

# Dekton for Architectural Projects

DEKTON®

### ULTRACOMPACT SURFACES

A product designed by **COSENTINO** 

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### WHAT IS DEKTON ?

Dekton is the new ultracompact surface created through the innovative combination of more than 20 minerals. New techniques such as ultracompaction and synthesization tum Dekton into a material with unique properties and limitless possibilities - an improved version of natural stone.

PST is a process that sinters mineral particles so that they link up and change their internal structure. PST technology completely synthesises innovative procedures from the most advanced technology industries.

This evolution represents a technological and industrial leap capable of generating a new process, a revolutionary material and a leading product.

Dekton uses the exclusive PST technology, a technological process that uses an accelerated version of the metamorphic changes that natural stone undergoes from exposure to high pressure and high temperatures for thousands of years.

It features virtually zero porosity and its non-existence of microflaws, that cause tension and weaknesses, set Dekton apart from other materials.



#### DEKTON FORMATS

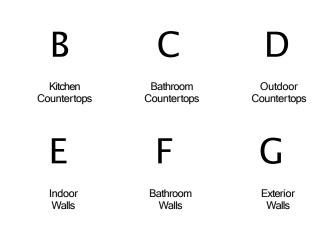
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Thanks to its mechanical properties which are 3 times better than granite, Dekton offers limitless possibilities in every surface in small or large format, from façades to high-traffic flooring.

#### DEKTON ADVANTAGES

| 9                      | 8                    | 6                      |
|------------------------|----------------------|------------------------|
| Highly UV<br>Resistant | Scratch<br>Resistant | Resistant<br>to Stains |
|                        |                      |                        |
| 3                      | 0                    | 1                      |

DEKTON APPLICATIONS



Dekton slabs come in different thicknesses, from 0.8 cm to 3 cm, so that you choose the most appropriate option depending on the application, design or desired effect.



Maximum Resistance to Heat



Dimensional Stability

Resistant to Abrasion

5



Resistance to Freezing and Thawing

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Fireproof Material

High Resistance to Hydrolysis

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Indoor Floors



Stairs

Bathroom and Pool Floor Coverings Outdoor Terrace Floor Coverings

7

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## Ventilated Façades









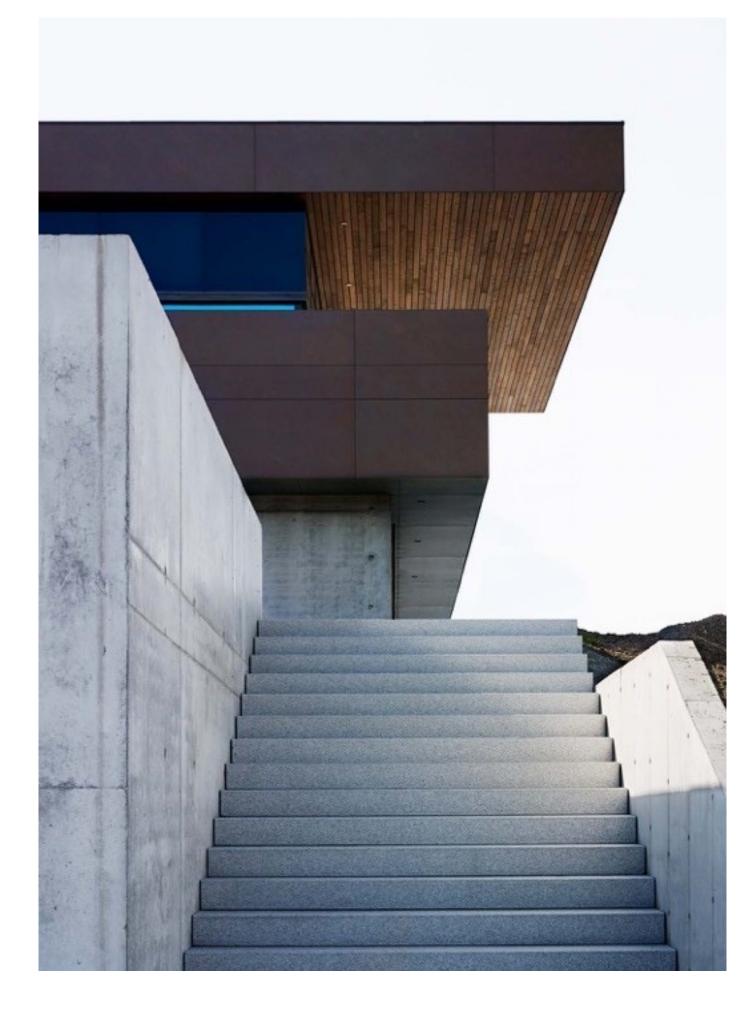
Resistance to Freezing and Thawing

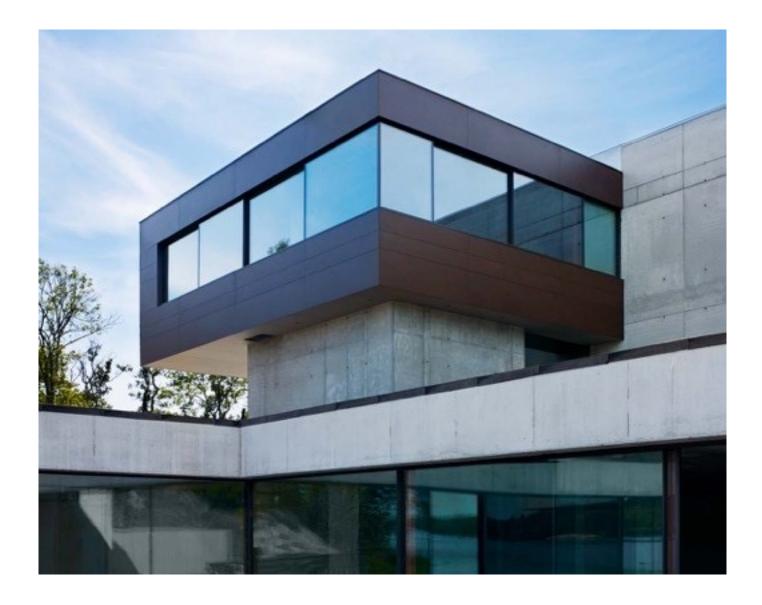
Dimensional Stability



Cajamar | Almería (Spain) | Dekton Sirocco









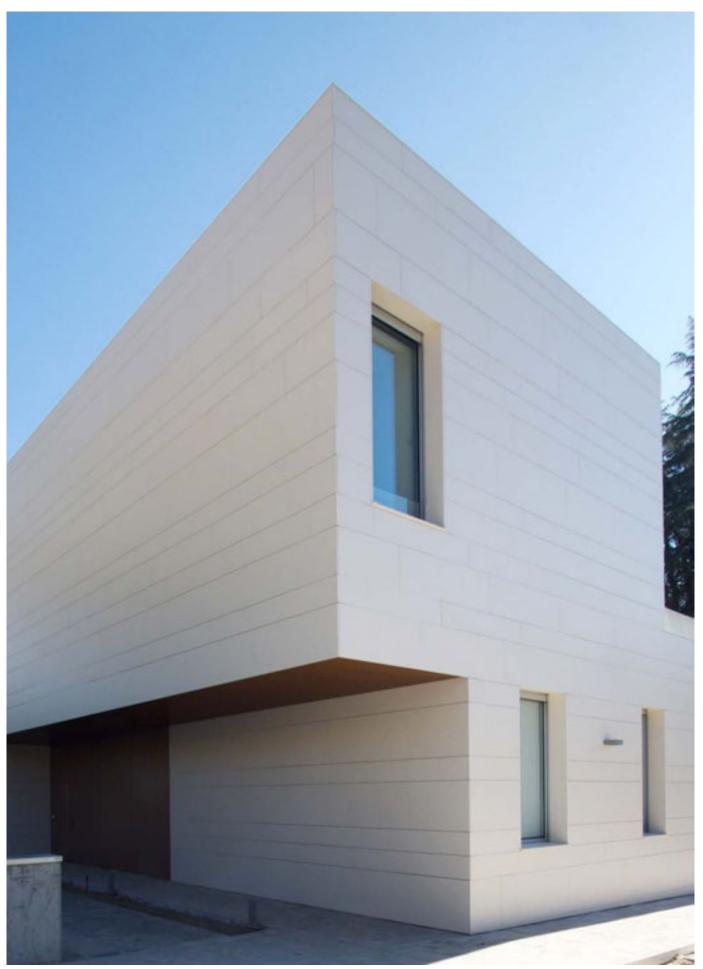
Ultracompact surfaces with 1.2 cm thickness are ideal for, probably the most demanding architectural application: the independent skin of buildings.

Only this sort of material can offer as many solutions using different certified anchoring systems, such as continuous grooved edges, undercut anchors or dovetail-shaped diagonal grooves.

The project is thus released from formal limitations and can incorporate creative shapes, with pieces that can be up to 3m long and have slim lineal designs.



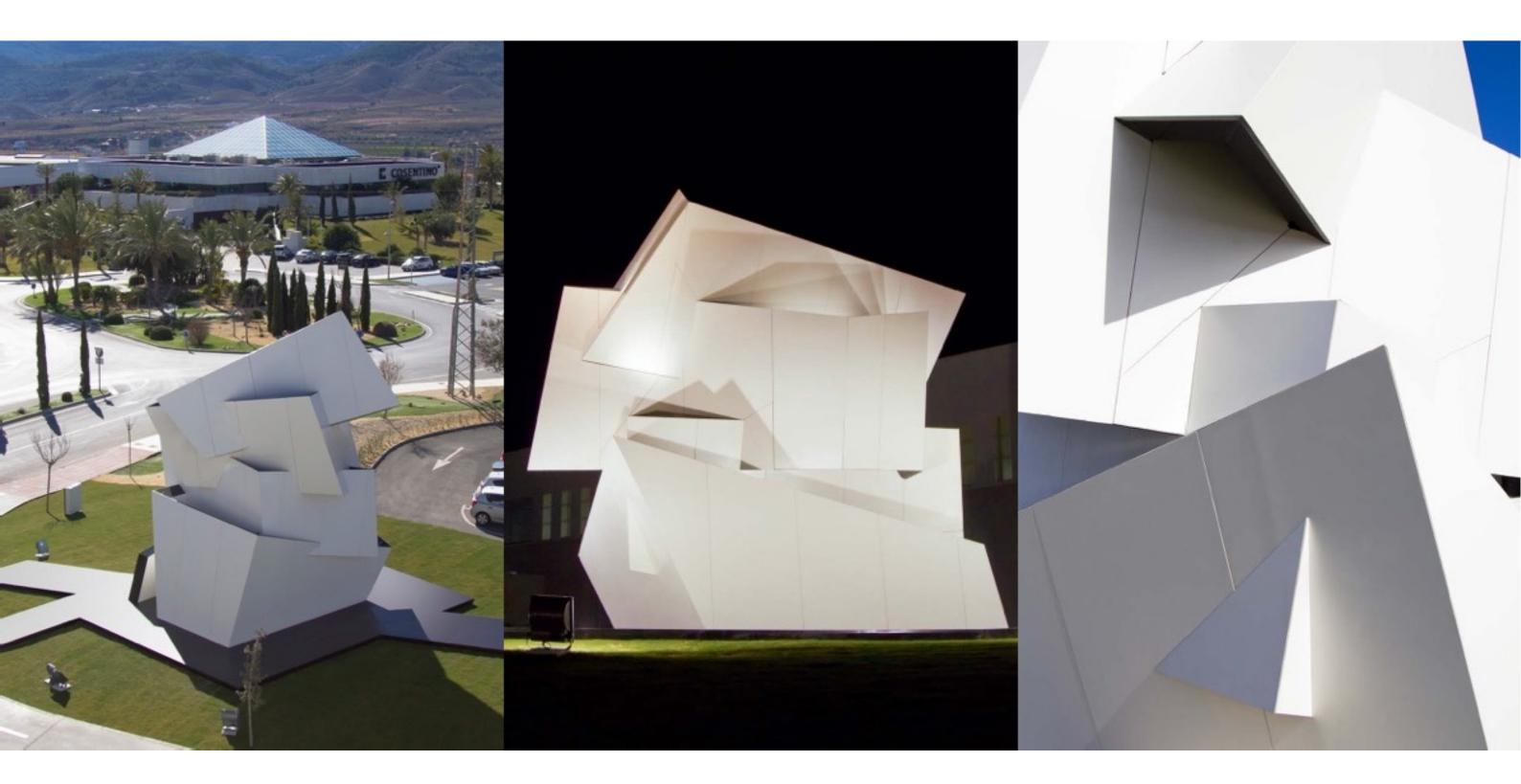






Casa Cor  $\ \mid$  Dekton Kadum - Irok  $\ \mid \mathbb{O}$  Roberto Migotto - Carlos Piratininga

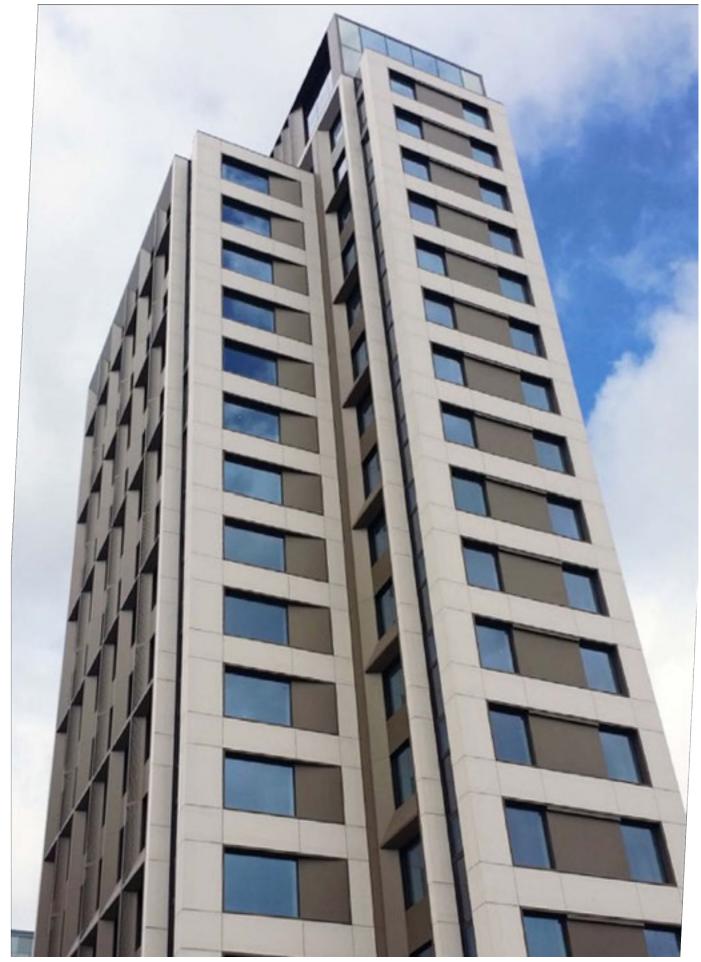




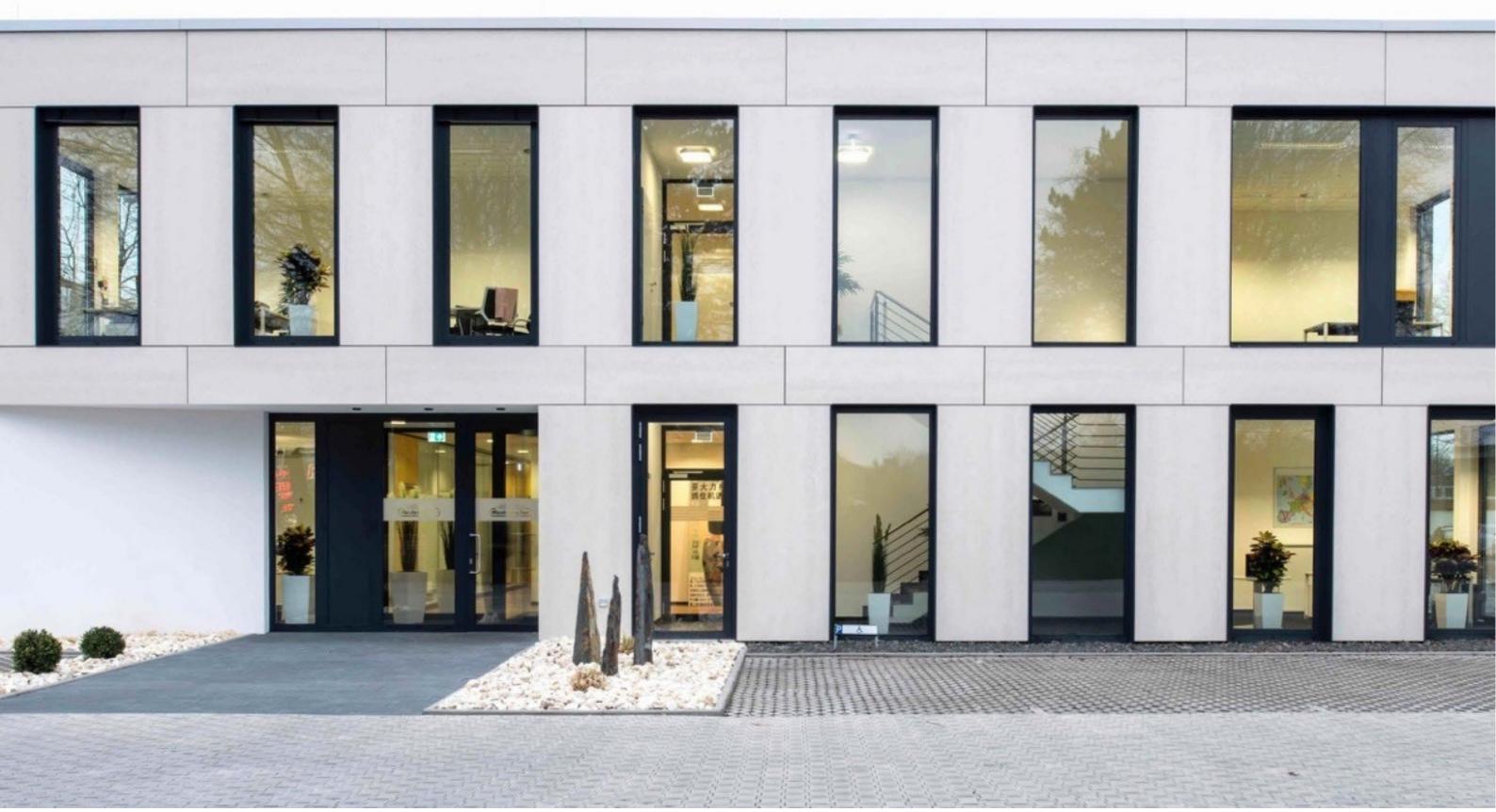


Current challenges go from a shop that needs a great personality (where all pieces are different and joints need total accuracy to integrate the lighting system, led lights

for instance) to the renovation of a skyscraper for which large scale pieces can resist wind or earthquakes.



Archway | London (United Kingdom) | Dekton Danae

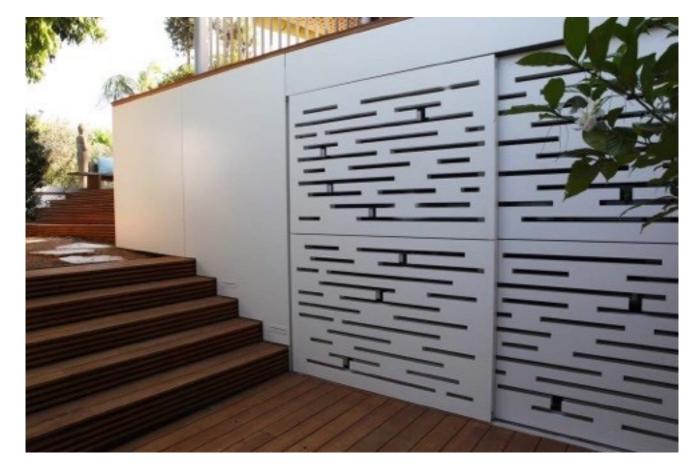


Schittenhelm | Germany | Dekton Danae



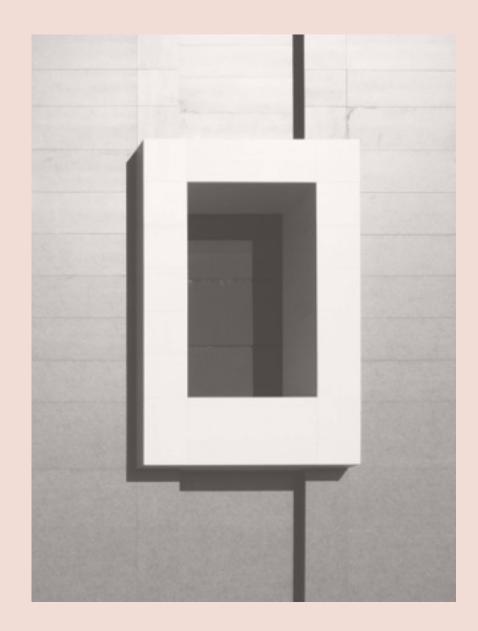
Building façades go beyond the building itself. Each piece is measured with pinpoint accuracy and the resulting overall look is permanent.

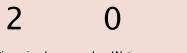
Neither the sun or ice will leave traces on the material (shape and colour stability, warping-free, are the key to everlasting architecture).











Dimensional Stability

Low Water Absorption

6

Resistant to Stains

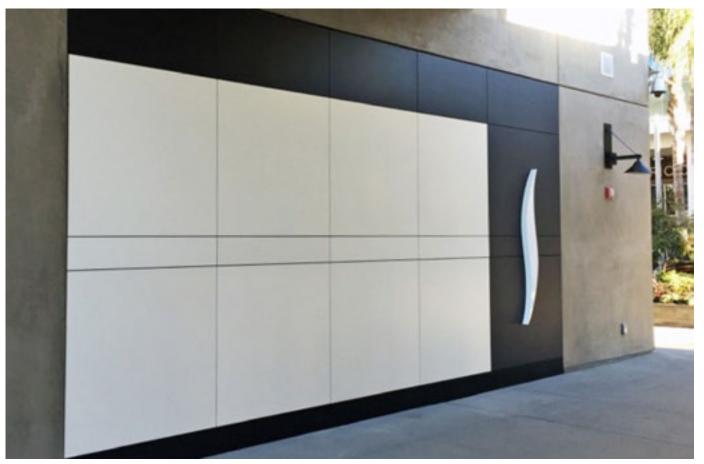


Highly UV Resistant



Marc Cain | Amsterdam (The Netherlands) | Dekton Zenith





Sephora | California (USA) | Dekton Domoos - Zenith



The surface of a city is an ever changing skin, exposed to the best and worst of people. Graffiti can ruin the greatest design, unless the material can resist almost everything. 0.8cm thickness together with a top mechanical performance is the key to ensure windows and thin solid walls become one, in shape and size.

When that skin is solid, it must be perfectly level and have impeccable straight edges and drills so the logo is the leading actor.



Banco Popular | Sevilla (Spain) | Customised Dekton Popular Dark

Massive | Izmir (Turkey) | Dekton Sirius





House in Alicante | Alicante (Spain) | Dekton Strato



6

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Resistant to Stains

High Resistance to Hydrolysis

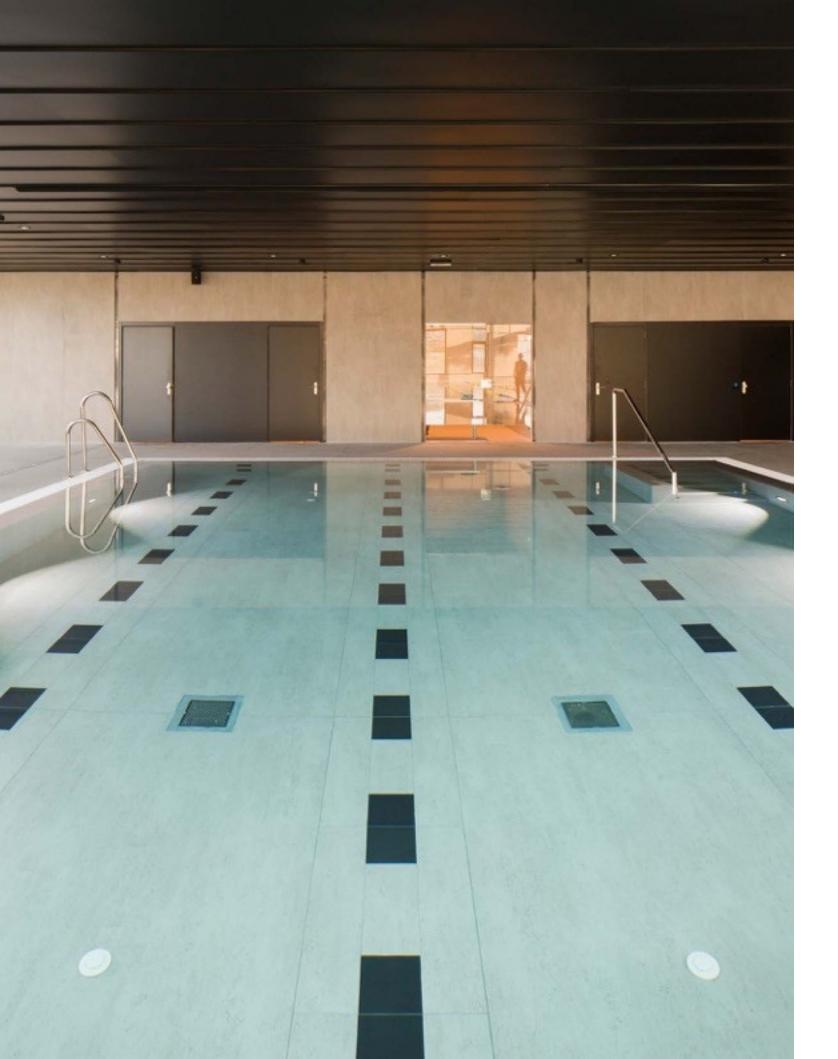
0 Low Water Absorption

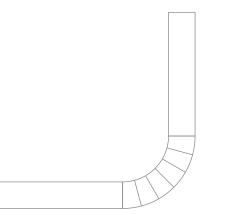


Dimensional Stability



Lewisville | Dallas (USA) | Dekton Danae

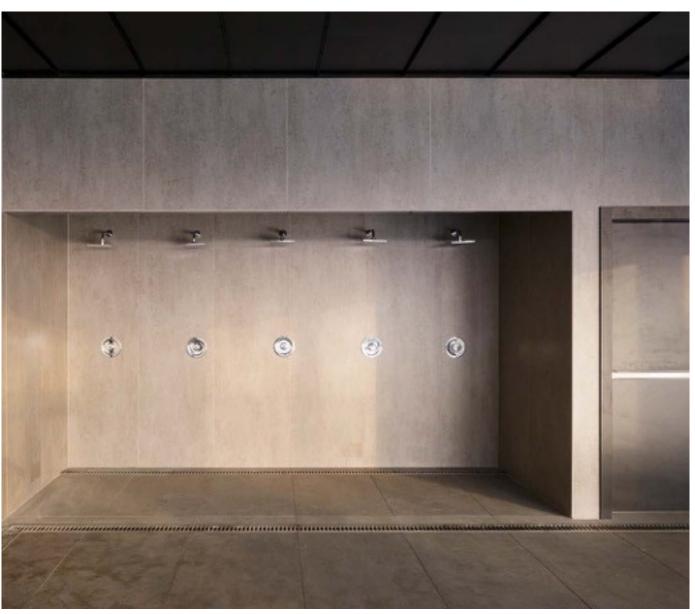




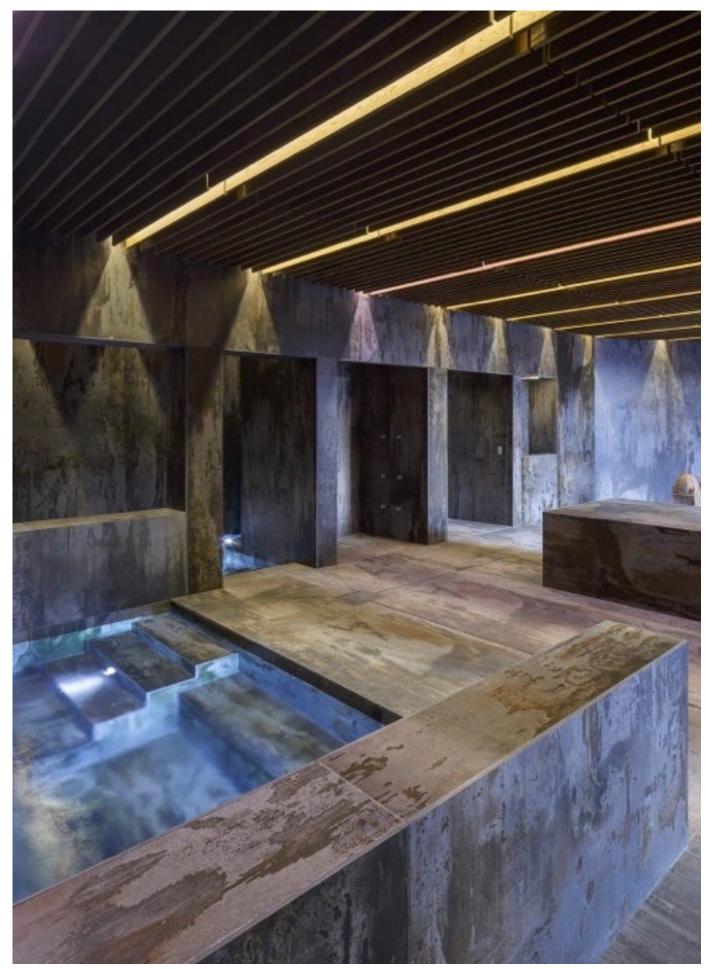
We all want to dive in when we see a swimming pool in summer, with its small tiles in a spotless ocean blue. But we all forget (or ignore), that the same swimming pool becomes a nightmare for the owners in spring and autumn, fighting against the green flecks that cling to the joints.

Why not change the rules? Why not use large plates for the sides and the bottom? Why not integrate the surrounding floor with the pool itself? Why not even think about rounded edges and comers? Never before has this been possible - but it is today.

And what about the slipperiness of a shower tray or cladding from floor to ceiling with the same material and different textures? Before, that was a limitation. Not anymore.



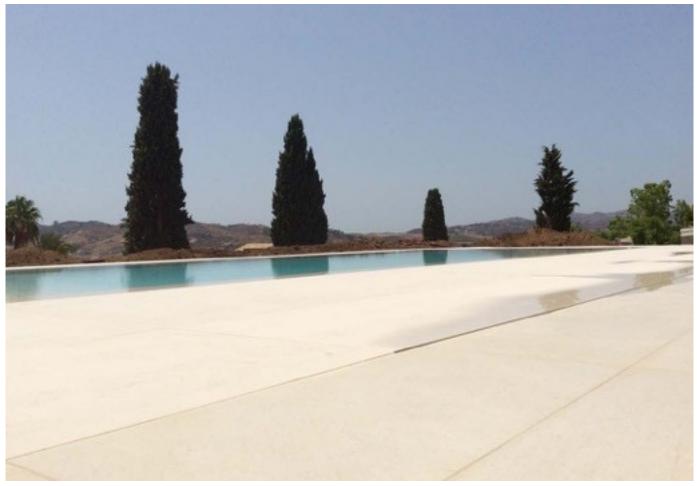
Rafa Nadal Academy | Dekton Keon |  $\tilde{C}$  Fernando Alda



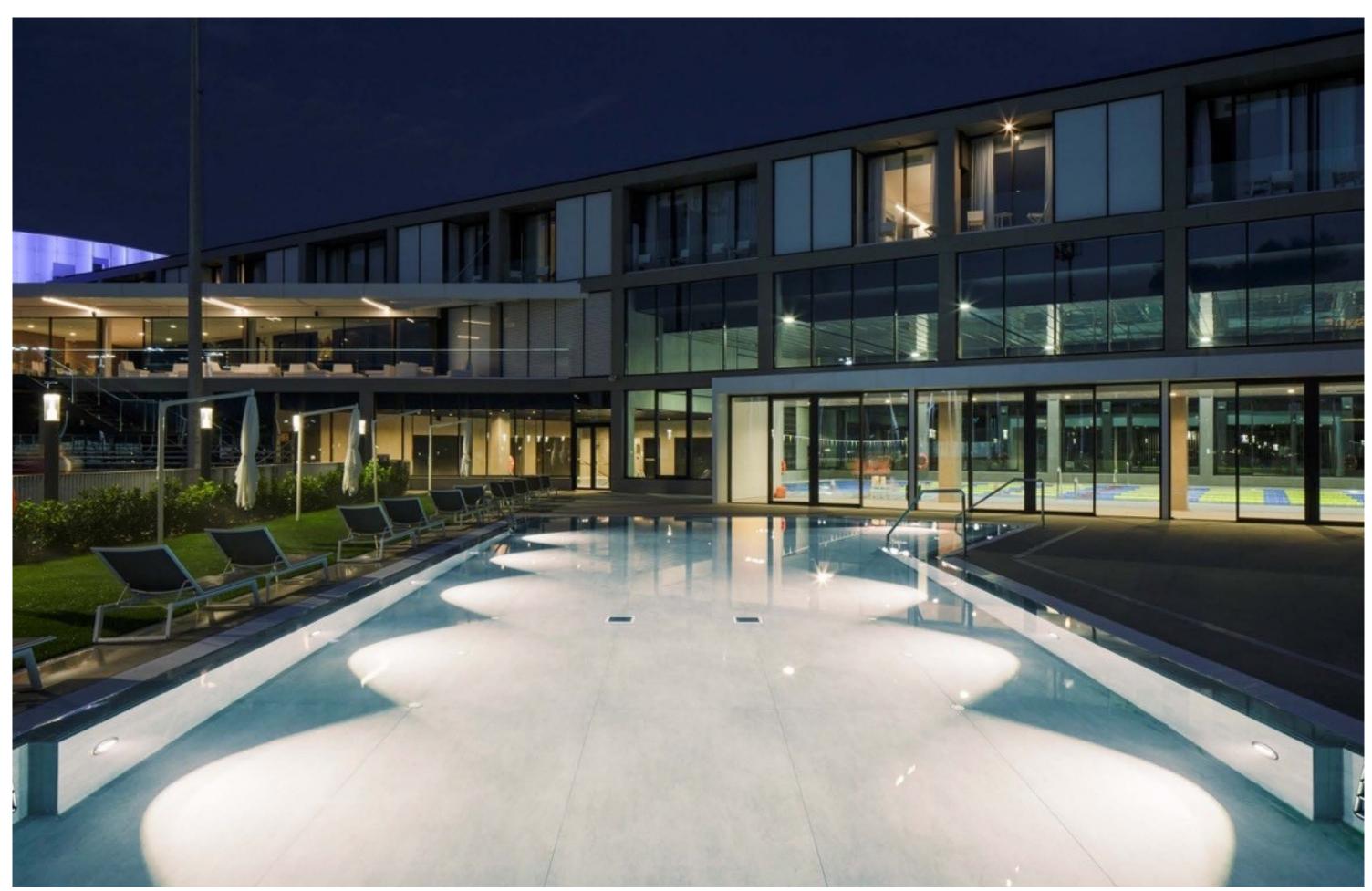
Rafa Nadal Academy | Dekton Trilium | © Fernando Alda



Hillcrest | California (USA) | Dekton Zenith



Swimming Pool | Málaga (Spain) | Dekton Danae







Highly UV Resistant

Resistance to Freezing and Thawing

## Outdoor Countertops



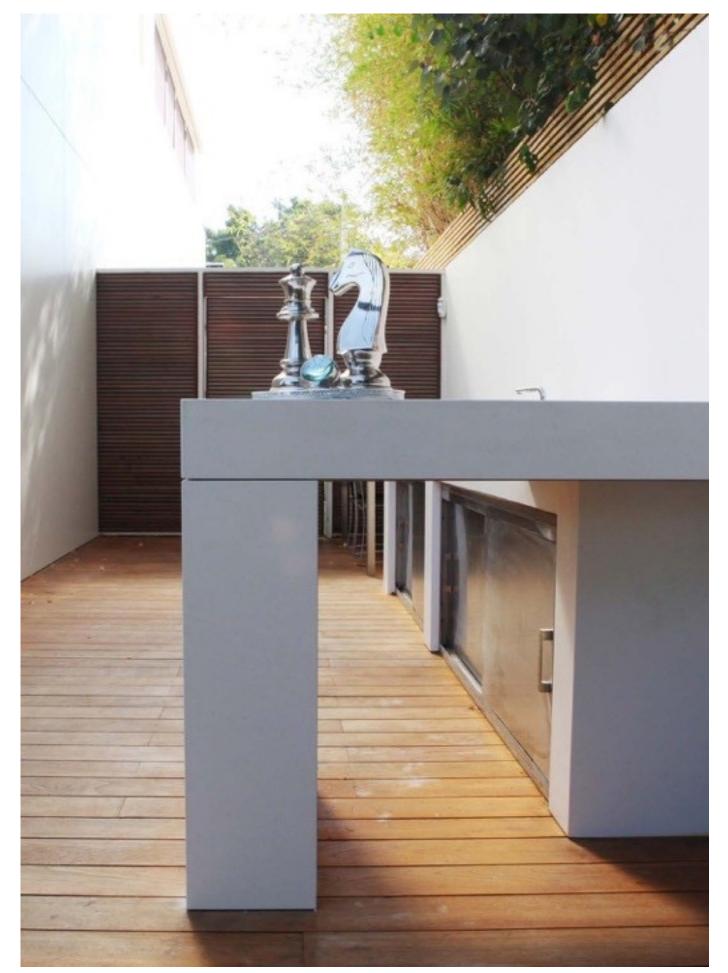
Scratch Resistant



Maximum Resistance to Heat



Private House | Spain | Dekton Kelya



Hagag | Kfar Shmaryahu (Israel) | Dekton Zenith



Pitch Concept | USA | Dekton Aura



Kitchen | Virginia (USA) | Dekton Keranium

When designing an outdoor surface we need to take gravity into account: everything floating in the air will end up falling onto it. And it can be unused for weeks and months.

Is the material strong enough to face a chemical cleaning and return to its original conditions? The decision will depend on this answer: Has the material been ever damaged by snow or frost? Cheap becomes expensive when adding up the regular maintenance.

## Large Size Flooring



5 Resistant to Abrasion

Superior Mechanical Resistance

3



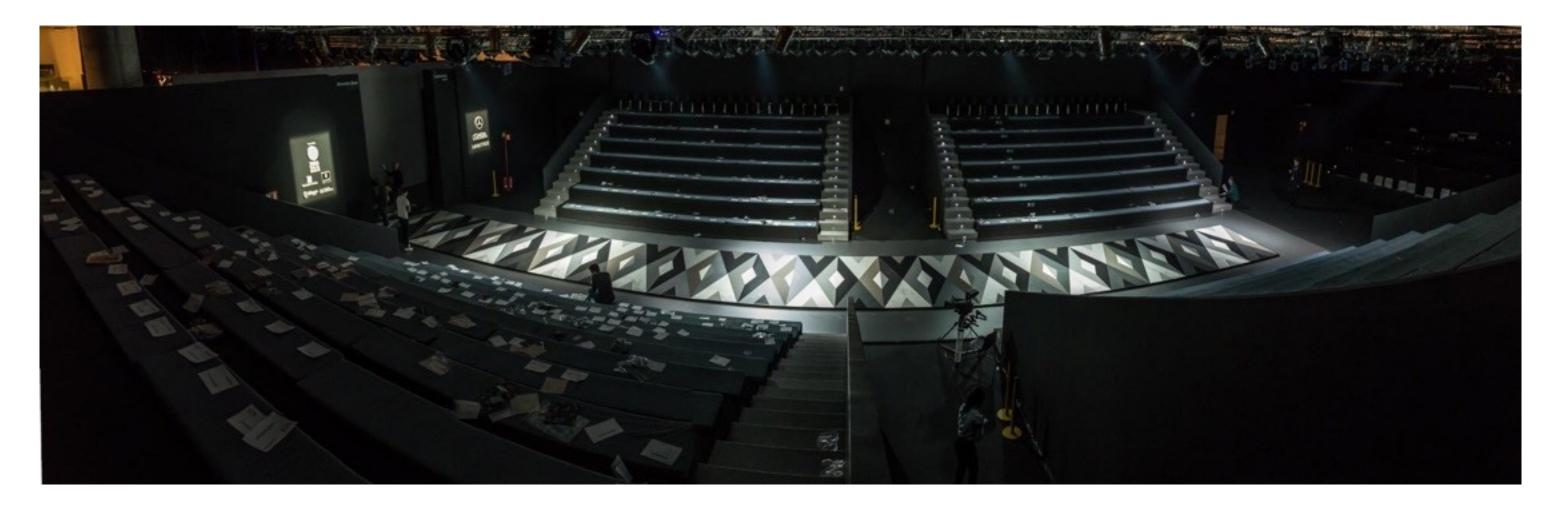


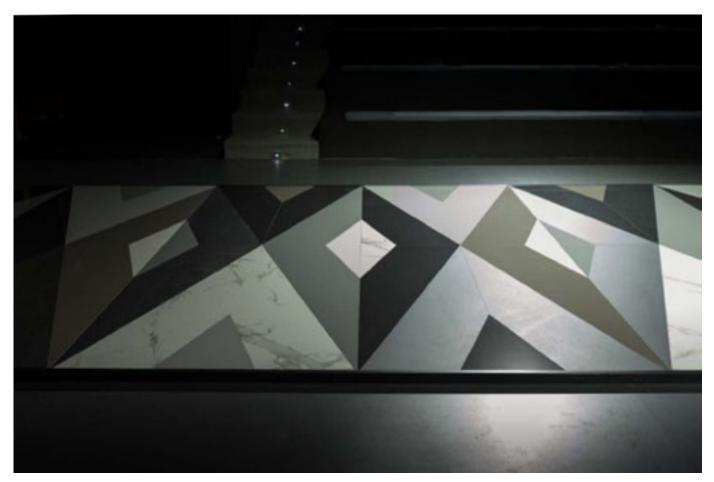
Resistant to Stains

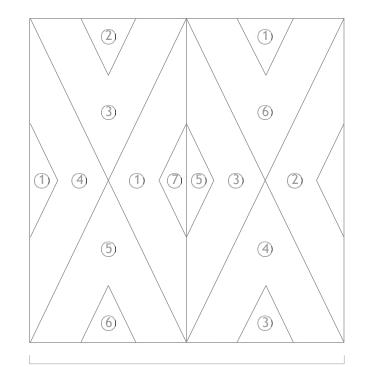


Microsoft Headquarter | Haifa (Israel) | Dekton Zenith - Domoos | © Lior Teitler









Repetition Pattern (x13)

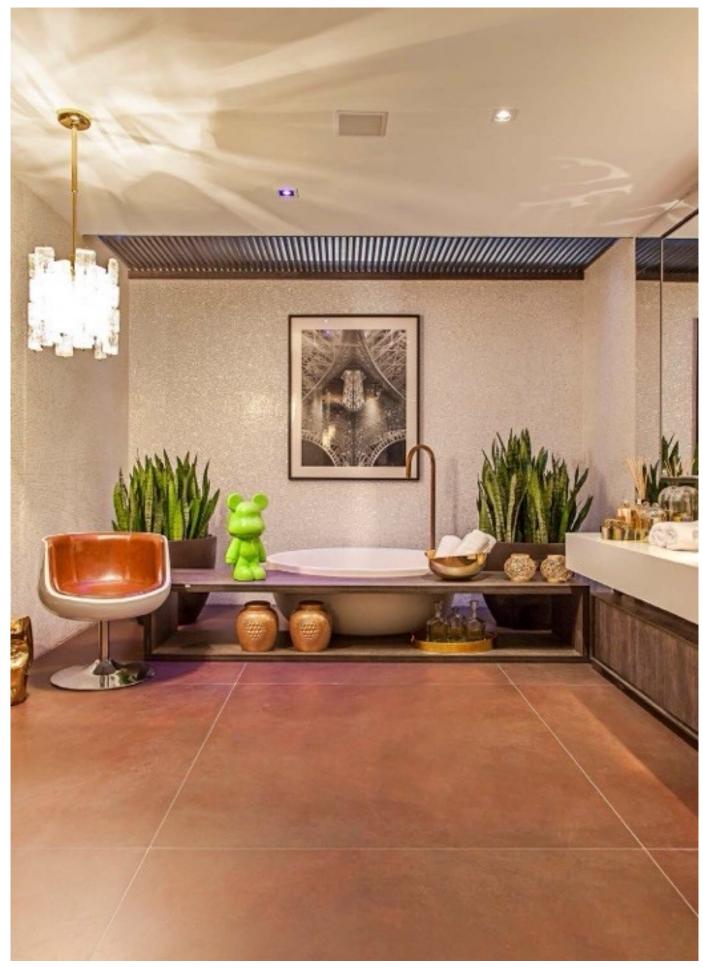
- (1) Blaze Solid
- 2 Lumina Solid
- 3 Negro Solid
- (4) Kelya Natural
- 5 Aura Natural
- 6 Splendor Solid
- Halo Solid

Why does a floor have to be square or rectangular? Because the industry has imposed it. Why only one or two colors? Why only polished or matte?

Rules have changed. We now have everything that our imagination dares to create, at our fingertips.



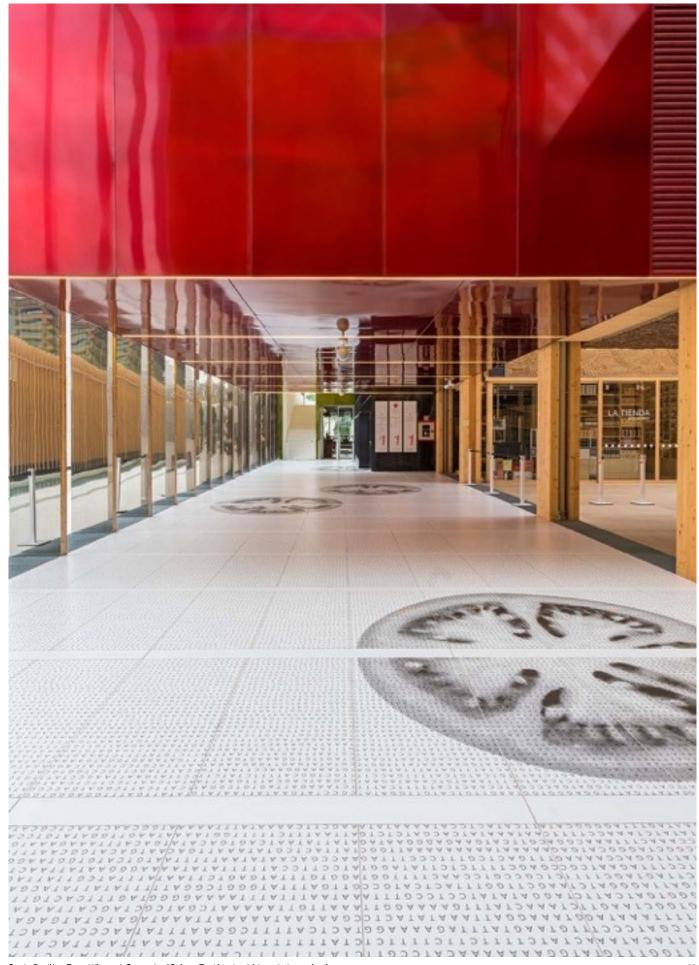
Apartment Conde de Aranda | Madrid (Spain) | Dekton Ariane | © Raquel Elliot



Casa Cor | Dekton Kadum |  $\ensuremath{\mathbb{C}}$  Brunette Fraccaroli







Spain Pavilion Expo Milano  $\ \mid$  Customised Dekton Zenith using inkjet printing technology



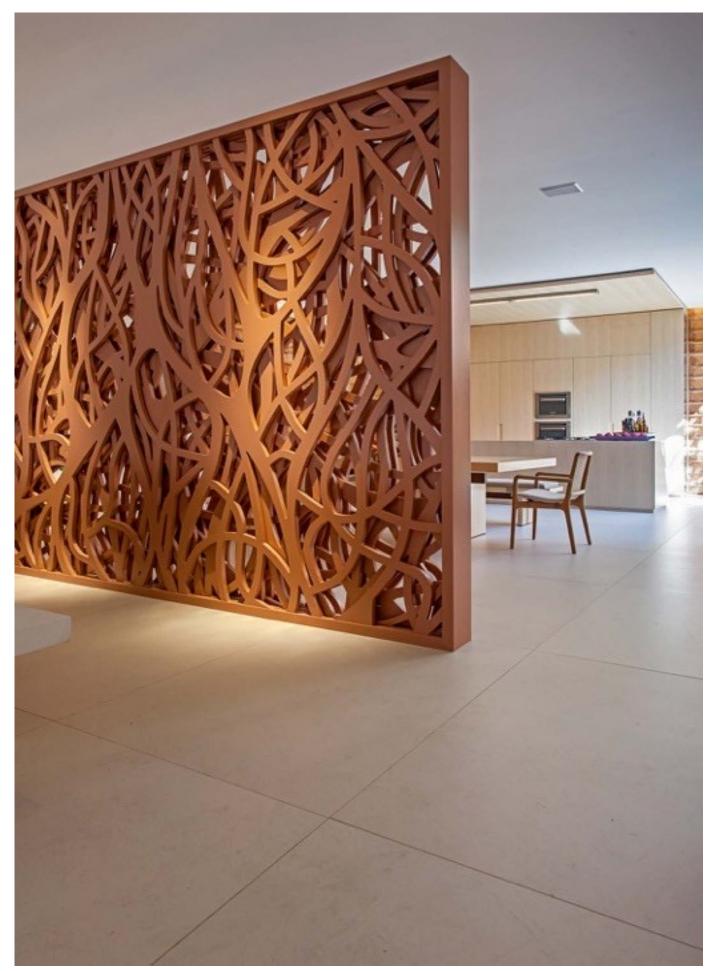


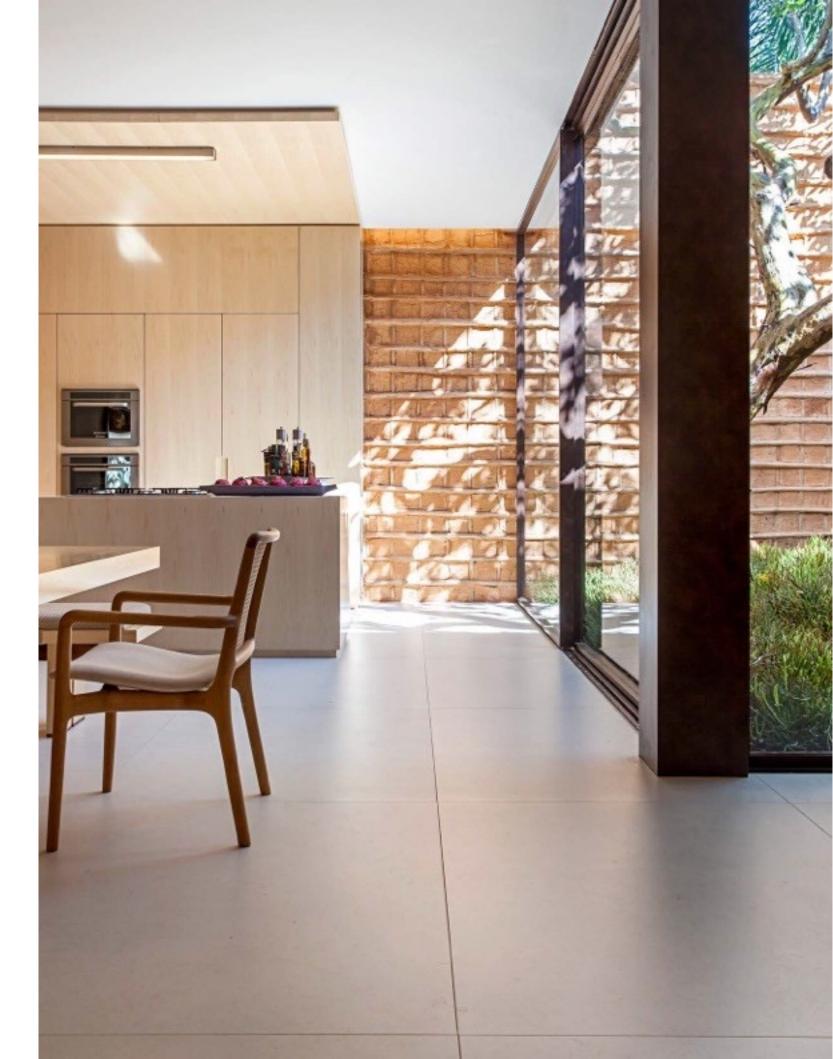


Where are the limits? When talking about ultracompact surfaces, the limits are in the creativity it portrays. In prehistoric times, cavern walls were used to draw the working plan (e.g. Altamira).

In the 21st century, we can draw the detailed structure of tomatoes on a mosaic floor - slab by slab, thousands of them, each of them with a different graphic. Everything over a material which is always the same yet versatile in so many ways, for instance, through inkjet.





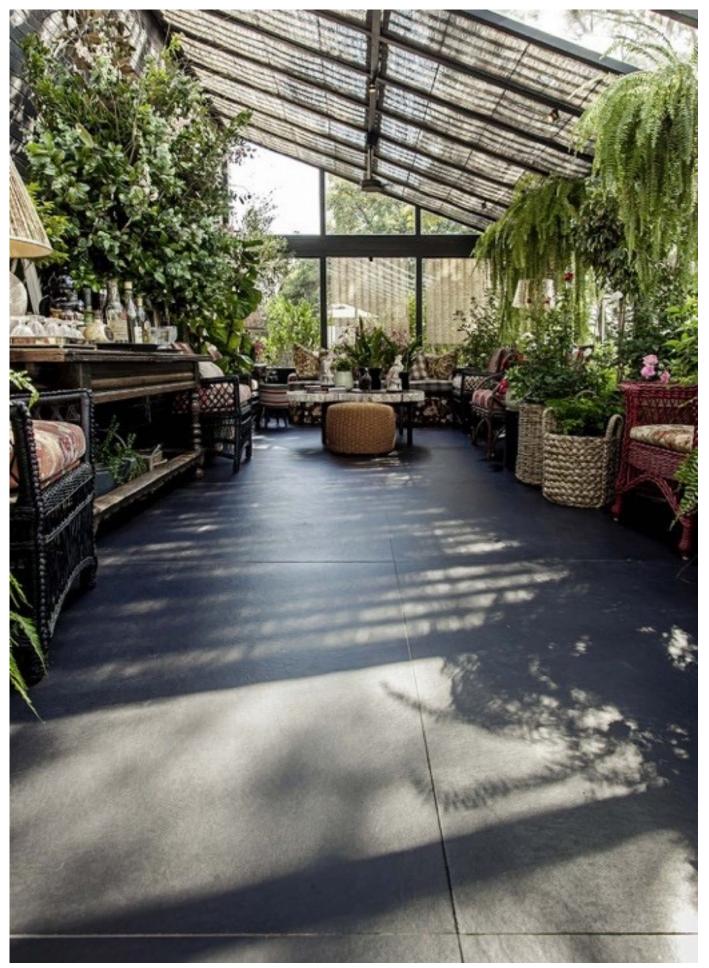


Casa Cor | Dekton Irok |  $\ \odot$  Carlos Piratininga

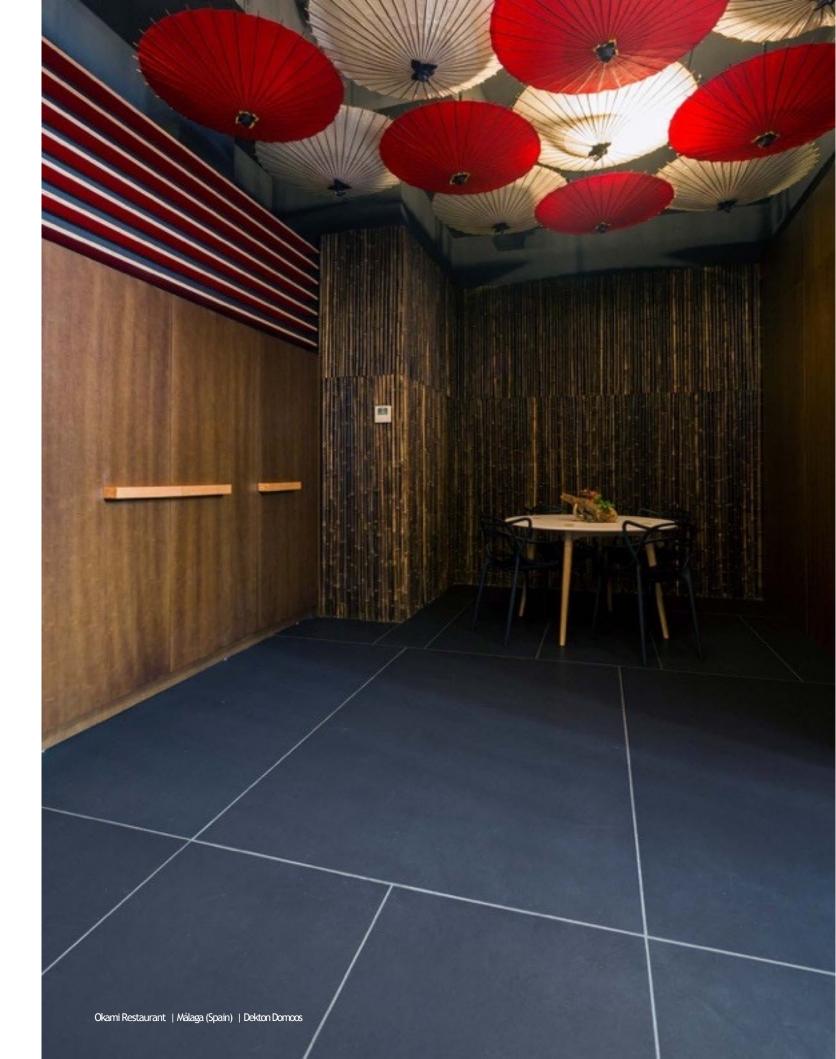


Dressing Room | Dekton Aura | © Architect Carico Dumont - Jomar Bragança

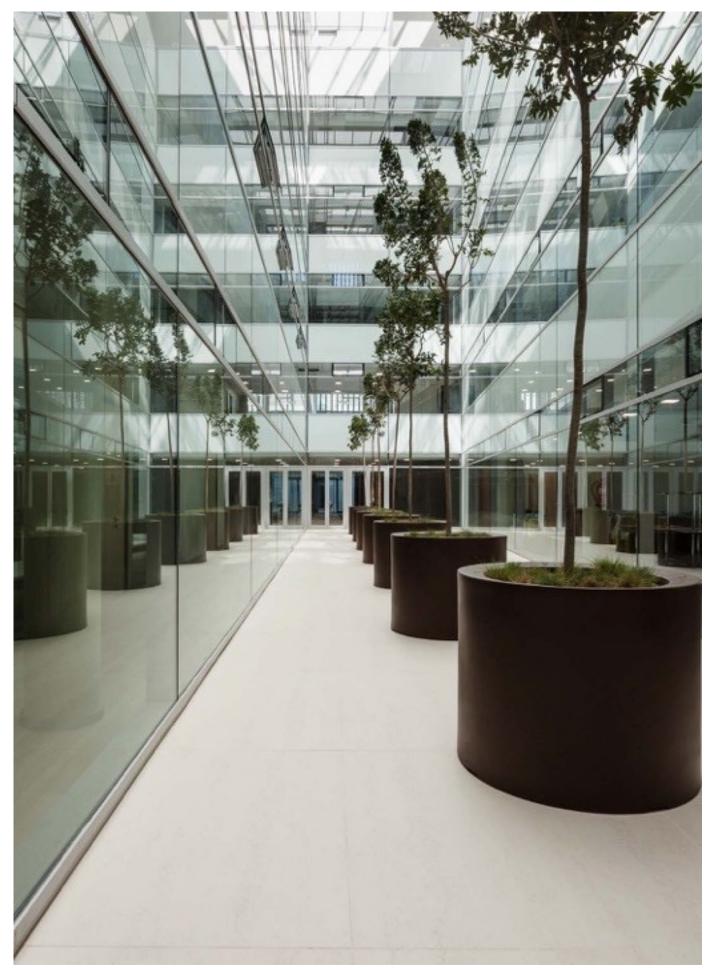




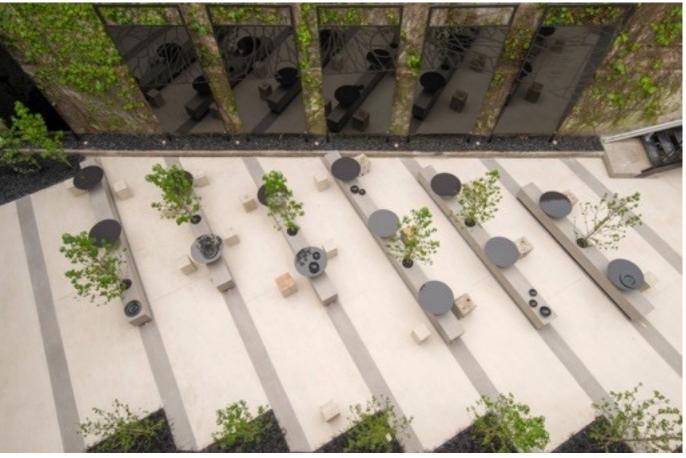
Casa Cor  $\ \mid$  Dekton Sirius  $\ \mid$   ${\mathbb O}$  Sig Bergamin







Cajamar | Dekton Danae | © Fernando Alda



Foa Kucher | Dekton Blanc Concrete - Keon | © Architect Micaela Bosio. Lopez, Kucher, Caran, Segoura and Dominguez



Microsoft Head Office | Taipei (Taiwan) | Dekton Keon

Steps & Risers



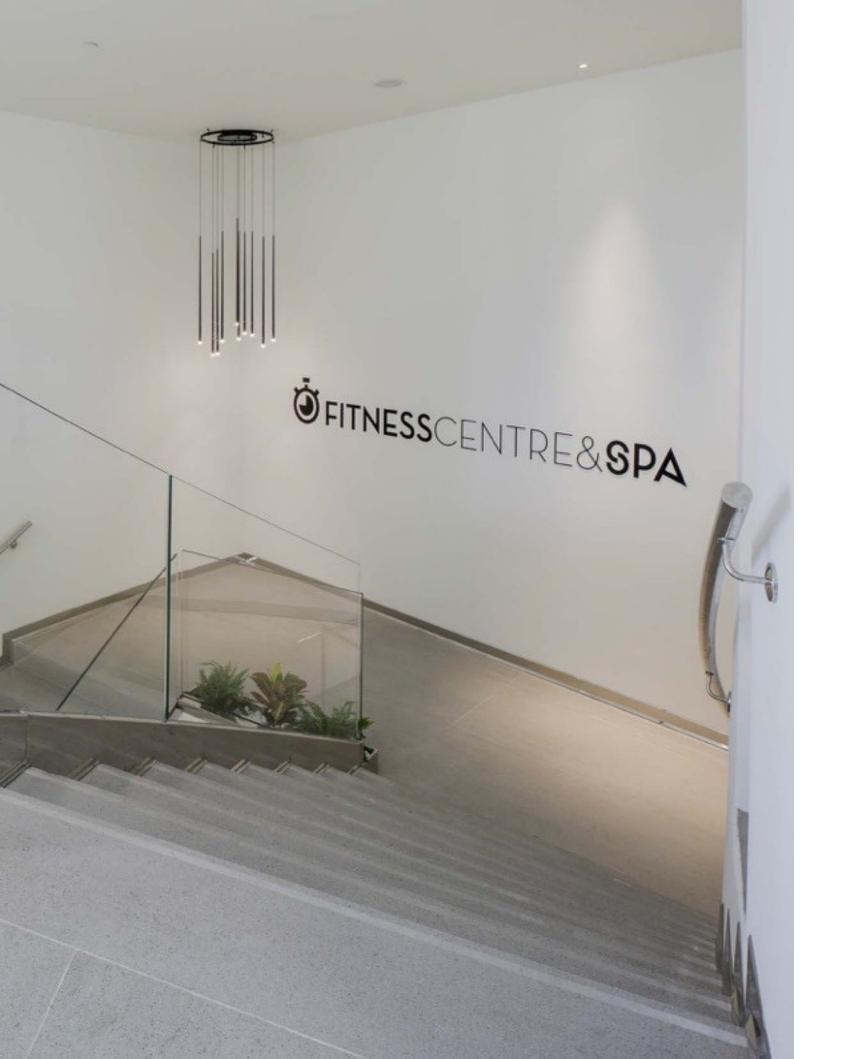
3 \$ Superior Mechanical Resistance Fireproof Material

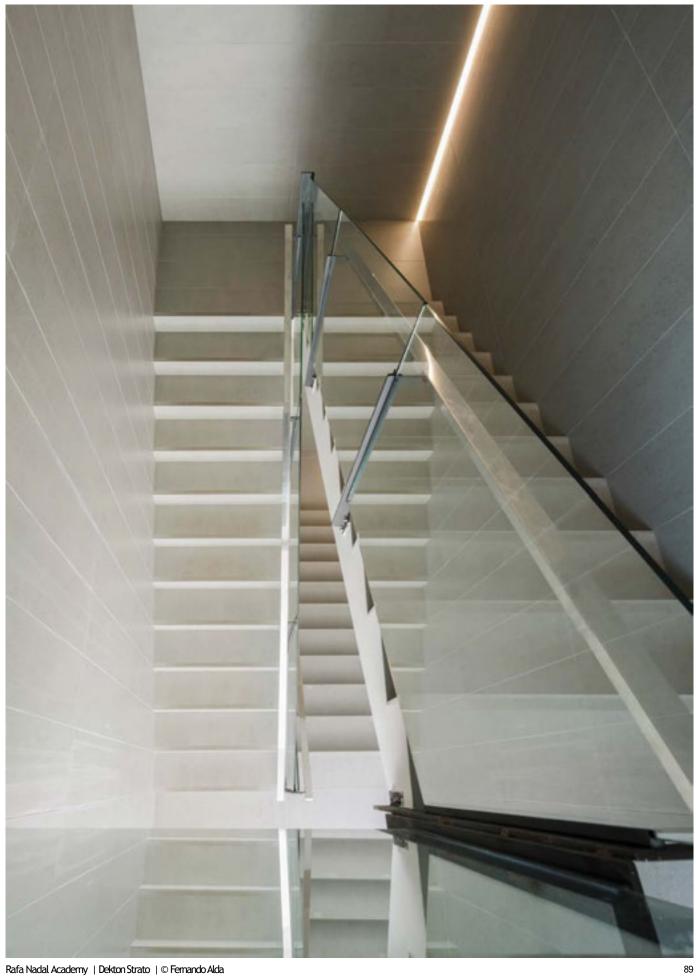


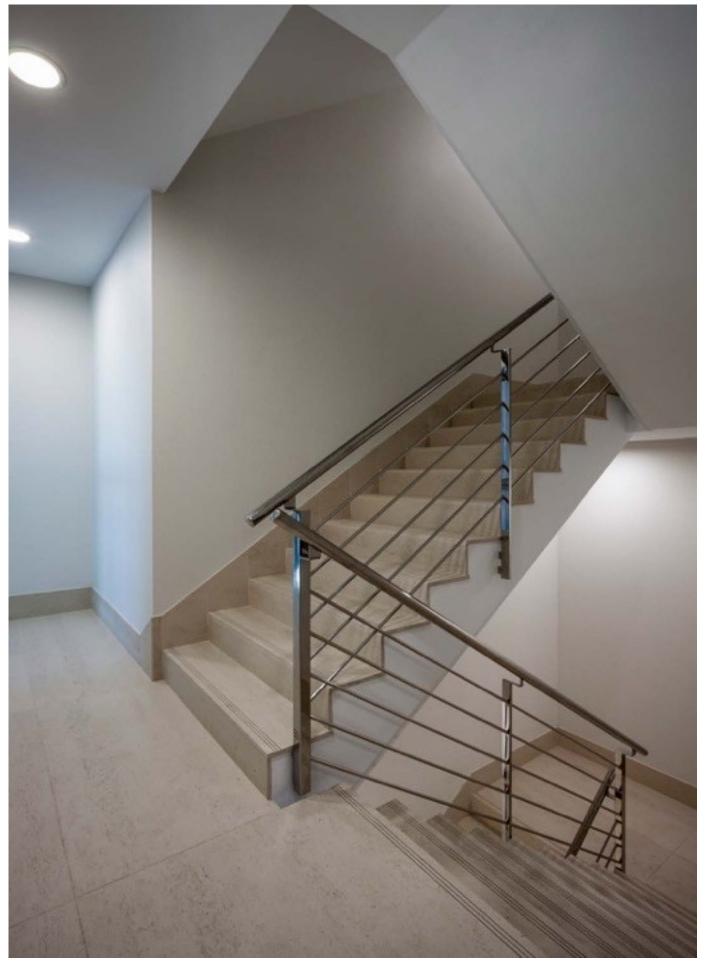




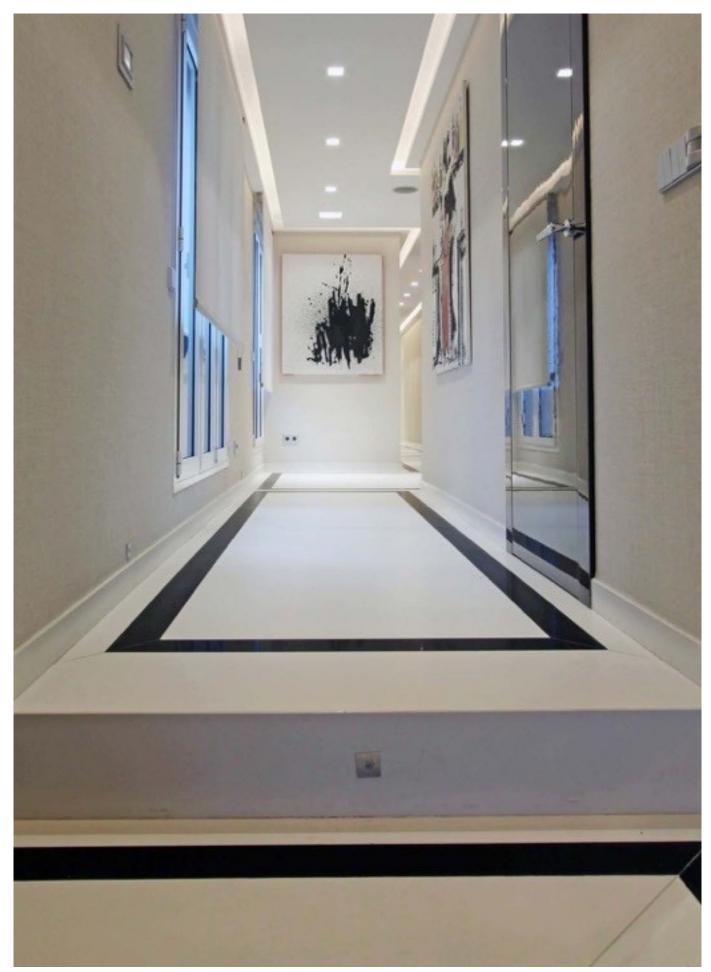
Scratch Resistant







Cajamar | Dekton Danae | © Fernando Alda



Apartment Conde de Aranda | Madrid (Spain) | Dekton Ariane |  $\tilde{O}$  Raquel Elliot

# Wall Cladding





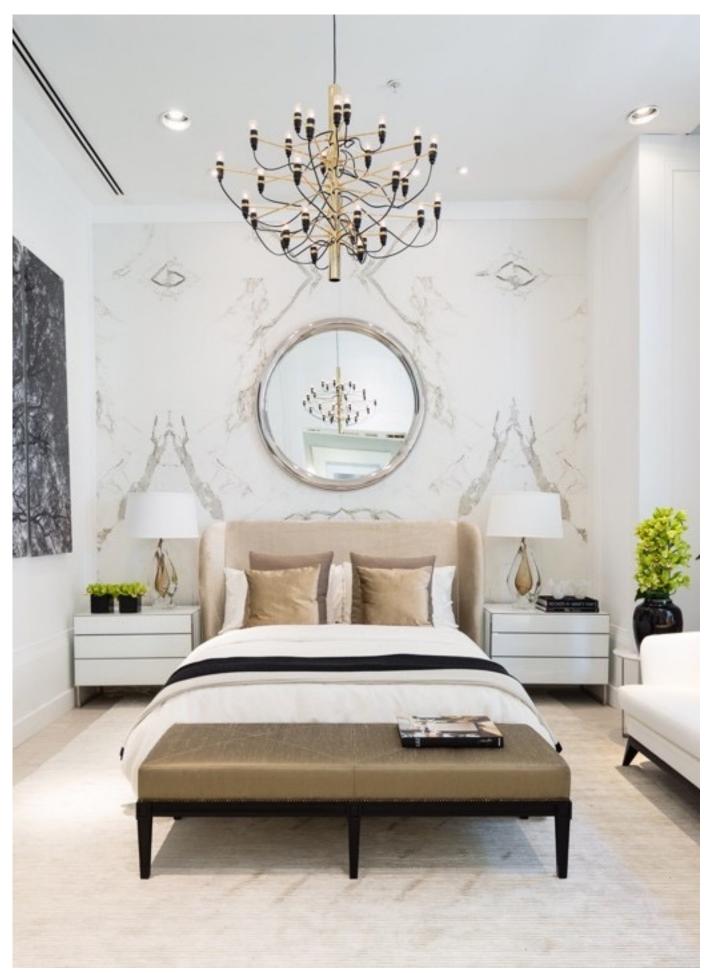
Material





Low Water Absorption











Henderson Municipal Swimming Pool | Dekton Entzo | © Architect Barry McCallum



Uterqüe | Barcelona (Spain) | Dekton Danae

Parisian Apartment - Salone Mobile Milano 2016 | Dekton Zenith Inkjet | © Interior Design: Cecconi Simone



## Indoor Countertops





Low Water Absorption

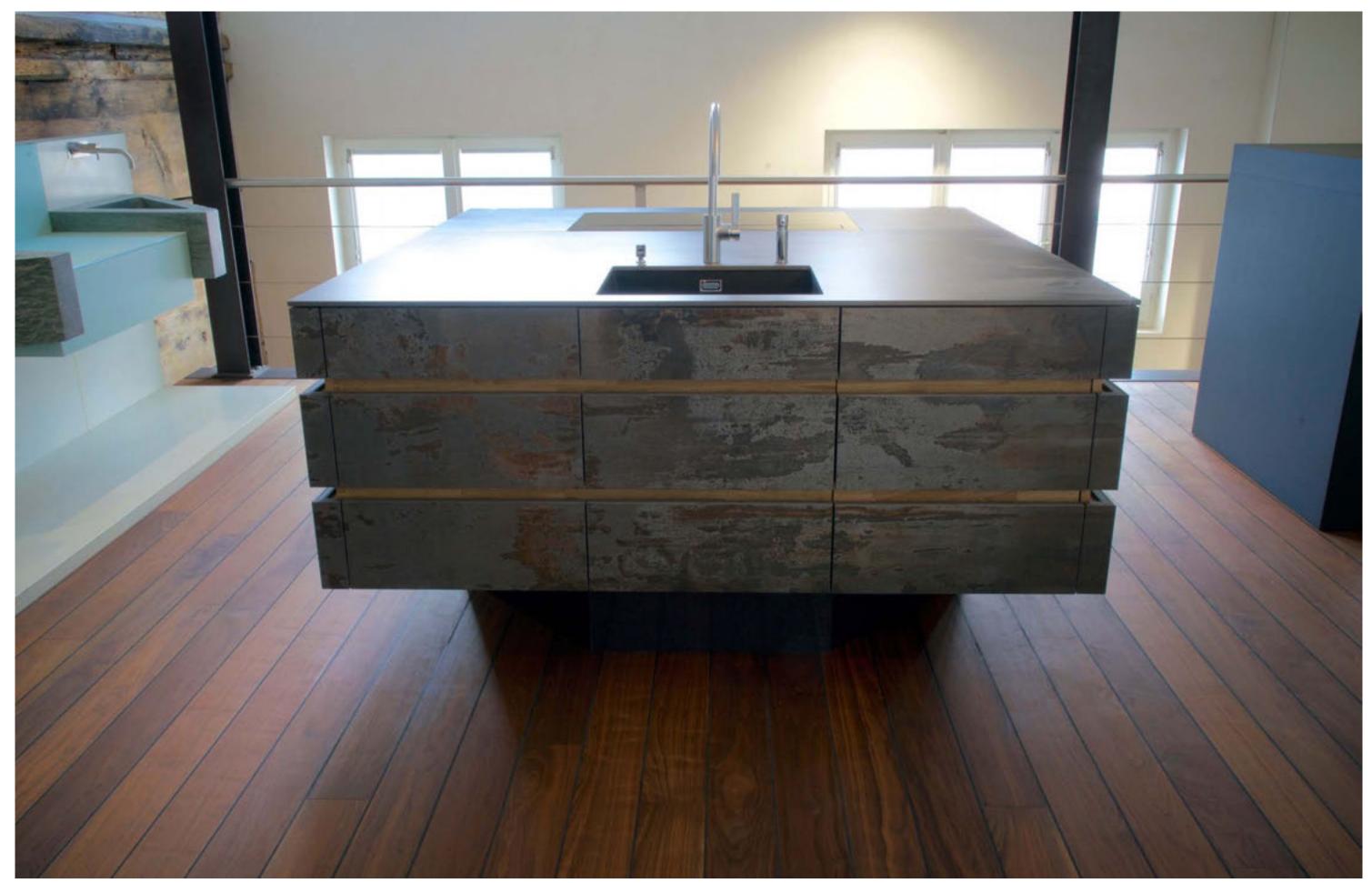
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Scratch Resistant



Resistant to Stains





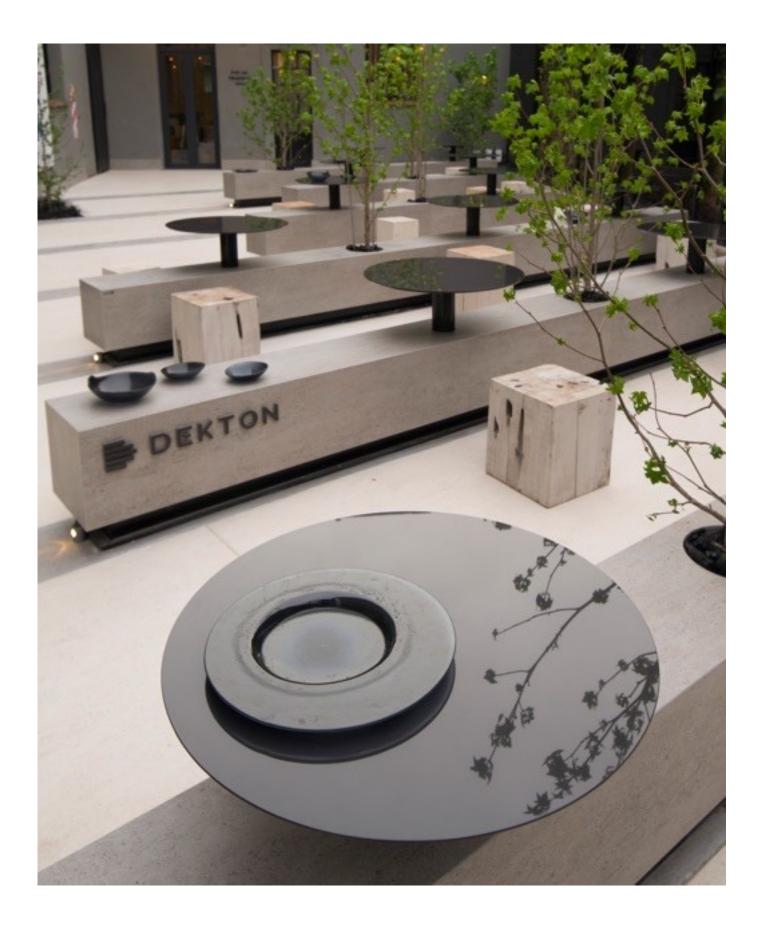


Casa Cor | Dekton Entzo | © Michel Alban - Jônatas Padilha

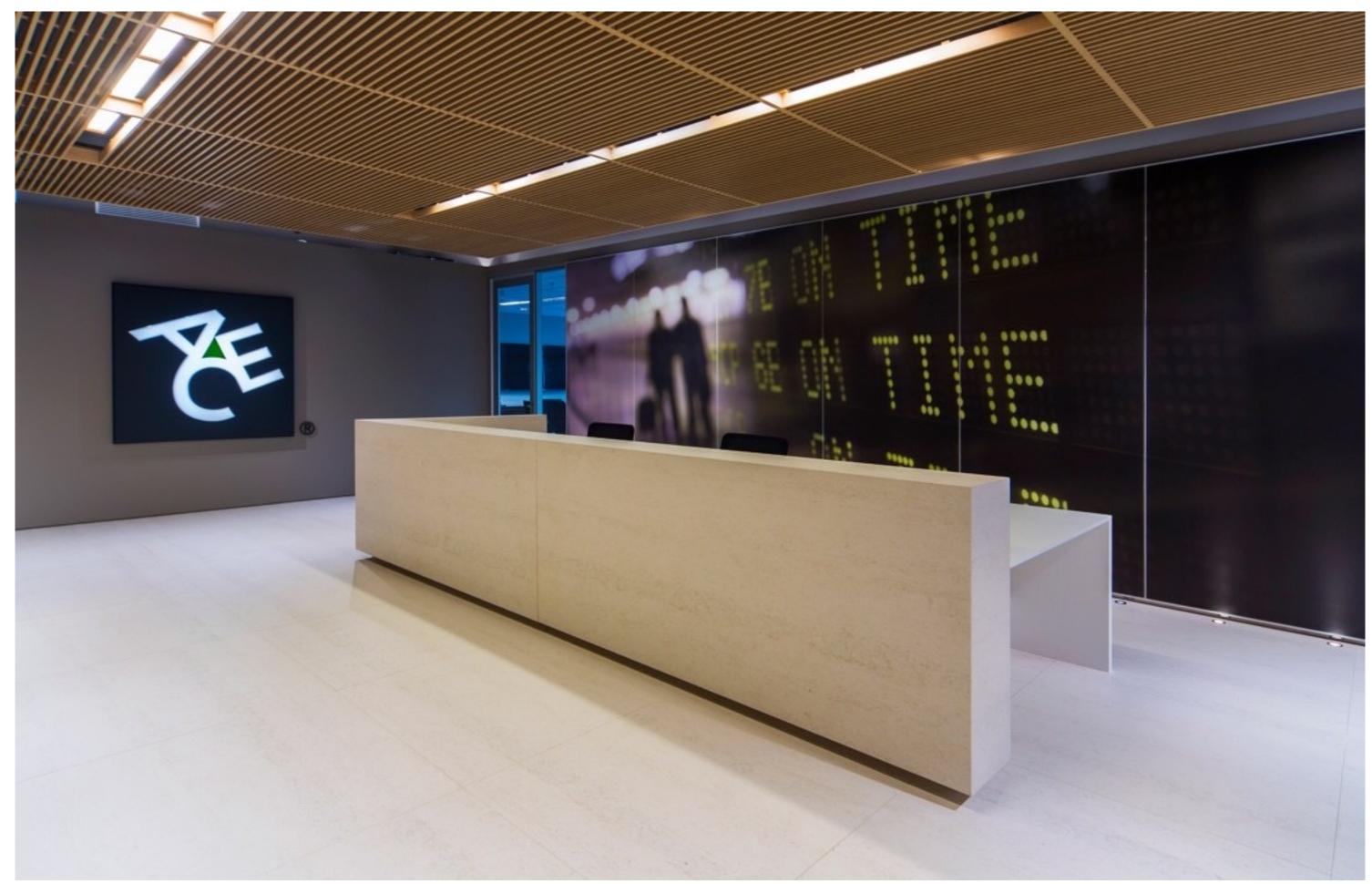


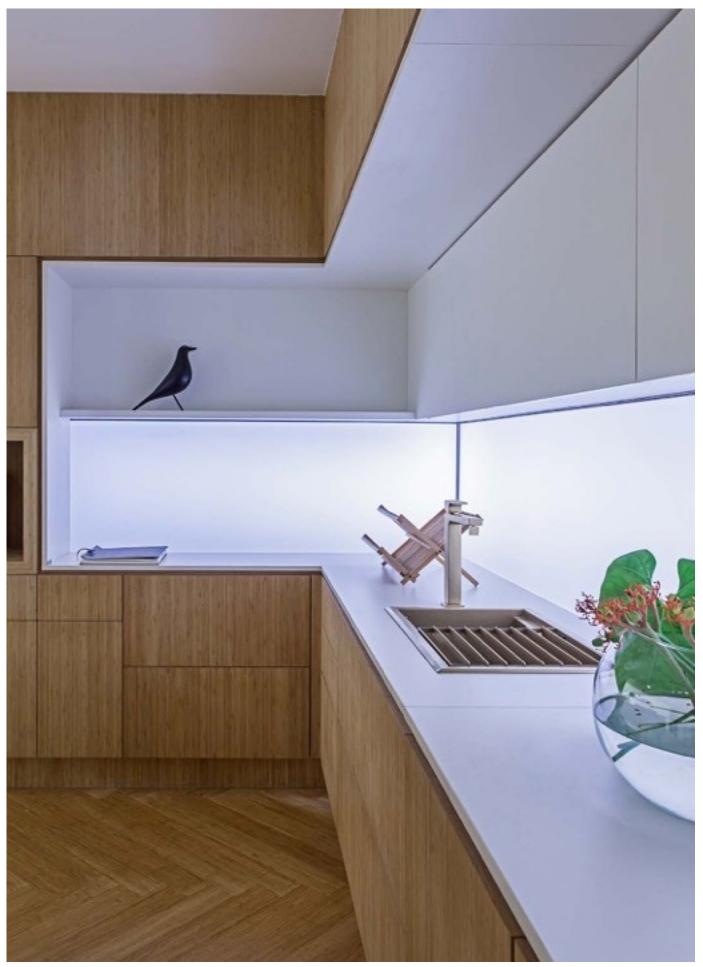
Private House | Dekton Entzo | © Ricardo Santonja



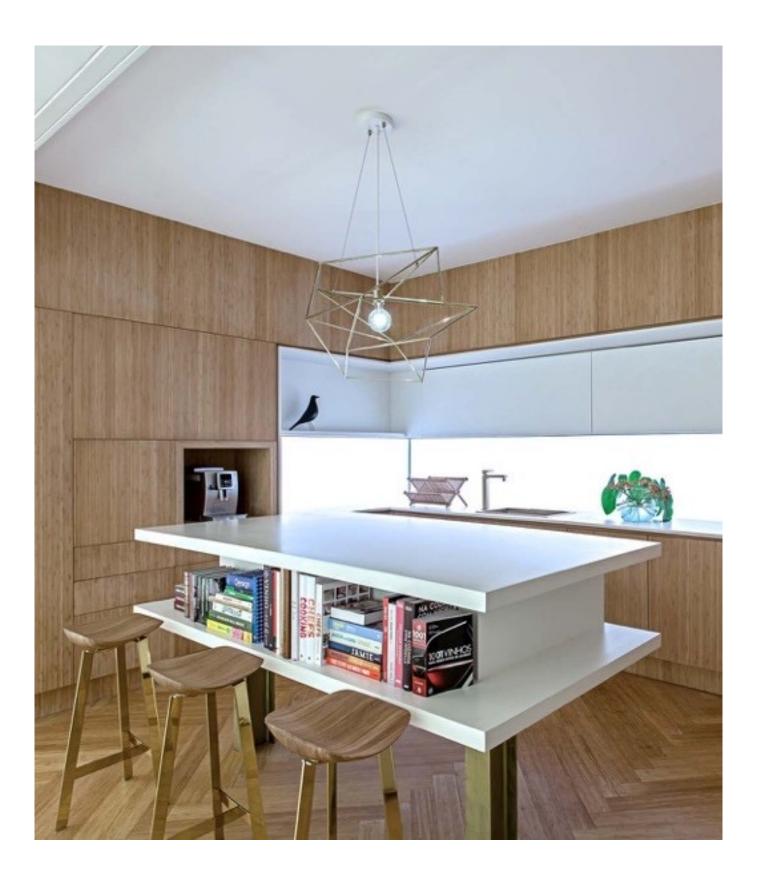








Casa Cor | Dekton Zenith | © Marilia Pellegrini - Carlos Piratininga



There have always been worktops, but functional kitchens go above and beyond. Horizontal workplaces, walls, ceilings and floors are all attacked by grease and smoke... that is a whole other level. Protection with design is only available within

materials that offer top mechanical properties (for example, bending resistance) and zero porosity regardless of the texture (for an effortless cleaning with any chemical product).



Microsoft Head Office | Dekton Keon - Zenith | © Designer Space Matrix



The Plaza Hotel 5\* | Tirana (Albania) | Dekton Zenith







Citrus Heights | California (USA) | Dekton Danae | © Annette Starkey

Choosing where to place an island is not only a matter of space, but also of function. The first step in the design process is knowing how big the island can be using just one piece.

Later, we need to check the size of overhung parts, if the material can be easily cut without breaking risks, availability of the material in 2 or 3 cm thickness so the edge becomes an aesthetically pleasing feature. Only then, the structure underneath can be designed.



0 Resistant to Stains

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Low Water Absorption





Superior Mechanical Resistance



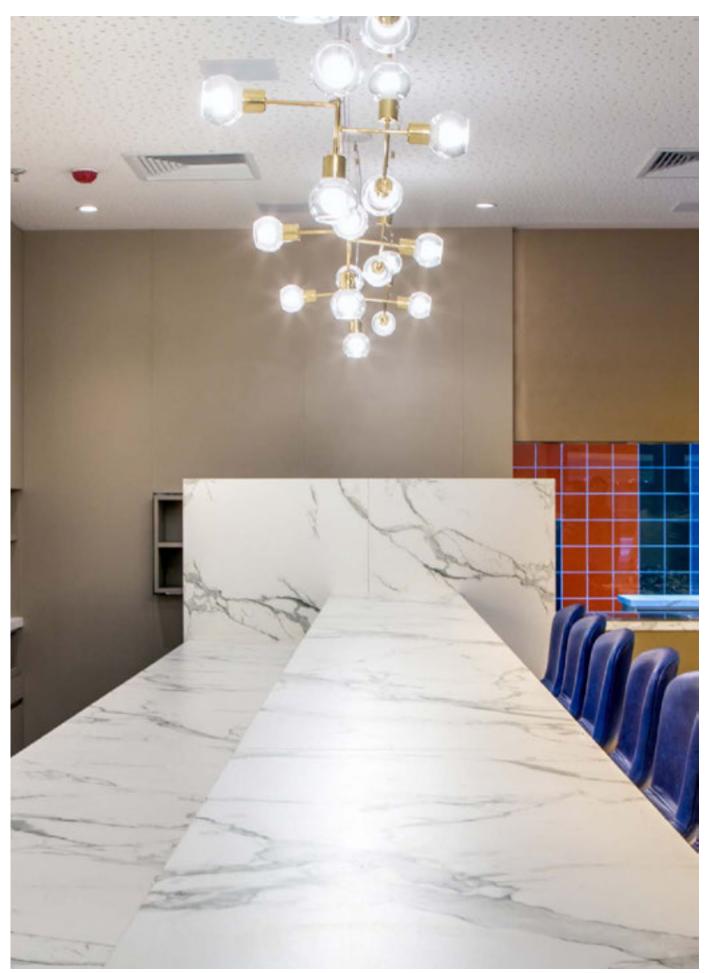
Resistant to Abrasion



Restaurant | Dekton Keranium | © MCA Studio







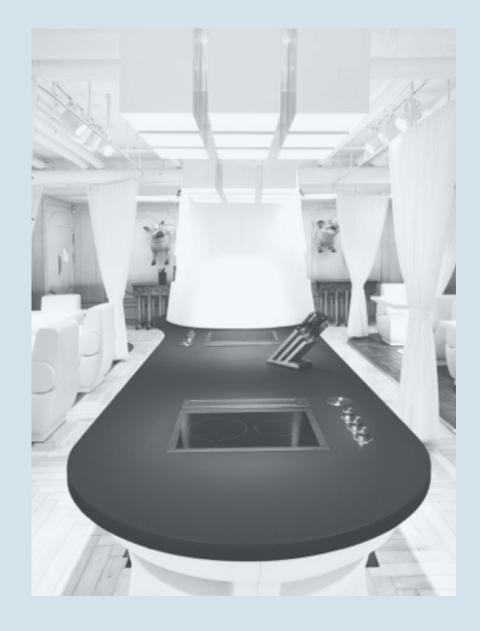
Hospital Copa D'or | Rio de Janeiro (Brazil) | Dekton Aura Bookmatch | © André Nazareth





Casa Cor | Dekton Domoos |  ${\ensuremath{\mathbb C}}$  Sig Bergamin

## Food Services



4 Maximum Resistance to Heat

Fireproof Material

\$



Scratch Resistant



Resistant to Abrasion



Dani García Restaurant | Marbella (Spain) | Dekton Zenith Blackbox







D'Stage Restaurant | Madrid (Spain) | Dekton Keranium

Industrial kitchen and buffet services are highly-demanding applications where few materials are allowed to enter. Large formats, the amount of holes, the presence of cold and hot items and the required hygiene demanded from an intense and daily use create a harsh environment for almost every material... but not for an ultracompact surface.



Diverxo Restaurant | Madrid (España) | Dekton Domoos

Diverxo Restaurant | Madrid (España) | Dekton Domoos

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AND DESCRIPTION OF THE PARTY NAMES

- Louis

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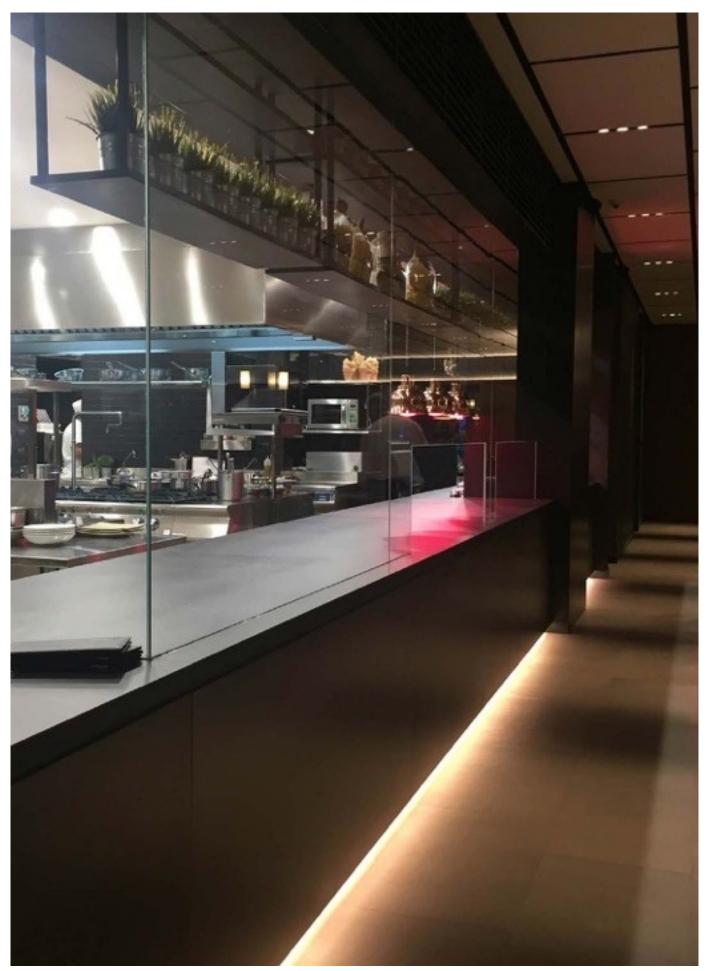
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Restaurant André | Singapore (Singapore) | Dekton Galema



Casa Cor | Dekton Aura | © Michel Alban - Jônatas Padilha

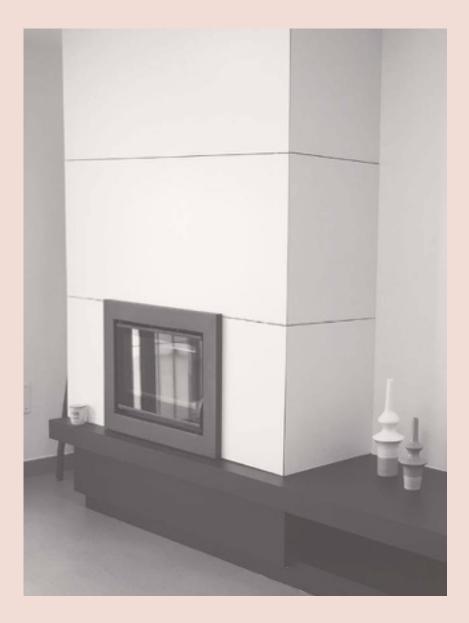


Pane e Vino, Italian Restaurant | Dekton Sirius | © Interior Designer Camilla Lapucci



The Plaza Hotel 5\* | Tirana (Albania) | Dekton Aura

# Fireplace Surrounds



3 \$ Fireproof Superior Mechanical Resistance Material

2 Dimensional Stability

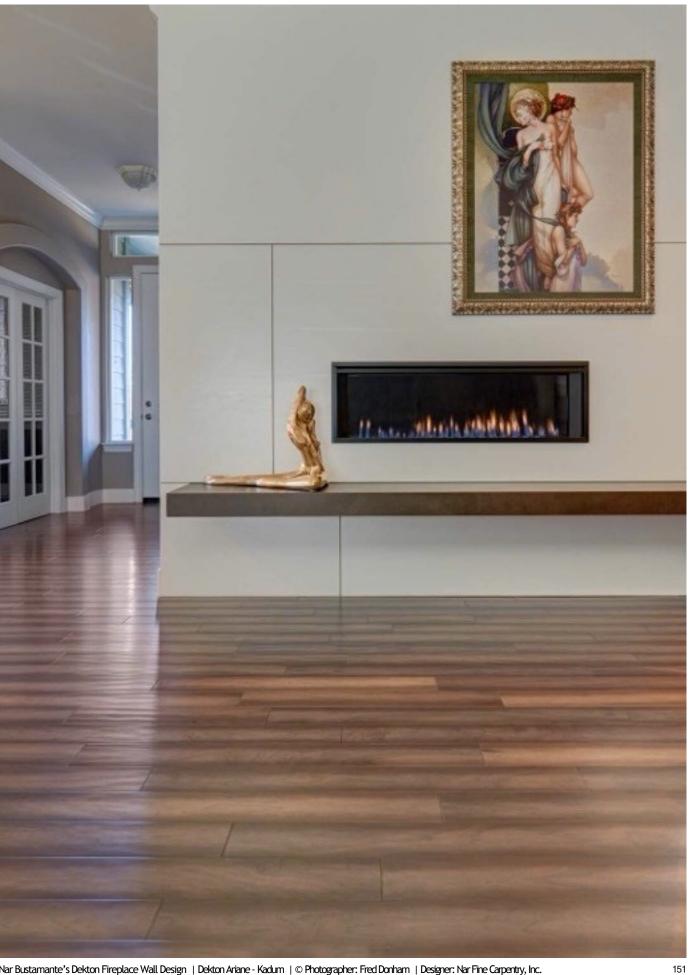


Maximum Resistance to Heat



Casa Cor | Dekton Keon |  $\mathbb C$  Edgard Cesar





Nar Bustamante's Dekton Fireplace Wall Design | Dekton Ariane - Kadum | © Photographer: Fred Donham | Designer: Nar Fine Carpentry, Inc.

Nar Fine Carpentry's Dekton Sail Lounge | Dekton Aura Bookmatch - Trilium | © Photographer: Fred Donham | Designer: Nar Fine Carpentry, Inc.





Northwest Fireplace Centre | Manchester (United Kingdom) | Dekton Makai

Extreme heat at home must never be underestimated. Heat is present not only at the source but also within the ashes, and the often used metal cases. By taking care of the internal cladding with a heat-resistant material, we can now design a final casing with large format plates, giving the latest looks to a functional requirement while maintaining the physical, mechanical and thermal properties. Whole pieces over 3m long, large horizontal strips with just 2mm joints are now possible thanks to pieces cut with the maximum accuracy and no warping.

### DEKTON TECHNICAL INFORMATION

### Technical Information According to ASTM Standard (American Society for Testing and Materials)

#### Family I

Domoos, Sirius, Sirocco, Kadum, Strato, Keranium, Ananké, Vegha, Ventus, Korus, Galema, Keon, Kelya, Borea, Valterra, Aldem, Odin... XGLOSS: Spectra, Lumina, Blaze, Splendor...

Danae, Irok, Edora, Makai, Blanc Concrete, Gada, Bento, Aged Timber, Sterling, Sarey, Dove...

Family II Zenith, Aura, Ariane, Kairos, Entzo, Aura 15... XGLOSS: Halo, Fiord, Tundra, Glacier...

### Family IV Trilium...

Family III

| TEST   | STANDARD                  | DETERMINATION                           | UD  | FAMILY I             | FAMILY II            | FAMILY III           | FAMILY IV           |  |
|--|---------------------------|---|-----|----------------------|----------------------|----------------------|---------------------|--|
| Moisture expansion   | ASTM C370                 | Average moisture expansion              | %   | 0.02                 | 0.005                | 0.004                | 0,02                |  |
| Breaking strength  | ASTM C648                 | Average breaking strength               | lbf | 3,963                | 4,896                | 3,932                | 1194                |  |
| Flexural properties  | ASTM C674                 | Average modulus of rupture              | psi | 10,828               | 13,997               | 9,005                | 8023                |  |
| Water absorption, bulk density, apparent porosity and apparent specific garavity | ASTM C373                 | Average water absorption                | %   | 0.03<br>(Impervious) | 0.05<br>(Impervious) | 0.01<br>(Impervious) | 0,0<br>(Imprevious) |  |
| Static coefficient of friction (skid resitance)                                  | ASTM C1028                | static coef. Friction dry               | -   | 0.80                 | 0.77                 | 0.77                 | 0,76                |  |
|  |                           | static coef. Friction wet               | -   | 0.66                 | 0.56                 | 0.69                 | 0,61                |  |
| Wet dynamic coefficient of frictipn (DCOF)                                       | ANSI A137.1 section 9.6.1 | Average DCOF                            | -   | 0.57                 | *                    | 0.47                 | *                   |  |
| Relative resistance to wear (Taber abrasion) STM C501                            |                           | Average Abrasive Wear<br>Index          |     | 182,2                | 337                  | 240                  | 239                 |  |
| Thermal shock resistance   | ASTM C484                 | Defects                                 | -   | No defects           | No defects           | No defects           | No defects          |  |
| Bond strength  | ASTM C482                 | Average bond strength                   | psi | 423                  | 437                  | 357                  | 454                 |  |
|  |                           | Common Household and cleaning chemicals |     |                      |                      |                      |                     |  |
|  |                           | Acetic acid, 3% (v/v)                   | -   | No affected          | No affected          | No affected          | No affected         |  |
|  |                           | Acetic acid, 10% (v/v)                  | -   | No affected          | No affected          | No affected          | No affected         |  |
|  |                           | Ammonium chloride, 100 g/L              | -   | No affected          | No affected          | No affected          | No affected         |  |
|  |                           | Citric acid solution, 30 g/L            | -   | No affected          | No affected          | No affected          | No affected         |  |
| Resistance to chemical substances  | ASTM C650                 | Citric acid solution, 100 g/L           | -   | No affected          | No affected          | No affected          | No affected         |  |
|  |                           | Lactic acid, 5% (v/v)                   | -   | No affected          | No affected          | No affected          | No affected         |  |
|  |                           | Phosphoric acid, 3% (v/v)               | -   | No affected          | No affected          | No affected          | No affected         |  |
|  |                           | Phosphoric acid, 10% (v/v)              | -   | No affected          | No affected          | No affected          | No affected         |  |
|  |                           | Sulfamic acid, 30 g/L                   | -   | No affected          | No affected          | No affected          | No affected         |  |
|  |                           |   |     |                      |                      |                      |                     |  |

#### Family I

Domoos, Sirius, Sirocco, Kadum, Strato, Keranium, Ananké, Vegha, Ventus, Korus, Galema, Keon, Kelya, Borea, Valterra, Aldem, Odin... XGLOSS: Spectra, Lumina, Blaze, Splendor...

#### Family II

Zenith, Aura, Ariane, Kairos, Entzo, Aura 15... XGLOSS: Halo, Fiord, Tundra, Glacier...

| TEST                              | STANDARD   | DETERMINATION                                  | UD     | FAMILY I    | FAMILY II   | FAMILY III  | FAMILY IV   |  |  |
|-----------------------------------|------------|--|--------|-------------|-------------|-------------|-------------|--|--|
|                                   |            | Swimming pool chemicals                        |        |             |             |             |             |  |  |
|                                   | ASTM C650  | Sodium hypoclorite solution, 20 mg/L           |        | No affected | No affected | No affected | No affected |  |  |
|                                   |            | Acids and bases                                |        |             |             |             |             |  |  |
| Resistance to chemical substances |            | Hydrochloric acid solution, 3% (v/v)           |        | No affected | No affected | No affected | No affected |  |  |
|                                   |            | Hydrochloric acid solution, 18% (v/v)          |        | No affected | No affected | No affected | No affected |  |  |
|                                   |            | Potassium hydroxide, 30 g/L                    |        | No affected | No affected | No affected | No affected |  |  |
|                                   |            | Potassium hydroxide, 100 g/L                   |        | No affected | No affected | No affected | No affected |  |  |
|                                   |            | Average weight percent absorption              | 1 %    | 0.02        | 0.04        | 0.02        | 0,04        |  |  |
| Absorption and bulk gravity       | ASTM C97   | Average density                                | lb/ft3 | 156         | 160.63      | 157.6       | 152,7       |  |  |
|                                   |            | Average modulus of rupture dry conditions      | psi    | 8,128       | 9,042       | 7,369       | *           |  |  |
| Modulus of rupture                | ASTM C99   | Average modulus of rupture wet conditions      | psi    | 7,490       | 8,446       | 7,480       | ź           |  |  |
| Flexural strength                 | ASTM C880  | Average flexural strength<br>dry conditions    | psi    | 6,840       | 3,118       | 5,858       | 6068        |  |  |
|                                   |            | Average flexural strength<br>wet conditions    | psi    | 6,205       | 4,187       | 5,119       | 6249        |  |  |
| Compressive strength              | STM C170   | Average compressive strength<br>dry conditions | psi    | 34,409      | >55,000     | 44,882      | 53800       |  |  |
|                                   |            | Average compressive strength<br>wet conditions | psi    | 17,823      | >55,000     | 40,165      | 58600       |  |  |
| Abrassion resistance              | ASTM C1353 | Average index of abrassion                     | -      | 349         | 349.48      | 265.8       | 263         |  |  |

\* Test pending

#### Family III

Danae, Irok, Edora, Makai, Blanc Concrete, Gada, Bento, Aged Timber, Sterling, Sarey, Dove...

#### Family IV

Trilium...





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\* See specific warranty conditions. \*\* To obtain more information about hues with NSF certificate please visit <u>www.nsf.org</u>