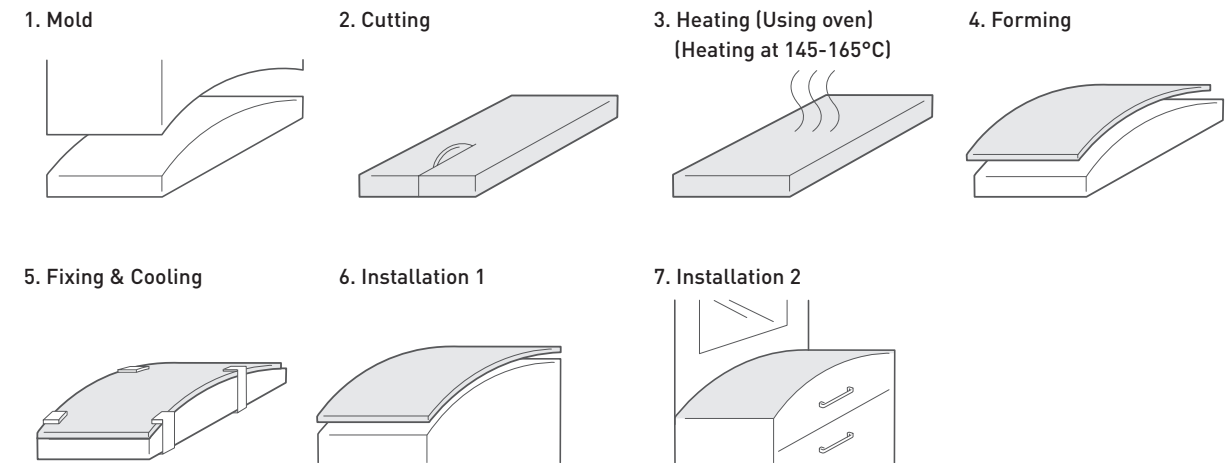
Staron® has a lower hardness than natural stone so you are able to use a wood working CNC to create precise grooves (Mohs hardness: 2-3).



You are able to create an interior that embodies what the designer wants.

CNC: Computer processed cost calculations of alterations

### Thermoforming process

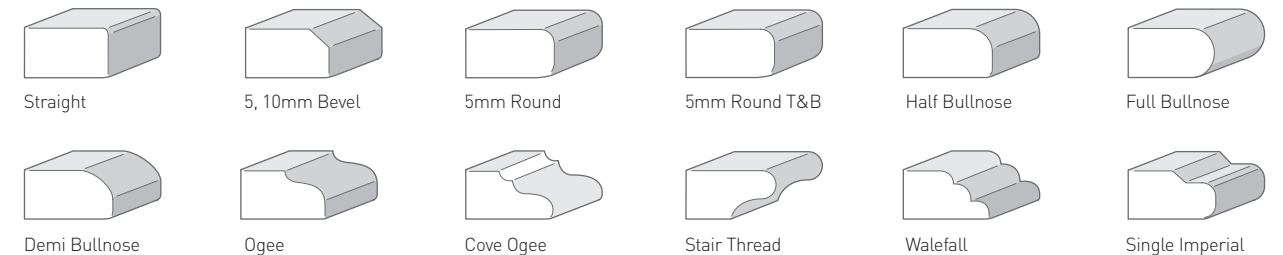


Recommended minimum inside radius value versus material thickness and color

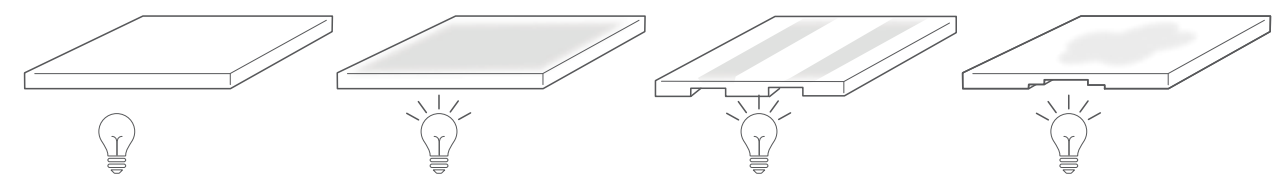
Staron® Solid Surfaces Thickness	Min. Inside Radius(R)	Staron® Solid Surfaces Color Group
1/4" (6mm)	1" (25mm)	Solid, Sanded Aspen, Pebble
	4" (102mm)	
1/2" (12mm)	3" (76mm)	Solid, Sanded Aspen, Pebble
	5" (127mm)	
	8" (203mm)	

\* Quarry, Metallic and Tempest are not recommended for thermoforming

### Various edge designs



### Transparent





## Performance Properties

### Staron®

Properties	Typical Results	Test Procedure
Tensile strength	6,000 psi	ASTM D 638
Tensile modulus	600,000 psi	ASTM D 638
Flexural strength	10,000 psi	ASTM D 790
Flexural modulus	1,000,000 psi	ASTM D 790
Elongation	0.50%	ASTM D 638
Hardness	92 Rockwell "M" Scale 65 Barcol Impressor	ASTM D 785 ASTM D 2583
Thermal expansion	$2.0 \times 10^{-5}$ in/in F°	ASTM D 696
Gloss (60 Gardner)	Between 5–20	NEMA LD-3
Color stability	No change-200hrs	NEMA LD-3
Stain resistance	Pass Rating 41	ANSI Z 124
Abrasion resistance	Pass	ANSI Z 124
Boiling water surface resistance	No effect	NEMA LD-3
High temperature resistance	No effect	NEMA LD-3
IZOD impact resistance (notched)	0.28 ft.lbf/in	ASTM D 256
Ball drop 1/2" (12.3 mm) sheet	144" w/ 1/2 lb ball, No failure	NEMA LD-3
Fungi and bacterial resistance	No growth	ASTM G 21, G22
Specific gravity	1.72	ASTM D 792
Solid colors	1.69	
Patterened colors		
Water absorption	0.04%, (1/2", 24hrs) 0.11%, (1/8", 24hrs)	ASTM D 570
Flammability	Class A / Class 1	UBC 8-1
Flame spread	10	ASTM E 84
Smoke density	10	ASTM E 84
Radiant heat resistance	No visual effect	NEMA LD-3
Toxicity	84.4g (Solid Color) 81.8g (Patterned Color)	Pittsburgh Test Protocol (LC50 Test)

### Tempest®

Properties	Typical Results	Test Procedure
Tensile strength	3,500 psi	ASTM D 638
Tensile modulus	786,000 psi	ASTM D 638
Flexural strength	6,500 psi	ASTM D 790
Flexural modulus	950,000 psi	ASTM D 790
Elongation	0.5%	ASTM D 638
Hardness	88 Rockwell "M" Scale 54 Barcol Impressor	ASTM D 785 ASTM D 2583
Thermal expansion	$2.3 \times 10^{-5}$ in/in F° $3.6 \times 10^{-5}$ m/m °C	ASTM D 696
Gloss (60 Gardner)	Between 10–75	NEMA LD-3
Color stability	Pass	NEMA LD-3
Stain resistance	Pass	ANSI Z 124
Cleanability & Wear	Pass	ANSI Z 124
Boiling water surface resistance	No effect	NEMA LD-3
High temperature resistance	No effect	NEMA LD-3
IZOD impact resistance (notched)	0.28 ft.lbf/in	ASTM D 256
Ball drop 1/2" (12.3 mm) sheet	1/2 lb ball No failure, 93+	NEMA LD-3
Fungi and bacterial resistance	No growth	ASTM G 21, G22
Specific gravity	1.6	ASTM D 792
Water absorption	0.04%, (1/2", 24hrs)	ASTM D 570
Flammability	Class A / Class 1	ASTM E 84 / UBC 8-1
Food equipment materials	Approved	NSF/ANSI 51 (Food Zone)

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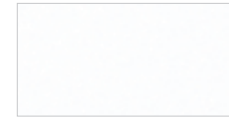
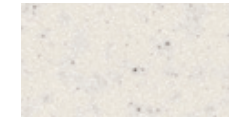
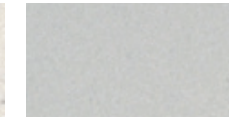


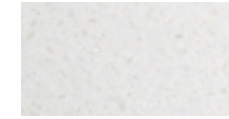








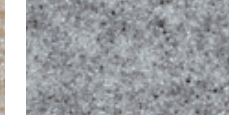

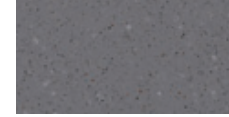
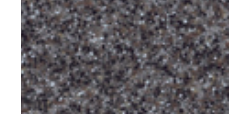

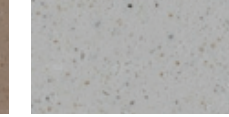
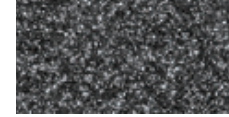



# Staron® Colors Chart






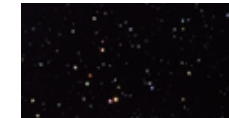
## Solid

			
Quasar White SQ019	Pure White SP016	Bright White BW010	Dazzling White SD001
			
Pearl SP011	Natural SV041	Tusk ST015	Ivory SI040
			
Fog SF020	Celadon SC010	Cool Mint SC063	Berry Frost SB033
			
Powder Blue SP063	Blonde SB043	Mist SM022	Placid SP062
			
Bliss SB022	Serene SS023	Sunflower SS042	California Poppy SC052
			
Univers SU053	Eggplant SV037	Iris SI056	Steel ST023
			
Onyx ON095			

## Sanded

			
Sanded Icicle SI414	Sanded Birch SB412	Sanded Stratus SS418	Sanded Linen SL443
			
Sanded Cornhusk SC443	Sanded Dover SD413	Sanded White Pepper WP410	Sanded Cream SM421
			
Sanded Sahara SS440	Sanded Gold Dust SG441	Sanded Cornmeal SC433	Sanded Papyrus SP474
			
Sanded Oatmeal SO446	Sanded Vermillion SV430	Sanded Grey SG420	Sanded Slate SS423
			
Sanded Tundra ST482	Sanded Mocha SM453	Sanded Clay SC475	Sanded Heron SH428
			
Sanded Dark Nebula DN421	Sanded Onyx SO423		

## Metallic

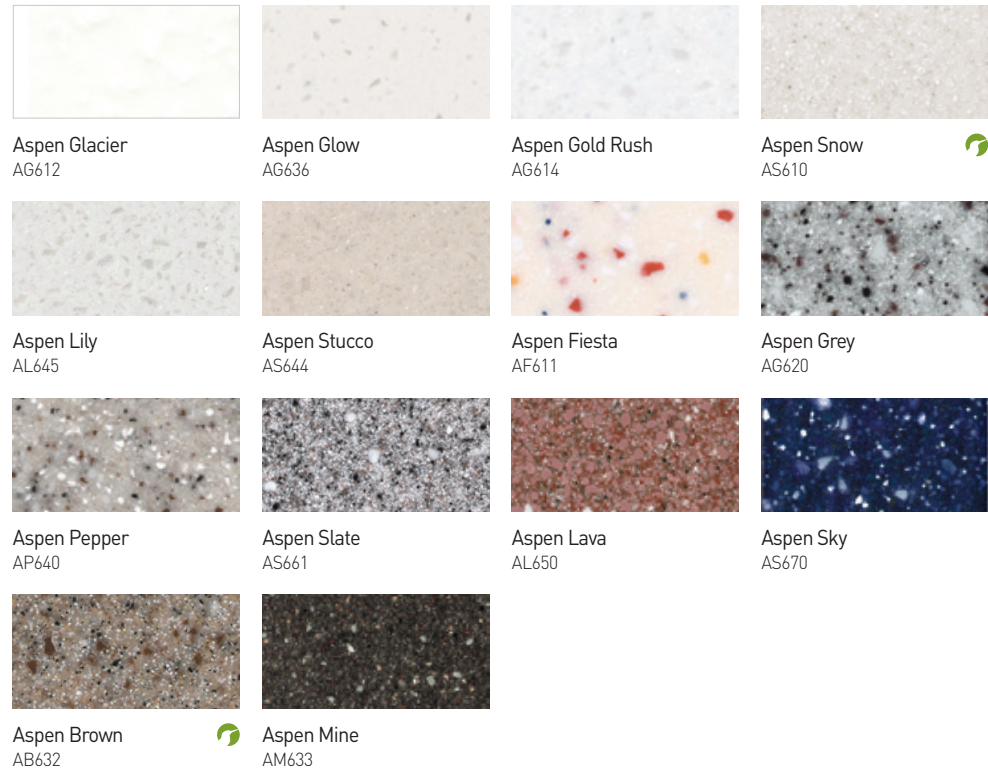
			
Metallic Yukon EY510	Metallic Beach EB545	Metallic Satingold ES558	Metallic Sleeksilver ES581
			
Metallic Galaxy EG595	Metallic Cosmos EC596		

 Staron® recycled content series

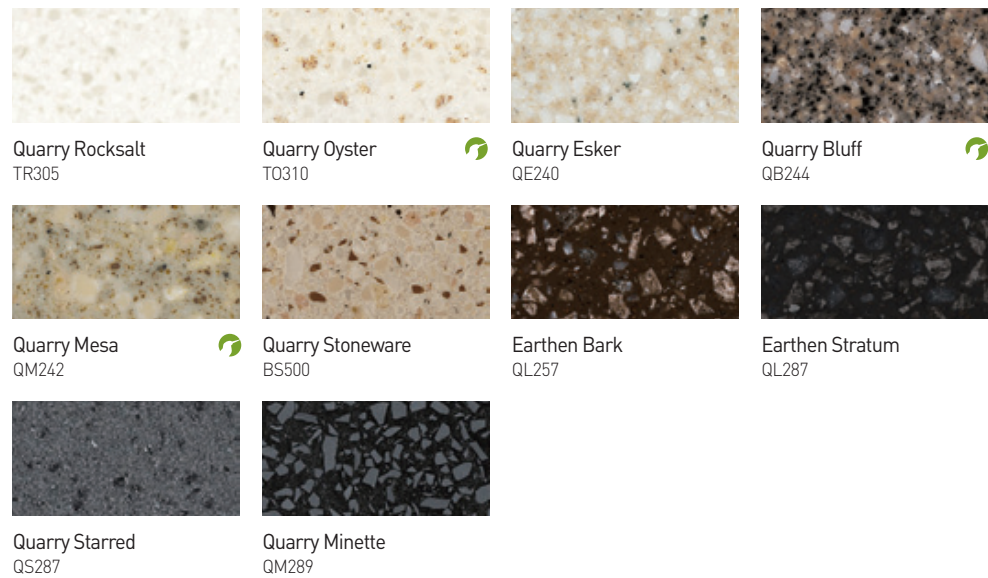
Printed representation of colors may vary from actual samples:  
Please view actual sample prior to selection.



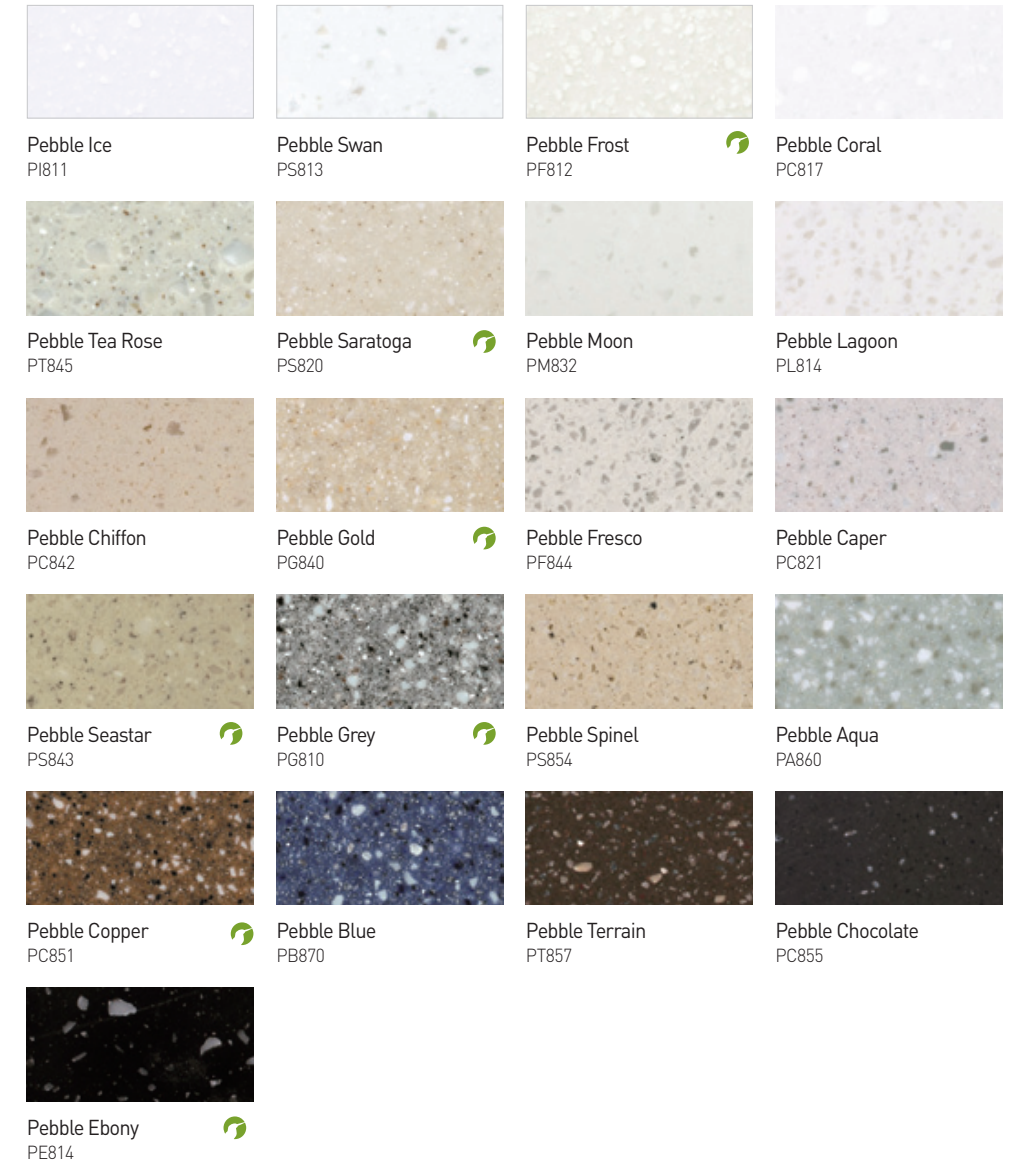
### Aspen



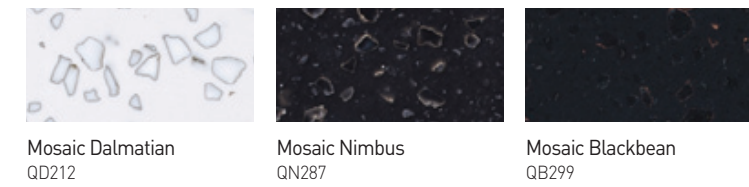
### Quarry



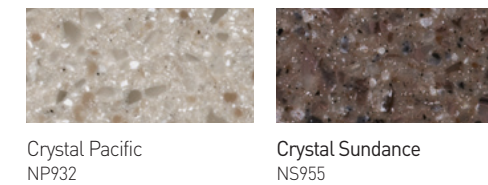
### Pebble



### Mosaic

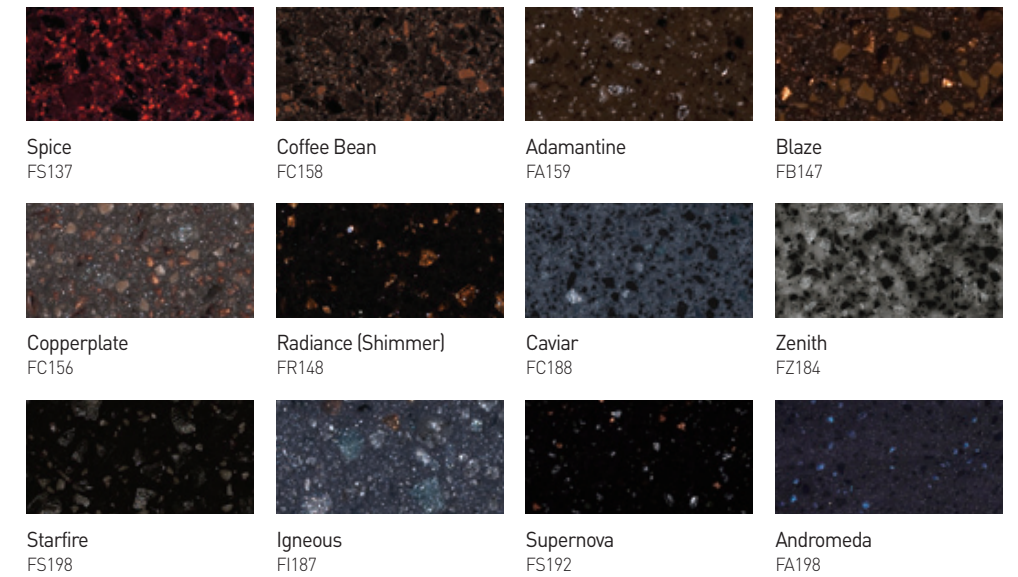
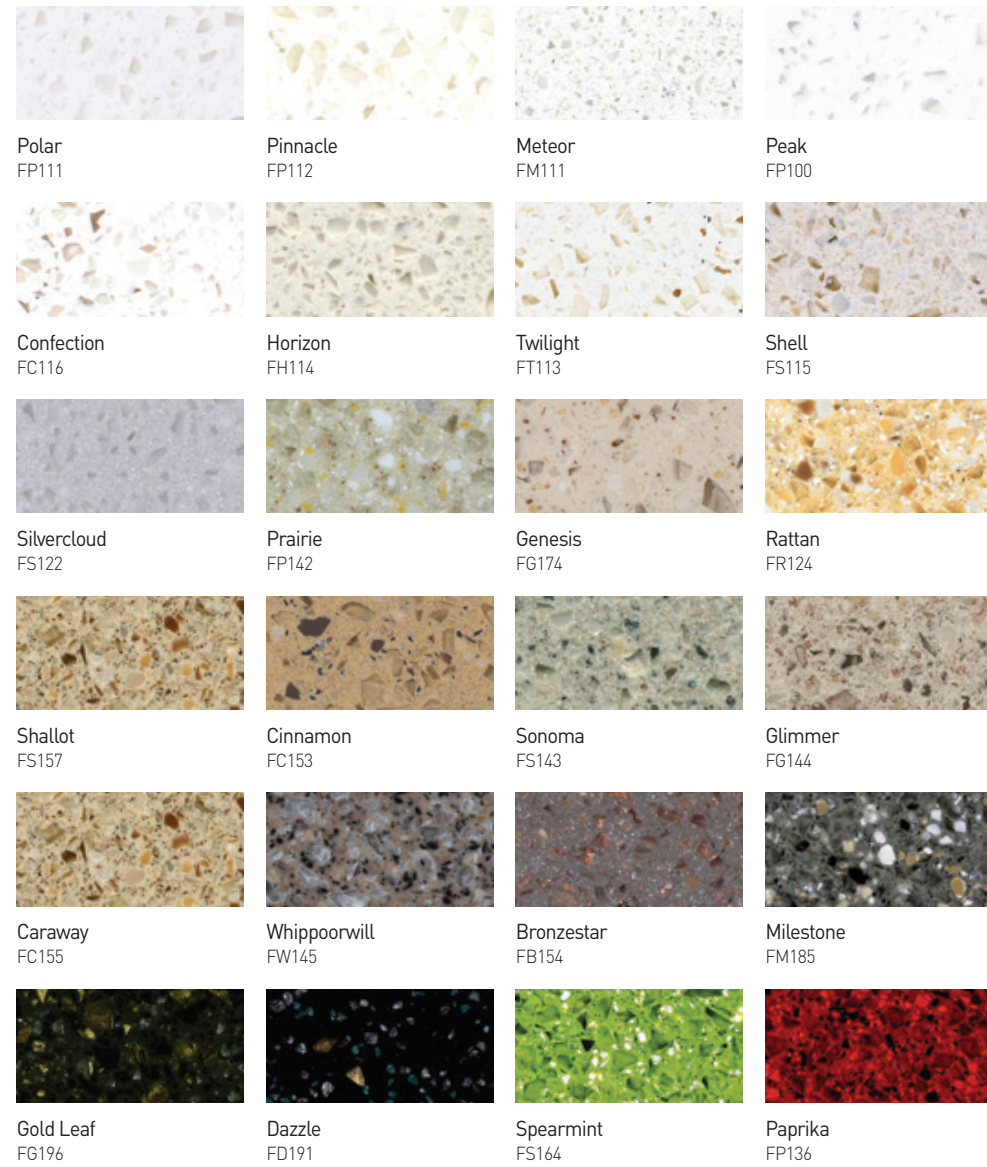


### Crystal





# Tempest® Colors Chart



Printed representation of colors may vary from actual samples:  
Please view actual sample prior to selection.



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