

# The first 100 Years.



Dear Reader,

2023 marks a huge **milestone in the history** of our company. Häfele is now **one hundred years old**, and we are taking the opportunity of this extraordinary anniversary to pause and reflect intensively on the growth that's taken us from a small hardware store in the Black Forest (Germany) to a global company.

In addition to extraordinary people who have guided the company's fortunes with far-sightedness, what stood out prominently for us was our ability to forge **strong partnerships** that have been fundamental in shaping our progress and achieving the milestones we stand before today. We sought to build an ecosystem that fostered a sense of community, respect, and shared purpose and over the years, this approach has proven to be the cornerstone of our achievements. Together, we have weathered economic downturns, navigated shifting market trends, and embraced technological advancements.

Therefore, it wouldn't be incorrect to state that it has been **courage and optimism**, above all that have carried us as an organization through stormy times. These qualities have also defined Häfele from the very beginning and characterised the founders back in the day. The original 2-man business which was a specialist hardware store led by **Adolf Häfele and Hermann Funk**, has developed into a global company, Häfele SE & Co KG, with subsidiaries in **38 countries**, **8,000 employees** and more than **1,50,000 customers**.

Standing on the threshold of the next phase of our journey, we realise that it was courage and optimism along with an **unwavering alliance with our employees, vendors, suppliers and above all our customers**, that enabled us to change continuously, to break new ground and not only to think ahead, but also to actively implement these forward-thinking ideas.

As we foray into the next 100 years, Hafele presents its future-oriented brand purpose (which will be at the very core of our strategic outlook) - "Maximising the value of space. Together." The new brand claim aims to consolidate our attitude, our competences, the developments inside and outside of our company and the strategic decisions we have made in the past years and decades. And as we transition between the first and second century, we aim to pour our collective experiences that have brought us here into a connected mould – our purpose, that will function as a starting point for a shared journey into the future and will act as a powerful compass for us.

Needless to say, we excitedly look forward to shaping this - perhaps new, different, surprising - future together with you!

With Best Regards,

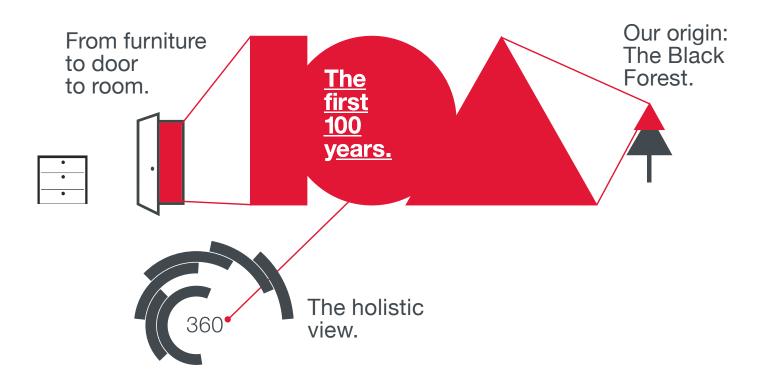
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Frank Schloeder Managing Director, Hafele South Asia



# THE PATH OF HÄFELE **THAT TRANSLATED INTO SYMBOLS**

For the 100-year anniversary of Häfele, we have expressed two things: The pride in the successful path that the company has taken up to today, and optimism that the path to the future will be just as successful because we have the courage to continuously reinvent ourselves. This is why the anniversary design is based on the roots of the company and is at the same time open and flexible. A modern forward-looking code that gives our ambitions a visual expression





# MAXIMIZING THE VALUE OF SPACE. **TOGETHER**.

In conjunction with its 100-year anniversary celebrations this year, that kicked off at Interzum 2023, Hafele unveiled a new purpose line "Maximizing the value of Space. Together.", which resonates strongly with us. We aim to strengthen our brand position in South Asia by emphasizing on the meaning of this purpose line, i.e. Hafele strives to provide the best of the best (maximizing) benefits (value) through its versatile solutions and services for different living and working spaces ranging from hotels, offices, institutes and homes as well as different interior applications like kitchens, living rooms & bedroom furniture, doors and interior partitions, wardrobes as well as furniture and room lighting. And this we strive to achieve in partnership (together) with all entities within our ecosystem from our suppliers, partners (Industry and Project), channels (distributors, dealers and franchisees), influencers (architects, designers, contractors and carpenters) right up to the final beneficiary i.e., our end customer.

In short, with our new purpose line we aim to co-create an environment for our endearing customers where they can enjoy the multiplied benefits of their living and working spaces.

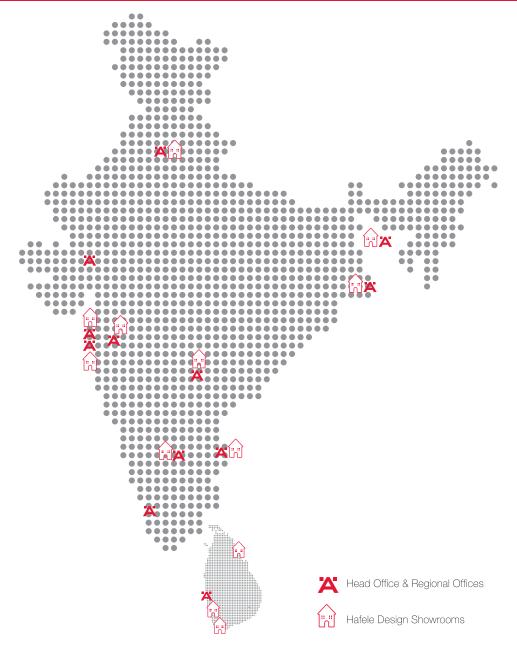
# Hafele Worldwide



With its origin in 1923 in a small town named 'Nagold' from the Swabian region of Germany that nurses a passion for hardware technology, it is no surprise that Häfele has lived up to its roots through a successful presence in the architectural and furniture hardware industry for over 10 decades now. Today, Hafele's worldwide penetration includes 38 subsidiaries across Europe, America, Asia, Australia and New Zealand. With these subsidiaries and numerous other sales organisations, Häfele operates in over 150 countries. The Häfele headquarters, 4 manufacturing units and 10 sales offices are located within Germany; while 1 manufacturing unit is located at Budapest, Hungary. The company also owns one of the largest and most sophisticated warehouses in its home country. The Häfele worldwide workforce is empowered by a base of over 8100 employees.

The group services over 150,000 customers across the globe through its extensive range of hardware products and a comprehensive logistics system. In addition to this, Häfele also provides consultative services to its customers, educating and advising them about buying the correct hardware as per their requirements. With this level of market penetration and ability to handle worldwide demand, it comes as no surprise that the company is an authority in the segment of home interior solutions; what is pleasantly surprising, though, is that in spite of its size, Häfele still remains a family owned and run business with a unique, friendly and value-centric work culture which is strongly followed among all its subsidiaries.

# Hafele India



Häfele India is a wholly-owned subsidiary of the Häfele Global network and has been operating in India since 2003. The ability of the company to understand the diverse Indian market has made it an authority in the field of architectural hardware, furniture and kitchen fittings and accessories. The company also has a strong presence in synergized product categories namely Home Appliances, Interior Lighting, Water Solutions and Surfaces catering to the focused demand from these industries.

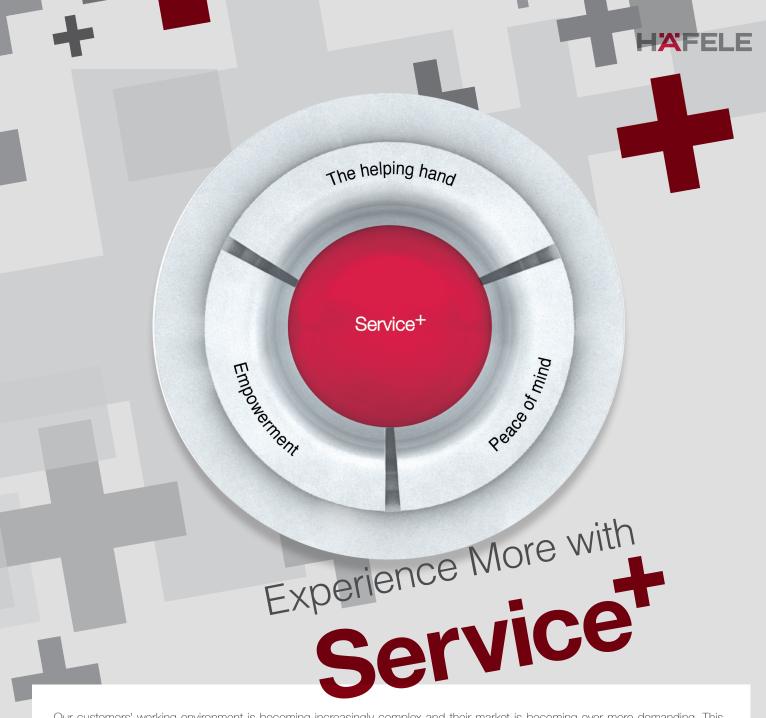
The subsidiary has a strong nation-wide presence with offices in Mumbai, Pune, Ahmedabad, Bangalore, Chennai, Hyderabad, Cochin, Delhi and Kolkata. It has full-scale operations in Sri Lanka and Bangladesh with Regional offices and Design Showrooms in both the countries; and has also spread its operations to other regions of South Asia including Nepal, Bhutan and Maldives.

Häfele's design showrooms are hubs of international home interior trends and cutting-edge designs presented in a world-class environment, where customers can see home solutions in their inherent applications. These showrooms function as a one-stop-shop for all home interior and improvement needs - from providing indepth technical advice to kitchen and wardrobe designing services through a team of experts stationed at the showroom.

Häfele India services its customers with a base of 1500 employees, a well-networked Franchise base of over 180 Partners along with over 500+ direct dealers and 90+ distributors who in turn cater to over 12000+ sub dealers. The subsidiary has a sophisticated Logistics centre in Mumbai along with distribution centres in Delhi, Bangalore, Kolkata and Colombo respectively.

### HAFELE

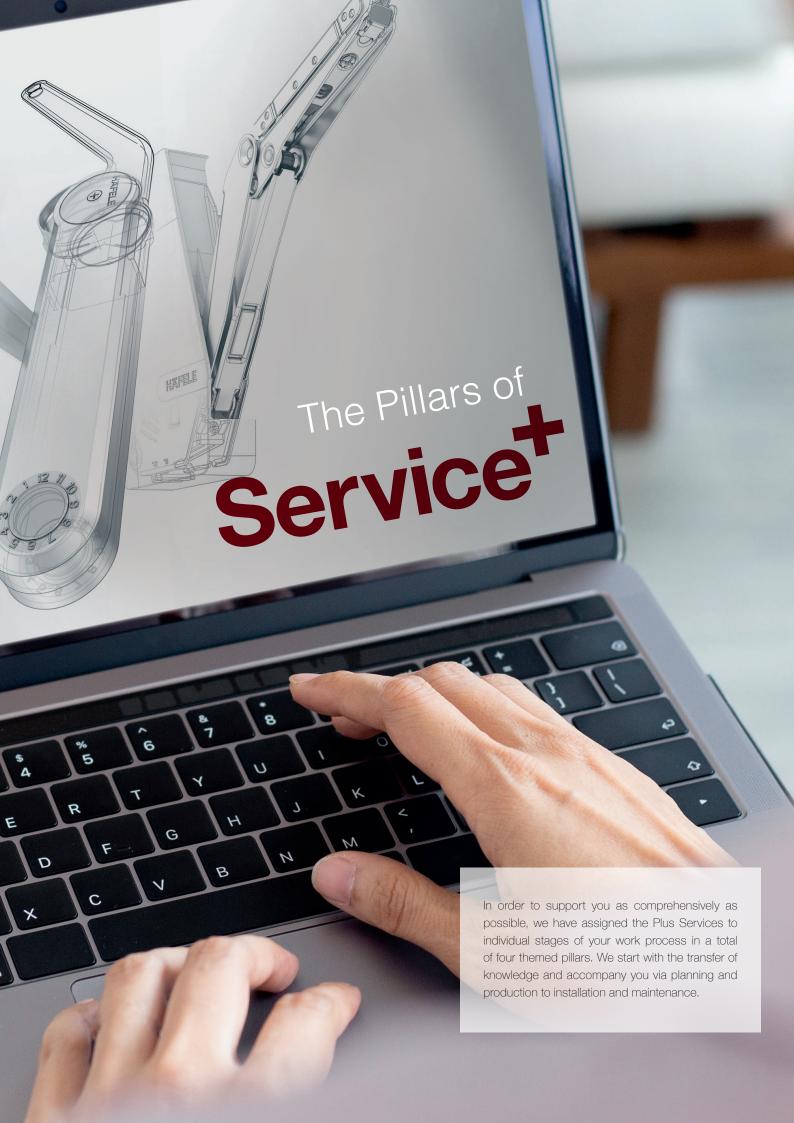




Our customers' working environment is becoming increasingly complex and their market is becoming ever more demanding. This drives our motivation to do everything in our power to help our customers be successful. And to demonstrate that Häfele is the right partner in these challenging times, we want to accompany our customers throughout their entire business process and give them added strength in every phase of their business. We don't just want to sell our products, we also want to provide the highest level of service.

We have now divided our services into two categories: Standard Services which we provide to our customers as a matter of course when they choose our products. For example, a high availability of our goods and punctual delivery. And then there is Service+ which constitutes of services that give our customers considerable added value in terms of building expertise, increasing productivity or providing individual customised solutions. These services require a considerable amount of time and effort to develop and implement and are designed to enable our customers to regard them as worthwhile investments.

The aim is to create solid long-term foundations for our comprehensive service promise and to make Häfele an indispensable partner for our customers. The focus here lies not so much on us and on what we do – but rather, on the benefits derived by our customers. We want to empower them with opportunities to develop and expand their skills – both as masters of their trade and as entrepreneurs. We want to support them in the planning and realisation of their projects and relieve them of as much work as possible, thereby providing them with a helping hand to use their most valuable resource – time – as efficiently as possible. And we aim to give our customers peace of mind and the assurance that even after the end of a successful project completion, we will continue to be there for them as a reliable partner, shouldering responsibility.







Empowering customers with

### Service+ Knowledge

Includes service offerings that provide inspiration and expertise to our customers about the Häfele product range. Through these, we enable our customers to use Häfele products profitably and at the same time remain at the cutting edge of technological development. One example of this is the Häfele Academy, which imparts knowledge about complex products and new technologies to our customers via seminars and trainings.

Providing a helping hand to customers with

### Service+ Planning & Customised

Includes service offerings like space, design planning and customisations that make life easier for our customers and support their design vision. An example of this is Hafele's Lighting Design Service which helps our customers curate a lighting plan, following a customised approach, that enhances and brings out the true functionality of the interior space as per requirement.





Lending a "Peace-of-mind" experience through

### Service+ Assist

Includes service offerings that provide support and assistance to our customers, whether digitally or on site. An example of this is the complete assembly and installation service for more complex and maintenance-intensive products done by our Meister certified and trained technicians.





# WHAT IS DEKTON?

### WHAT IS DEKTON?

DEKTON is a new and unique surface created through the innovative combination of 28 natural minerals found in nature and its exclusive

### ULTRA COMPACTING TECHNOLOGY.

This technology replicates and enhances the metamorphic changes that natural stone undergoes over a millennia through exposure to high pressure and high temperature.

This evolution represents a technological and industrial leap capable of generating a revolutionary material and leading product with virtually ZERO porosity and non-existence of any micro flaws that cause weakness.



### **DEKTON**

The product's patent was requested in 2012 and currently a PCT patent has been requested. Owing to its properties, DEKTON® is a unique material around the world, as it boasts the highest quality technical characteristics among the different existing construction surfaces on the market.

### Manufacturing Process

The manufacturing process includes several phases. It is explained below phase -wise.

Receipt and preparation of raw material: at the very start of the process, the raw materials are checked for quality and suitability. All raw materials are stored separately to prevent cross-contamination. They are then transported by a conveyor belt system, from the storage areas to a series of hoppers or purification systems exclusively designed for this process.

The raw materials used for DEKTON® have been very carefully chosen, paying particular attention to the physical and chemical parameters. They are supplied from all around the world and in some cases, demand a complex logistics system to prevent contamination or loss in quality.

Milling and homogenization: the DEKTON® formula is transported from the hoppers or purification systems to a wet grinding process, in which, the different raw materials are mixed in a certain ratio and are ground to a specific particle size. The particle size completely determines the speed and course of the chemical reaction that gives rise to DEKTON®. It also conditions the final properties of the product. This mixture is stored separately before use, following a pre-determined stabilisation period.

Pigmentation: the pigmentation process is made up of a complex system of mixers, diluters and stirrers. This system is capable of mixing, depending on the colour/ finish, inorganic pigments with the rest of the DEKTON® formula. These pigments also form part of the chemical reaction that gives rise to DEKTON®, thus the quality control of its chemical composition is thorough and

rigorous.

Atomisation: The already coloured DEKTON® formula is dried by atomisation until a specific size, grain form and a specific humidity are achieved. The different powder products obtained are stored in separate silos. In this case, the humidity controls the fluidity of these small particles, allowing them to be deposited in the different receptacles that supply some of the subsequent decoration systems. They flow between the channels that supply the other decoration systems or that allow their movement during mixing systems.

Decoration systems: using several unique mechanisms for their design and function, these small particles generated in the previous section, are carefully positioned on different locations on a belt, creating a continuous slab. The decoration mechanisms are what create the different aesthetic effects.

These effects can be produced throughout the thickness of the slab or just on the surface. In total, and in the first phase of the production process, there are 16 different decorative systems that can work independently or simultaneously, or even in groups, resulting in an incredible design versatility.

Shaping system: the continuous slab is separated into several sections that later will create the finished slab, and that will be subject to an extreme ultra-compaction process. To do so, a unique press like no other in the world has been designed for its special dimensions and its capacity to compact.

This process gives the slabs sufficient mechanical resistance to be able to move onto the next section, which is the final thermal process. Before reaching this last section, the ultra-compact slabs pass through different intermediary steps to assist the following steps or to include the aesthetic/decorative content of the piece in some cases.

Thermal process: during this process, the finished slab is given its final physical, chemical and aesthetic properties. This process includes the application of high temperatures so that the different coloured particles react following a pre-established reaction path.

Throughout this process, the raw material and initial pigments are transformed into several intermediary composites. These composites, through the application of heat, are controlled so that they react and so that they can follow the correct synthesis path.

The final result is DEKTON® with a useful surface area of approximately 3200 x 1440 mm and diverse thicknesses that vary from 4 to 20 mm, depending on the application.



### Chemical Composition

This product does not contain resins or organic additives and therefore polymerisation reactions are not used for its production. The chemical composition of the product is fully inorganic.

Different formulas are used for DEKTON®, depending on the type of product required; this means that the final chemical composition can fluctuate without the physical or chemical properties being

affected.

One example of the final chemical composition of DEKTON® is as follows: aluminium silicates, amorphous silica, crystalline silica, zircon and inorganic pigments. The content of crystalline silica in all colours and formula will always be below 11% in weight. The product is classified with the TARIC tariff code: 6914.90.00.90.

Nevertheless in accordance with its technical characteristics, it complies with group Blaof standard EN 14411:2006, such as tiles both for indoor and outdoor flooring applications.

### **Dimensions**

The DEKTON® slab has a nominal dimension of 3200 x 1440 mm. Depending on the type of colour and formula used to manufacture DEKTON®, the useful surface area may be larger than the above dimensions. In the event of a defect appearing, the surface area of the slab decreases in sufficient

measure to allow the defect to be eliminated from what is considered the useful surface area. In other words, the area affected by the defect is subtracted, as shown in the example. The DEKTON® slabs are marketed in different thicknesses: 4 to 20 mm.

The maximum deviation from the nominal value is  $\pm$  2%. As an example, for a 20 mm thick slab, the maximum variation that the slab may have is  $\pm$  0.4 mm.



### Textures / Finishes

The DEKTON® colours may have different textures such as Smooth matte, Textured matte (wood, slate / limestone) and Polished. Dekton Grip, our finish for wet zones, is also available.

The texture is determined by the name of the colour. Not all the textures are available in all the colours.

COLLECTION	TEXTURE	COLOURS	
SOLID	Smooth matte	DOMOOS, ZENITH	
	Textured matte	SIRIUS	
NATURAL	Smooth matte	AURA 22, ENTZO, KAIROS, DANAE, KELYA, SIROCCO, KIRA ,LAURENT, PORTUM, ETER, AERIS, SASEA, REM	
	Textured matte	BROMO	
TECH	Smooth matte	KERANIUM, KEON	
INDUSTRIAL	Smooth matte	TRILIUM, LAOS, SOKE	
LIQUID	Smooth matte	SHELL, SKY	



### **DEKTON FORMATS**





### High UV Resistance

Dekton is highly resistant to ultra violet (UV) light and will not fade or degrade over time making it perfect for both indoor and outdoor applications.



### Highly Scratch - resistant

Dekton is the most scratch resistant surface on the market and while the slip of a knife won't damage Dekton, cutting boards are still recommended to protect your household utensils.



### Resistant to stains

While other surfaces are stain resistant, Dekton is completely stain proof, Even the most stubborn stains like wine, coffee, markers and rust can easily be removed from the surface. Since Dekton has extremely low porosity and contains no resins, it is chemically resistant to drips or splashes of common household chemicals like bleach and drain cleaners. Even oven degreasers won't harm Dekton.



### High resistance to fire and heat

Dekton withstands high temperatures without burning, scorching or cracking. Hot pots and appliances like crock pots can be placed directly on the surface with no worry of damage



### Resistant to abrasion

Dekton is even more resistant to abrasion than granite making it the ideal surface for commercial applications and high traffic areas such as flooring. While other surfaces show wear overtime, Dekton finish will last for the life of the product and will never need to be resurfaced or re-finished.



### Resistant to ice & thawing

Dekton's low coefficient of thermal expansion makes it thermal shock proof from both extreme heat and extreme cold. It's natural resistance to ice and thawing makes it perfect to use in even the coldest environments.



### High mechanical resistance

With over 5 times the flexural strength of granite, Dekton can be installed in thinner material over greater spans allowing for up to a 12 inch unsupported overhang on worktops,inslands and bar tops Dekton's high compressive strength makes it an ideal material for walkways, pavers or driveways.



### Non - porous

Dekton is non porous and never needs to be sealed. It naturally prevents liquids and gases from penetrating the surface making it a low maintenance surface that is easier to clean



### Colour stability

The manufacturing process used to make Dekton allows us to control the pigmentation and decoration of the material giving better colour consistency from slab to slab and resulting in a long lasting product that will not fade overtime. The surface you install today will maintain the same new appearance for the life of the product.



### Dimensional stability

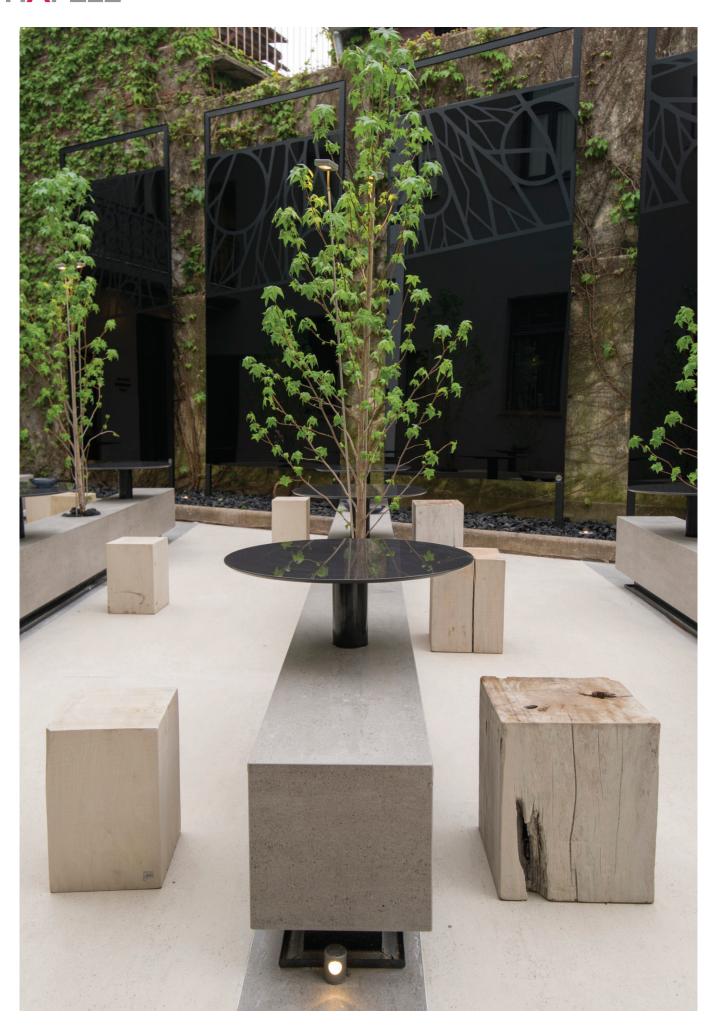
Dekton is very consistent in both dimension and thickness throughout the slab which minimizes the need for field corrections and allows for easy installation



### Waterproof

Dekton is highly water resistant







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## Large Size Flooring





Resistant to Abrasion



Superior Mechanical Resistance

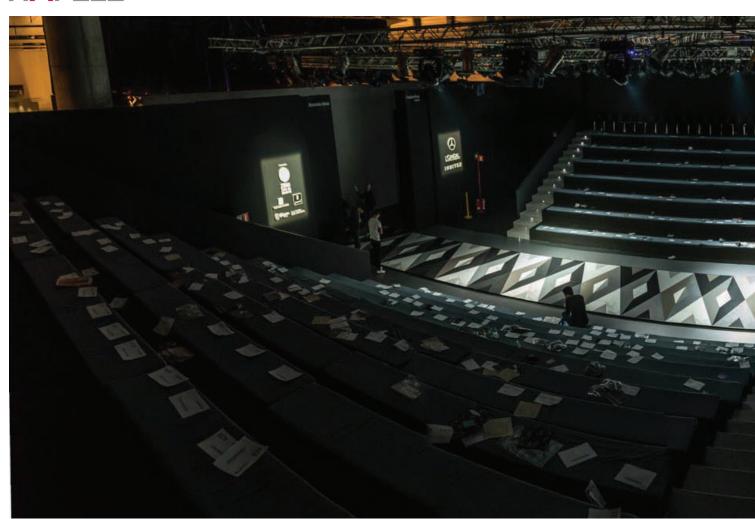


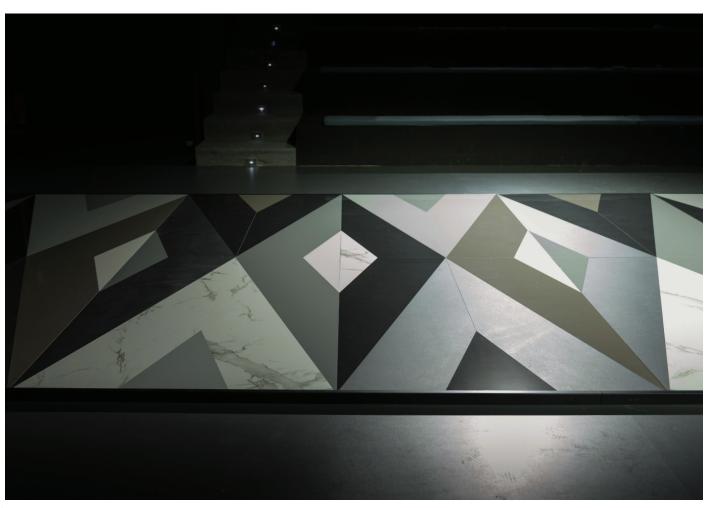
Dimensional Stability



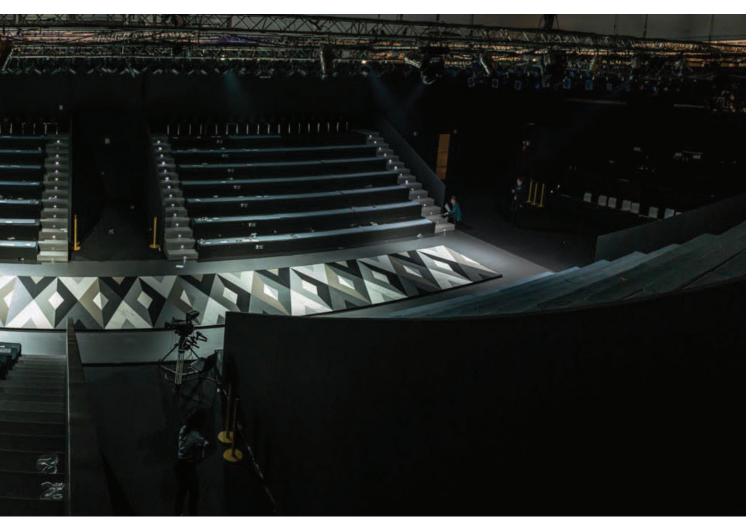
Resistant to Stains

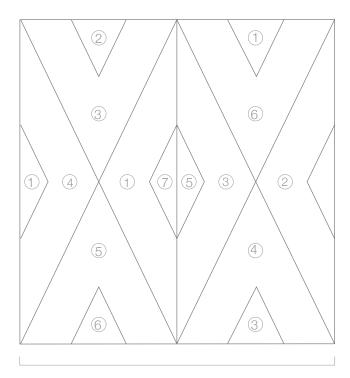












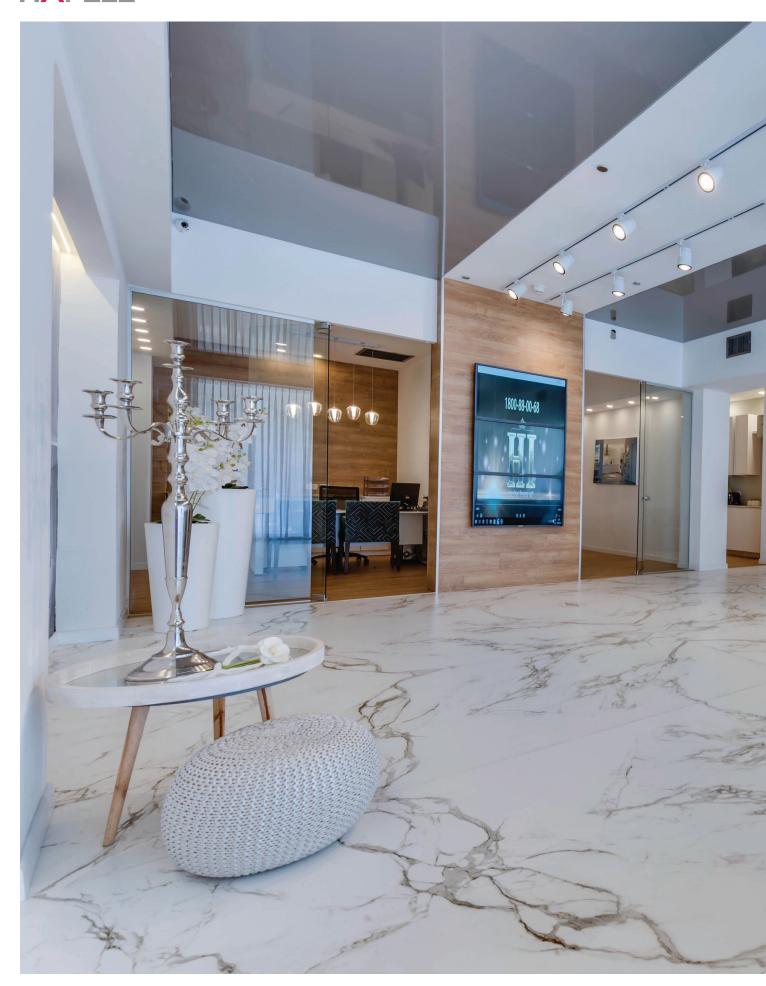
Repetition Pattern (x13)

- 1) Blaze Solid
- 2 Lumina Solid
- 3 Negro Solid
- 4 Kelya Natural
- 5 Aura Natural
- 6 Splendor Solid
- 7 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.





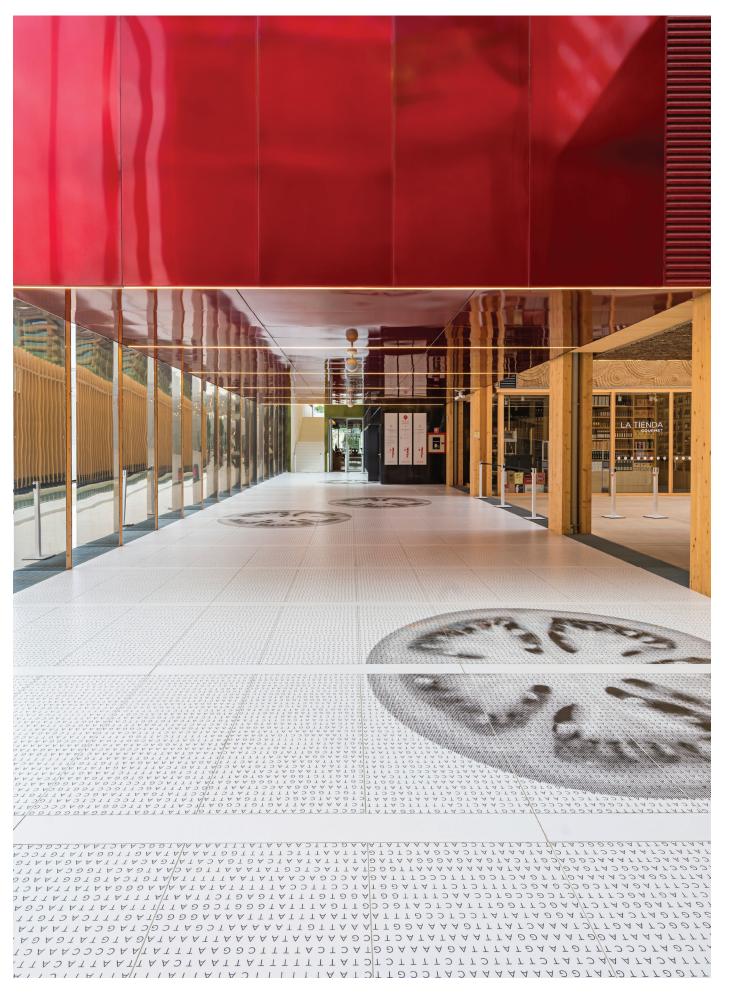
White House | Haifa (Israel) | Dekton Aura 15 Bookmatch











Spain Pavilion Expo Milano | Customised Dekton Zenith using inkjet printing technology









Dressing Room | Dekton Aura 15 | © Architect Carico Dumont - Jomar Bragança













Cajamar | Dekton Danae | © Fernando Alda









Aeris | Large Size Flooring





## Steps & Risers





Fireproof Material



Superior Mechanical Resistance

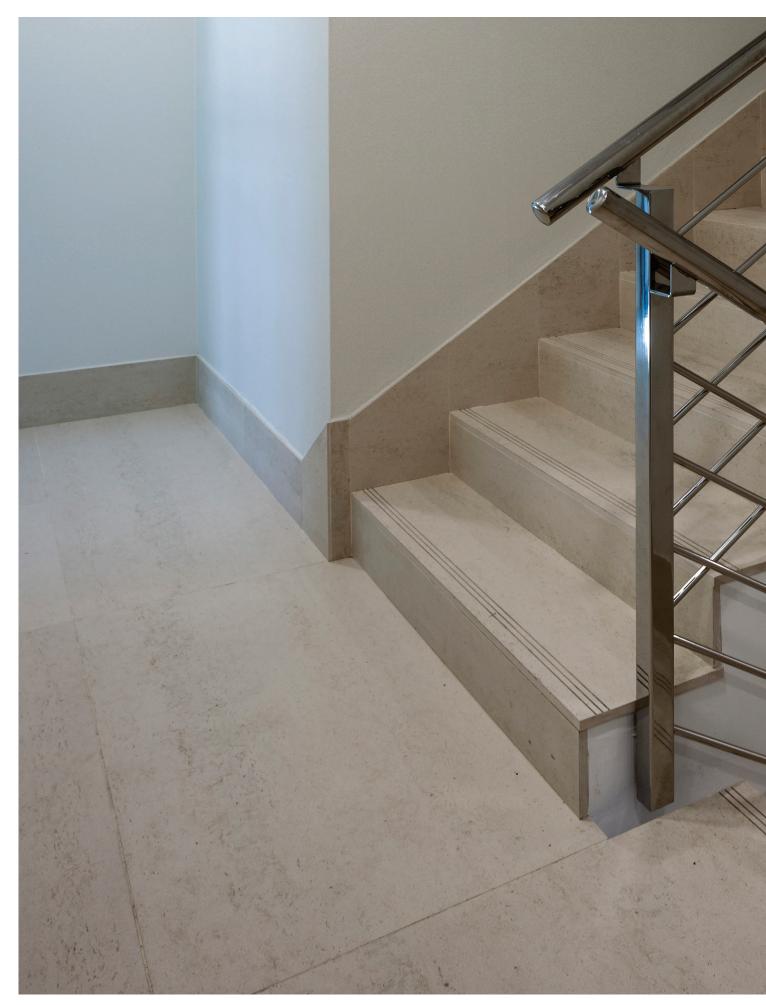


Dimensional Stability



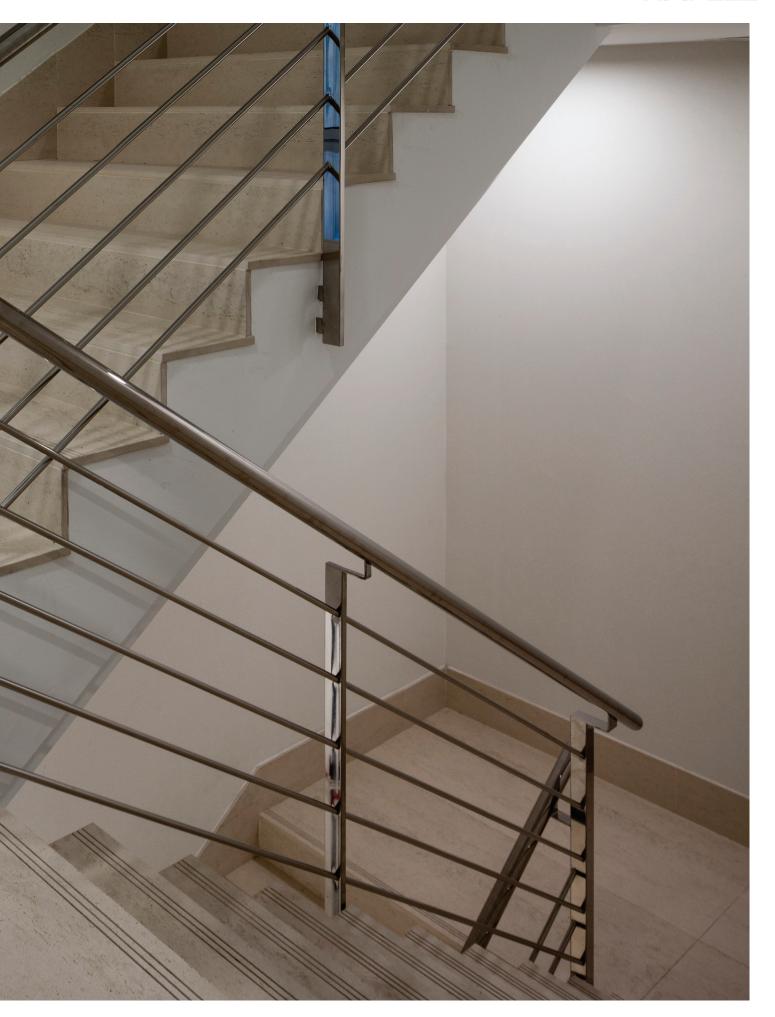
Scratch Resistant





Cajamar | Dekton Danae | © Fernando Alda





# Wall Cladding





Dimensional Stability



Fireproof Material

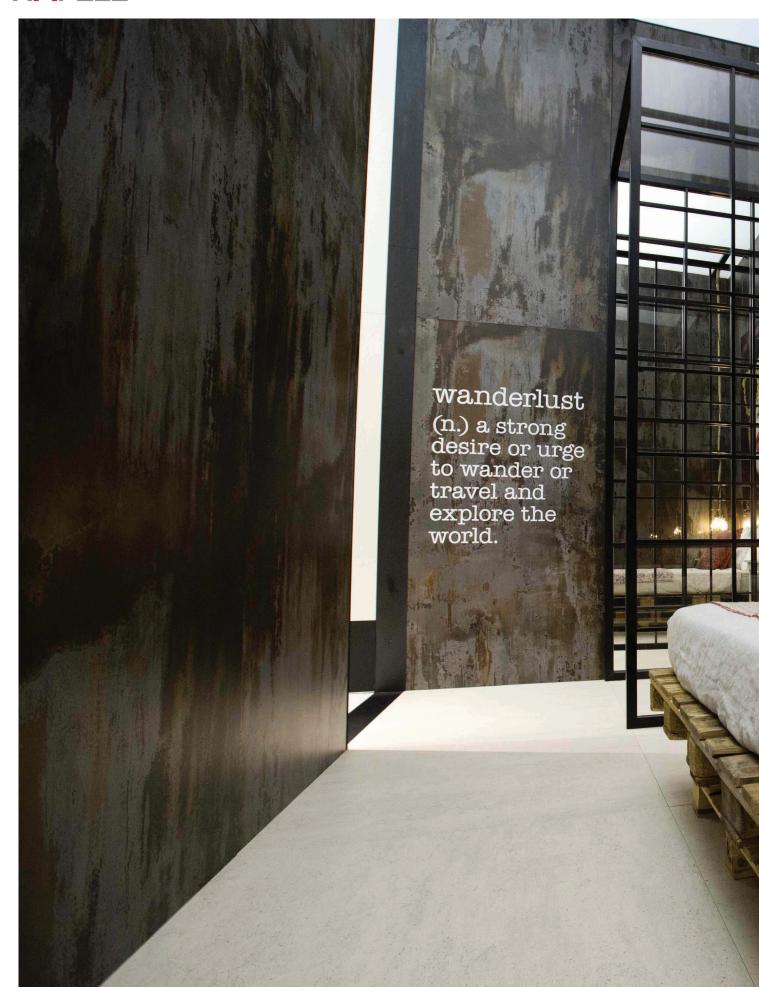


Superior Mechanical Resistance



Low Water Absorption



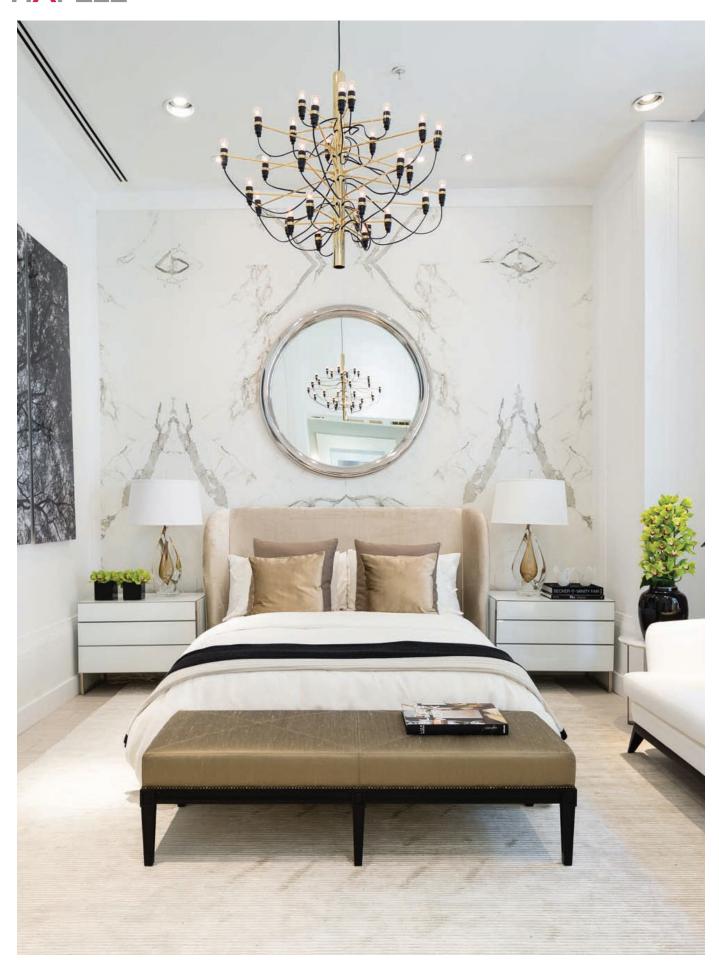


London Loft - Salone Mobile Milano 2016 | Dekton Trilium | © Interior Design: Cecconi Simone









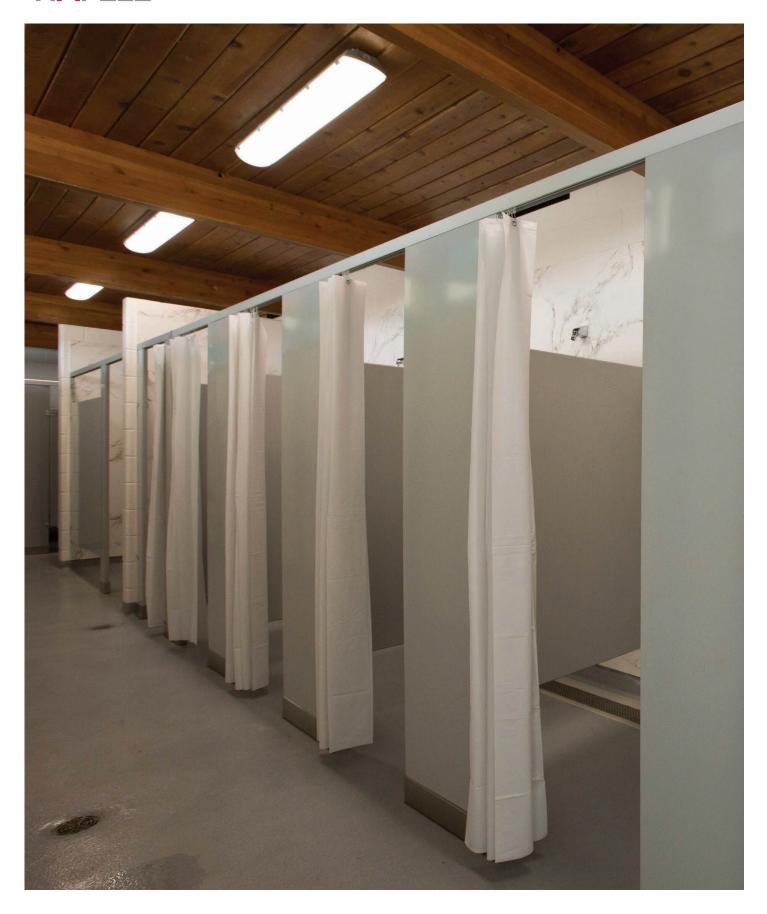
Artefacto Miami 2016 | Dekton Aura 15 Bookmatch | © Fabio Morozini - Fran Parente





Liquid Sky | Wall Cladding





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





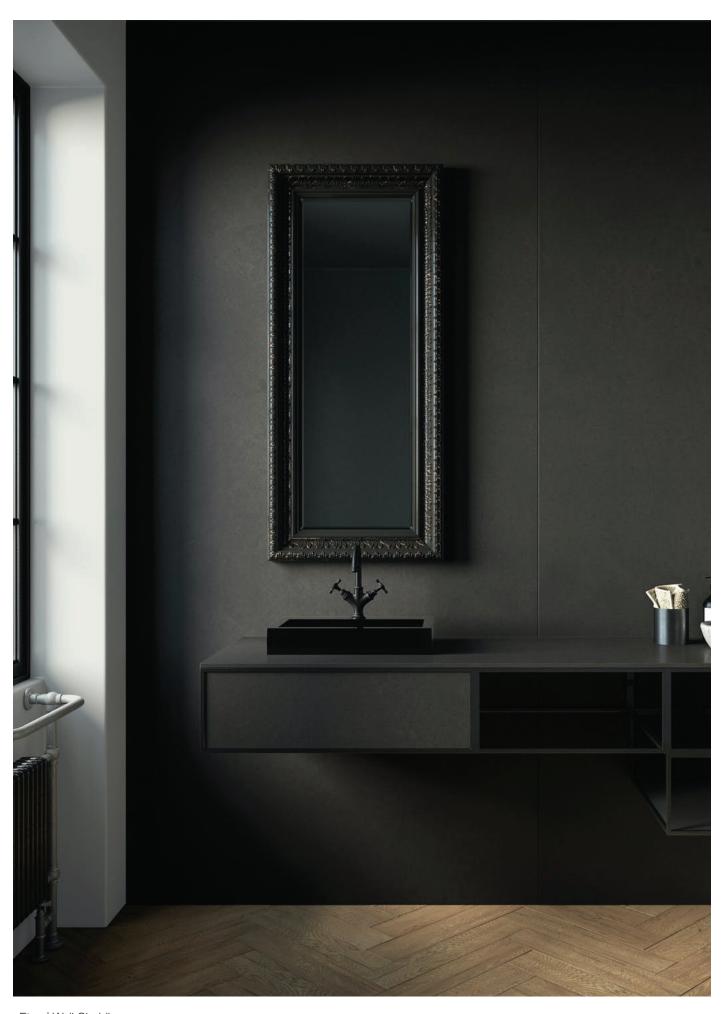
Uterqüe | Barcelona (Spain) | Dekton Danae





Sasea | Wall Cladding





Eter | Wall Cladding

## Ventilated Façades





Superior Mechanical Resistance



Highly UV Resistant

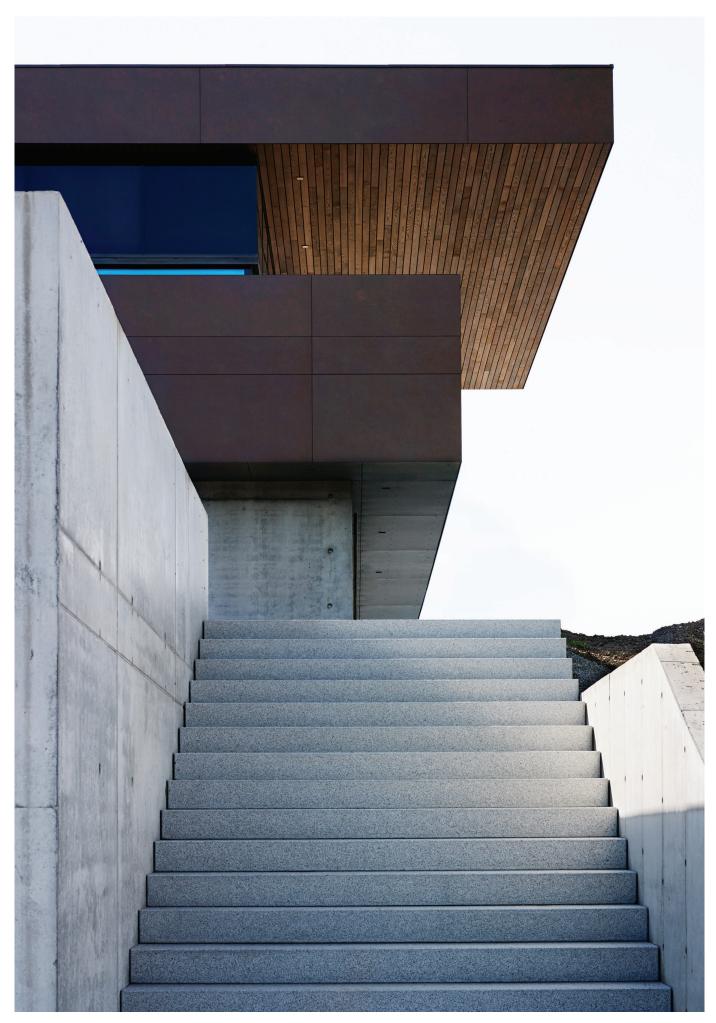


Resistance to Freezing and Thawing

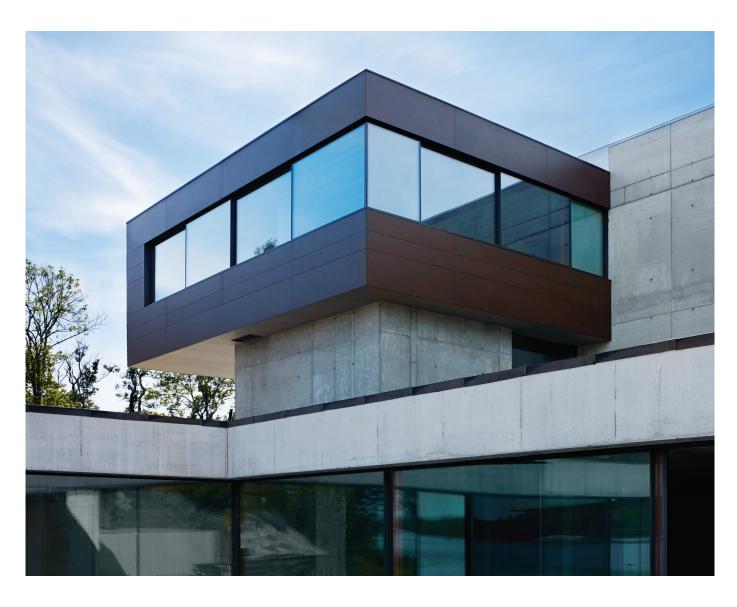


Dimensional Stability











Ultracompact surfaces with 8 mm 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 dovetailshaped 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.





Libeskind Sculpture | Almeria (Spain) | Dekton Zenith









Schittenhelm | Germany | Dekton Danae



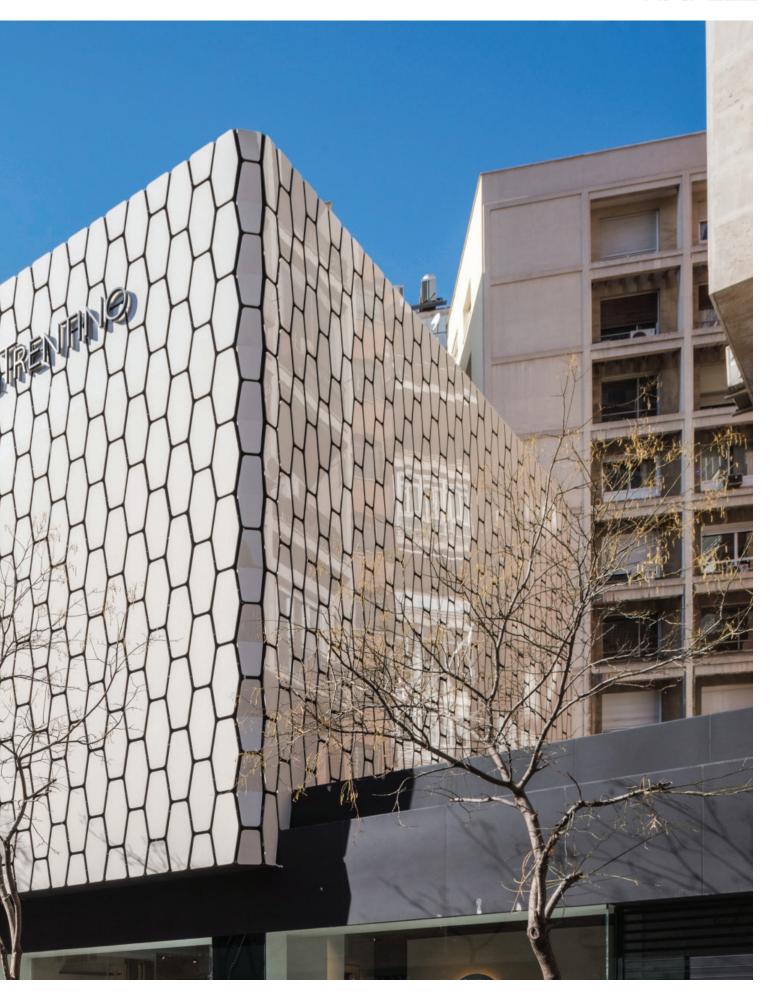






Vienna | Facades





## Swimming Pools





Resistant to Stains



High Resistance to Hydrolysis

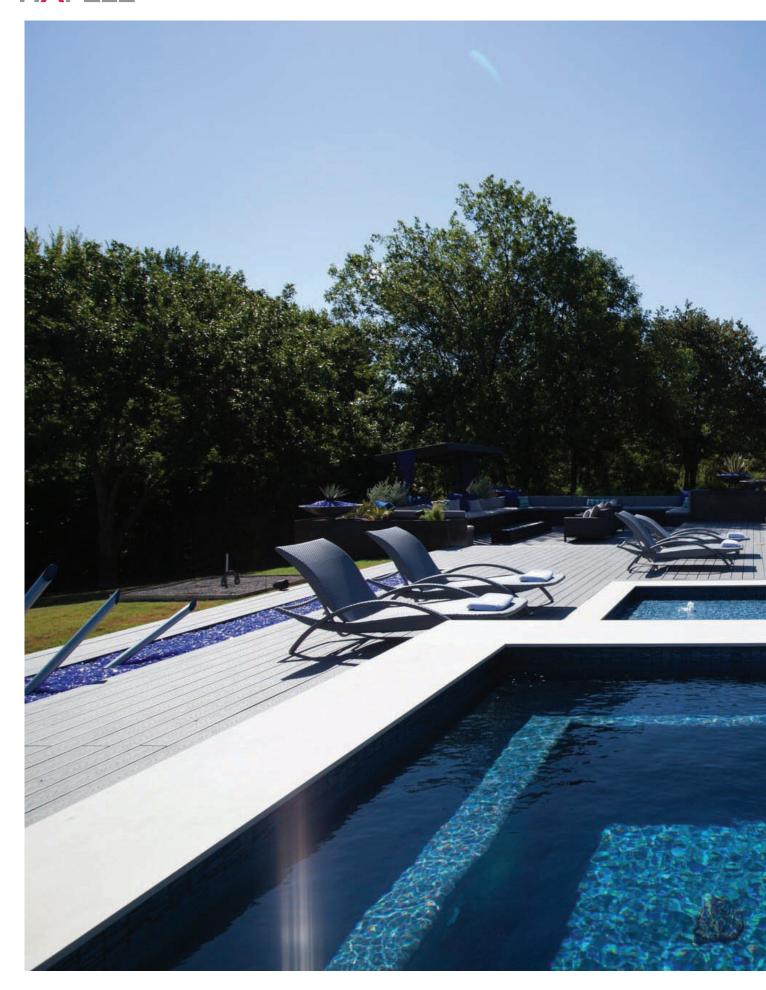


Low Water Absorption



Dimensional Stability



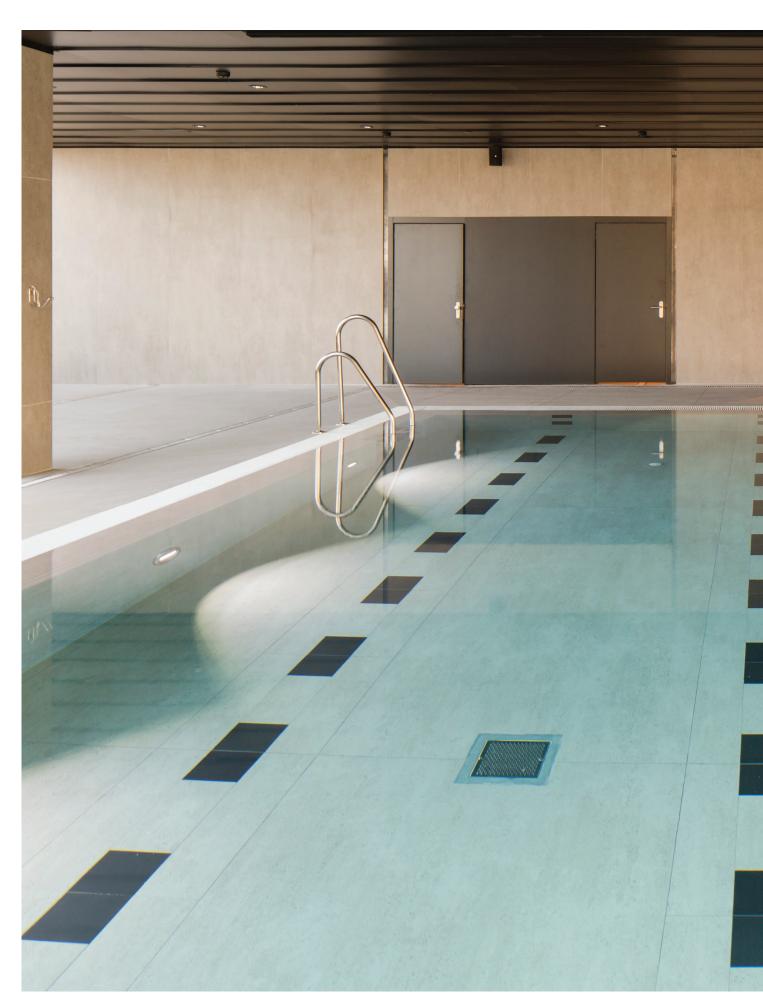


Lewisville | Dallas (USA) | Dekton Danae

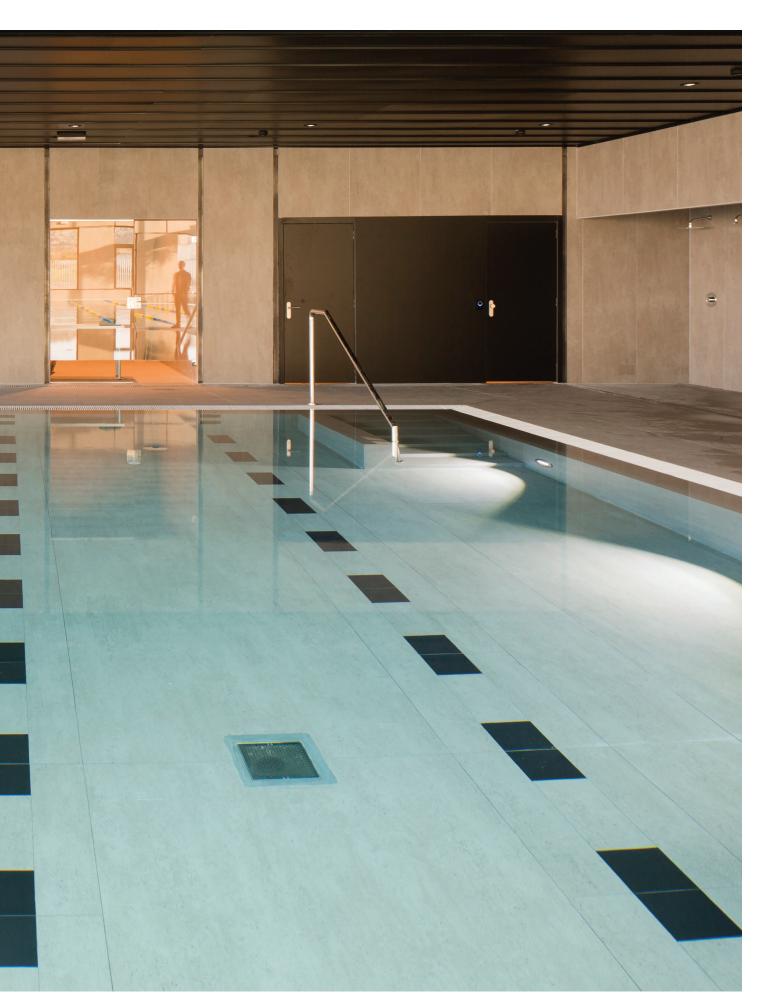




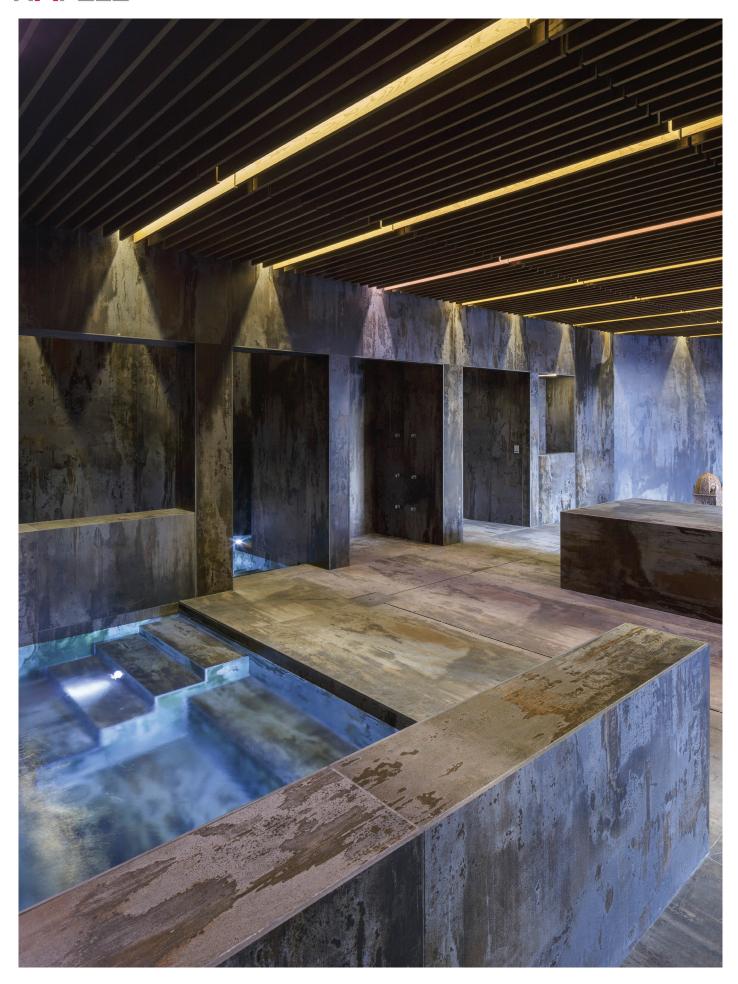












Rafa Nadal Academy | Dekton Trilium | © Fernando Alda





Hillcrest | California (USA) | Dekton Zenith



Swimming Pool | Málaga (Spain) | Dekton Danae



### Outdoor Countertops









Resistance to Freezing and Thawing

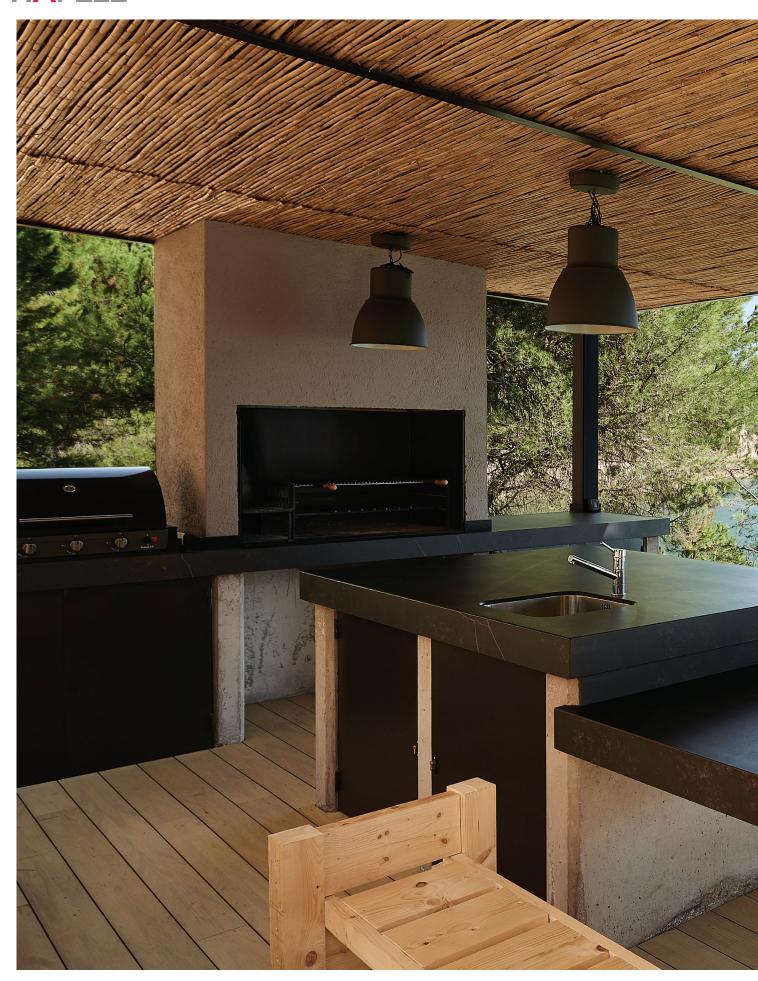


Scratch Resistant



Maximum Resistance to Heat



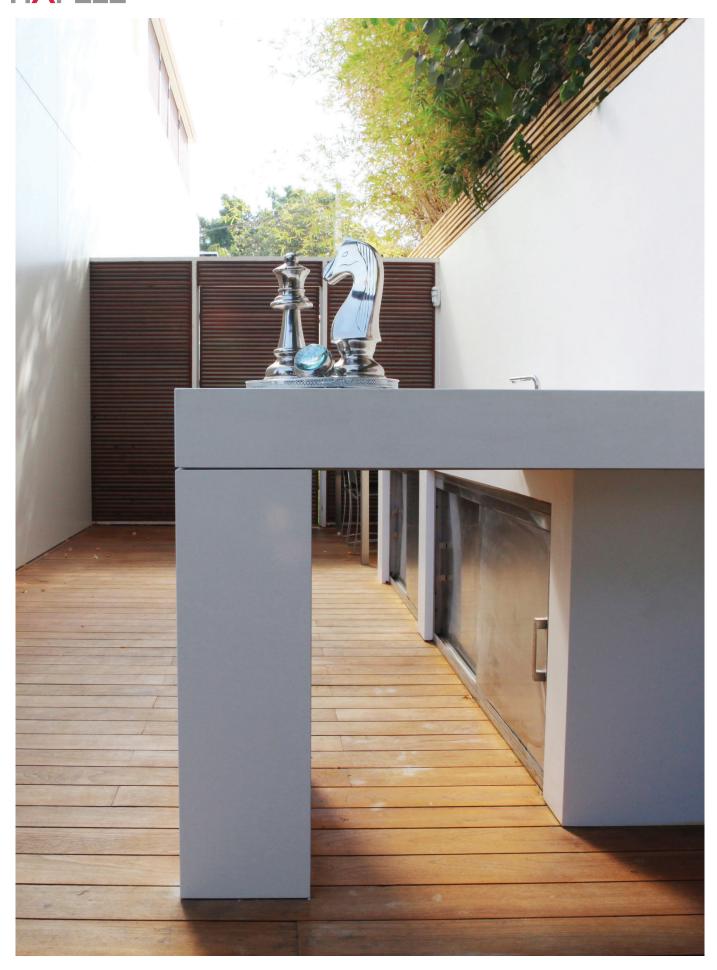


Private House | Spain | Dekton Kelya









Hagag | Kfar Shmaryahu (Israel) | Dekton Zenith





Pitch Concept | USA | Dekton Aura 22



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 ever been damaged by snow or frost? Cheap becomes expensive when adding up the regular maintenance.

### Food Services





Maximum Resistance to Heat



Fireproof Material



Scratch Resistant



Resistant to Abrasion

#### **H**AFELE



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









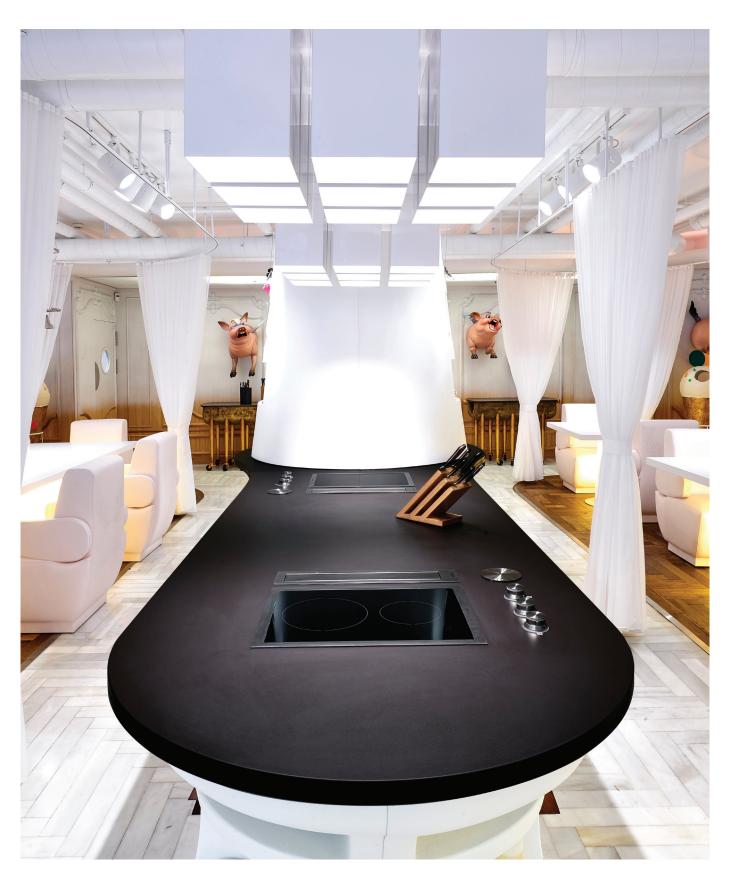




D'Stage Restaurant | Madrid (Spain) | Dekton Keranium



Industrial kitchen and buffet services are highlydemanding 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.

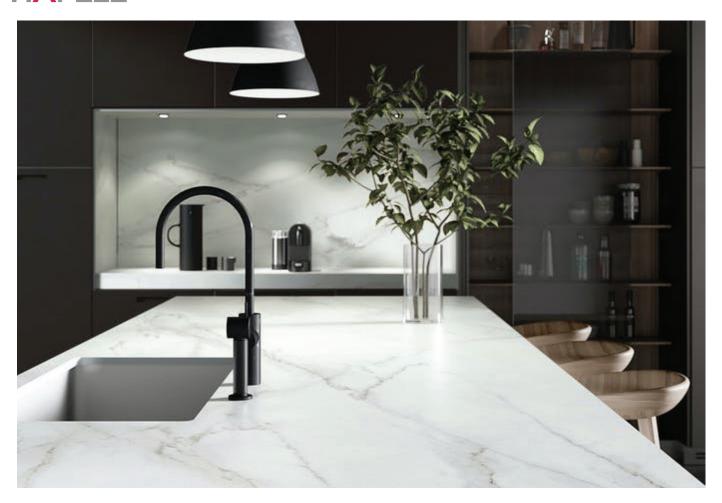


Diverxo Restaurant | Madrid (España) | Dekton Domoos





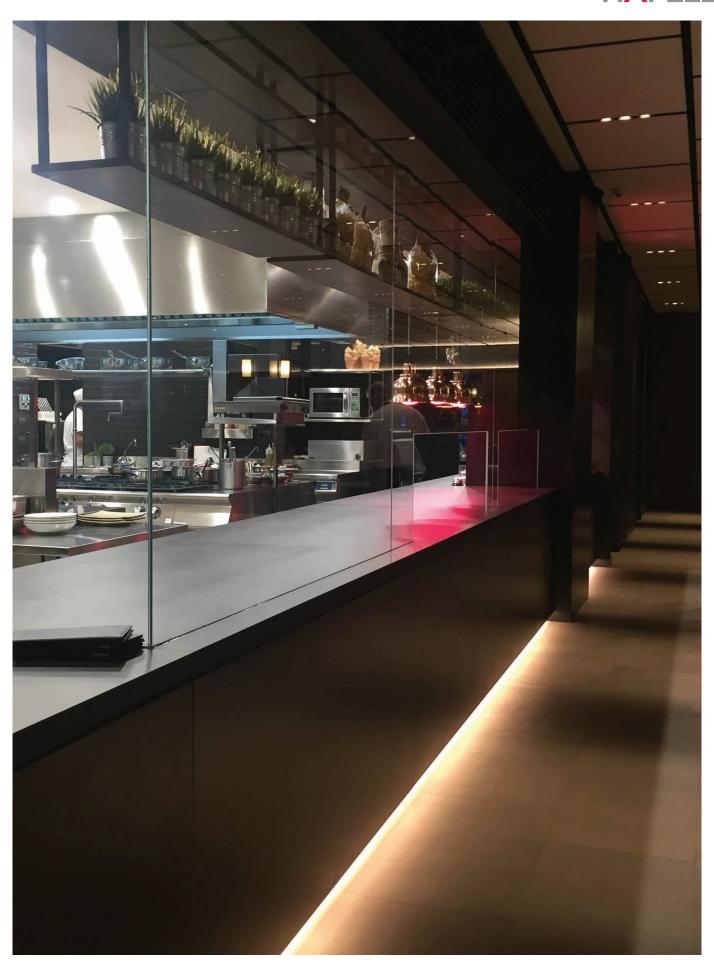






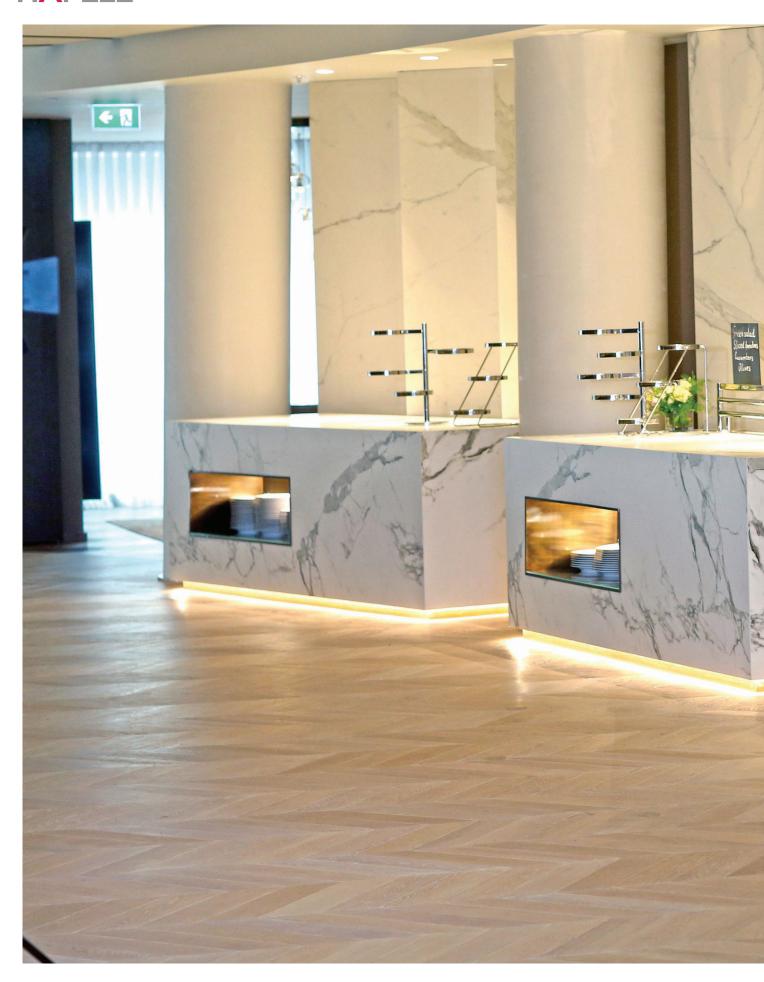
Casa Cor | Dekton Aura 15 | © Michel Alban - Jônatas Padilha





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





The Plaza Hotel 5\* | Tirana (Albania) | Dekton Aura 15





# Bar Tops





Resistant to Stains



Low Water Absorption



Superior Mechanical Resistance



Resistant to Abrasion





Restaurant | Dekton Keranium | © MCA Studio







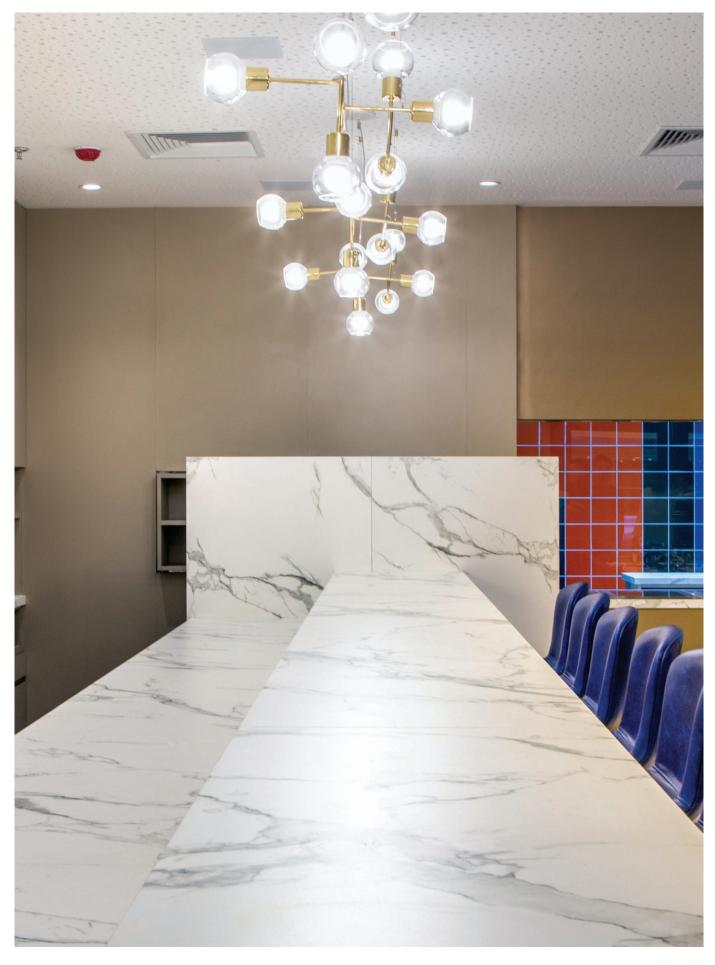


Okami Restaurant | Málaga (Spain) | Dekton Domoos









Hospital Copa D'or | Rio de Janeiro (Brazil) | Dekton Aura 15 Bookmatch | © André Nazareth









Casa Cor | Dekton Domoos | © Sig Bergamin







# Indoor Countertops





Maximum Resistance to Heat



Low Water Absorption



Scratch Resistant



Resistant to Stains



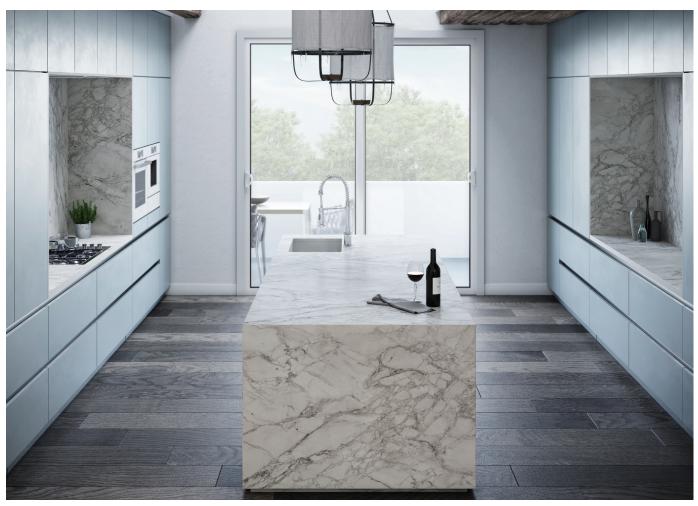


Liquid Shell | Indoor Countertop









Dekton Portum | Indoor Countertop



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





Laos | Indoor Countertop



Rem | Indoor Countertop





#### HAFELE



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. 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).



TECHNICAL INFORMATION



# DEKTON TECHNICAL INFORMATION

TEST	STANDARD	DETERMINA- TION	Units	Family I	Family II	Family III	Family IV
		Mean flexural strength	N/mm²	60	67	59	60
Flexural and bending strength	UNE EN ISO 10.545-4	Mean tensile strength	N	2548	2.313	2.356	2.568
		Mean breaking strength	N	14.966	13.559	13.818	15.620
		Water absorption by boiling	%	0	0,1	0,1	0,1
Water absorption,	UNE EN ISO	Water absorption by vacuum	%	0,1	0,1	0,1	0,1
open porosity and densities	10.545-3	Open porosity	%	0,2	0,2	0,2	0,2
uensities		Apparent relative density	g/cm <sup>3</sup>	2,51	2,61	2,53	2,44
		Apparent density	g/cm <sup>3</sup>	2,50	2,61	2,52	2,44
Resistance to deep abrasion	UNE EN ISO 10.545-6	Wear volume	mm³	125	106	115	119
		Length and width	%	0,11/-0,18	0,04/-0,08	0,04/-0,04	0,02/-0,02
		Thickness	%	0,50/-0,50	4,95/-2,20	0,53/-0,53	-1
		Straightness of sides	%	0,01/-0,01	0,03/-0,03	0,01/-0,03	0,02/-0,02
Determination of		Orthogonality	%	0,07/-0,16	0,04/-0,09	0,21/-0,21	0,08/-0,08
dimensions and	UNE EN ISO 10.545-2	Lateral curvature	%	0,04/-0,08	-0,06	-0,06	-0,07
surface quality	10.010 2	Central curvature	%	0,06/-0,06	0,02/-0,04	0,02/-0,04	0,02/-0,02
		Warping	%	-0,11	-0,07	-0,06	-0,04
		Surface appearance (Tile defect)	%	100	100	100	100
Determination of the impact strength	UNE EN ISO 10.545-5	Mean coefficient of restitution	-	0,85	0,85	0,85	0,92
Determination of inear thermal ex-	UNE EN ISO 10.545-8	Expansion between 30-100°C	°C-1	6,5·10-6	5,1·10 <sup>-6</sup>	6,3·10-6	5,8·10-6
Determination of resistance to thermal shock	UNE EN ISO 10.545-9	Expansion between 30-100°C	-	Passes/no damage	Passes/no da- mage	Passes/no damage	Passes/no da- mage
Determination of U	UNE EN ISO	Maximum ex- pansion	mm/m	0,1	0,1	0,1	0,1
	10.545-10	Intermediate expansion	mm/m	0,0	0,0	0,0	0,1
Determination of frost resistance	UNE EN ISO 10.545-12	Damage	-	Passes/no damage	Passes/no da- mage	Passes/no damage	Passes/no da- mage
		CINH /Cleaning products	Class	UA (no damage)	UA (no damage)	UA (no damage)	UA (no damage)
	UNE EN ISO 10.545-13	Bleach / Pool salts	Class	UA (no damage)	UA (no damage)	UA (no damage)	UA (no damage)
Determination of chemical resistance		HCI (3% v/v)	Class	ULA (no dama- ge)	ULA (no damage)	ULA (no damage)	ULA (no damage)
		Citric A. (100g/l)	Class	ULA (no dama- ge)	ULA (no damage)	ULA (no damage)	ULA (no damage)
		KOH (30 g/l)	Class	ULA (no dama- ge)	ULA (no damage)	ULA (no damage)	ULA (no damage)
		HCI (18%)	Class	UHA (no dama- ge)	UHA (no damage)	UHA (no dama- ge)	UHA (no damage)
		Lactic A. (5%)	Class	UHA (no dama- ge)	UHA (no damage)	UHA (no dama- ge)	UHA (no damage)
		KOH (100 g/l)	Class	UHA (no dama- ge)	UHA (no damage)	UHA (no dama- ge)	UHA (no damage)
		Green agent	Class	5	5	5	5
Determination of	UNE EN ISO	Red agent	Class	-	-	-	-
stain resistance	10.545-14	Mud (solution)	Class	5	5	5	5
		Olive oil	Class	5	5	5	5

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TEST	Stand- ard	Determination	Units	Family I	Family II	Family III	Family IV
Moisture expansion	ASTM C370	Average moisture expansion	%	0,02	0,005	0,004	*
Breaking strength	ASTM C648	Average breaking strength	lbf	3.963	4.896	3.932	*
Flexural properties	ASTM C674	Average modulus of rupture	psi	10.828	13.997	9.005	*
Water absorption, bulk density, apparent poros- ity and apparent specific gravity	ASTM C373	Average water absorption	%	0,03 (Impervi- ous)	0,05 (Impervious)	0,01 (Impervious)	*
Static coefficient of fric-	ASTM	Static coef. Friction dry	-	0,80	0,77	0,77	*
tion (skid resistance)	C1028	Static coef. Friction wet	-	0,66	0,56	0,69	*
Wet dynamic coefficient of friction (DCOF)	ANSI A137.1 section 9.6.1	Average DCOF	-	0,57	0,33	0,47	*
Relative resistance to wear (Taber abrasion)	ASTM C501	Average Abrasive Wear Index		182,2	337	240	*
Thermal shock resistance	ASTM C484	Defects	-	No defects	No defects	No defects	*
Bond strength	ASTM C482	Average bond strength	psi	423	437	357	*
	ASTM	Common Household and cleaning chemicals					
		Acetic acid, 3% (v/v)	-	Not affected	Not affected	Not affected	*
		Acetic acid, 10% (v/v)	-	Not affected	Not affected	Not affected	*
		Ammonium chloride, 100 g/L	-	Not affected	Not affected	Not affected	*
		Citric acid solution, 30 g/L	-	Not affected	Not affected	Not affected	*
		Citric acid solution, 100 g/L	-	Not affected	Not affected	Not affected	*
		Lactic acid, 5% (v/v)	-	Not affected	Not affected	Not affected	*
		Phosphoric acid, 3% (v/v)	-	Not affected	Not affected	Not affected	*
Resistance to chemical		Phosphoric acid, 10% (v/v)	-	Not affected	Not affected	Not affected	*
Resistance to chemical substances	C650	Sulfamic acid, 30 g/L	_	Not affected	Not affected	Not affected	*
		Sulfamic acid, 100 g/L	_	Not affected		Not affected	*
		Swimming pool chemicals					
		Sodium hypochlorite solution, 20 mg/L	_	Not affected	Not affected	Not affected	*
		Acids and bases					
		Hydrochloric acid solution, 3% (v/v)	_	Not affected	Not affected	Not affected	*
		Hydrochloric acid solution, 18% (v/v)	_	Not affected			*
		Potassium hydroxide, 30 g/L	-	Not affected			*
		Potassium hydroxide, 100 g/L	_	Not affected			*
	4.071.4	Average weight percent absorption	%	0,02			*
Absorption and density	ASTM C97	Average density	Ib/ft <sup>3</sup>	156			*
		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	0,004 3.932 9.005 0,01 (Impervious) 0,77 0,69 0,47  240 No defects 357  Not affected	*
	ASTM	Average flexural strength dry conditions	psi	6.840	3.118	0,004 3.932 9.005 0,01 (Impervious) 0,77 0,69 0,47  240 No defects 357  Not affected	*
Flexural strength	C880	Average flexural strength wet conditions	psi	6.205	4.187		*
	ASTM	Average compressive strength dry conditions	psi	34.409	Not affected         Not affected           0,04         0,02           160,63         157,6           9.042         7.369           8.446         7.480           3.118         5.858           4.187         5.119           >55.000         44.88           >55.000         40.16	44.882	*
Compressive strength	C170	Average compressive strength wet conditions	psi	17.823	>55.000	40.165	*
Abrasion resistance	ASTM C1353	Average index of abrasion	-	349	349.48	265,8	*



# DEKTON XGLOSS TECHNICAL INFORMATION

TEST	STANDARD	DETERMINATION	Units	Family I	Family II
		Mean flexural strength	N/mm²	Family I 60 2548 14966 0 0,1 0,2 2,51 2,50 125 0,11/-0,18 0,50/-0,50 0,01/-0,01 0,07/-0,16 0,04/-0,08 0,06/-0,06 -0,11 100 0,85	67
Flexural and bending strength	UNE EN ISO 10.545-4	Mean tensile strength	N	2548	2.313
Suchgui	10.040 4	Mean breaking strength	N	14966	13.559
		Water absorption by boiling	%	0	0,1
Water absorption,	UNE EN ISO 10.545-3	Water absorption by vacuum	%	0,1	0,1
open porosity and densities		Open porosity	%	0,2	0,2
uci isitics		Apparent relative density	g/cm³	2,51	2,61
		Apparent density	g/cm³	2,50	2,61
Resistance to deep abrasion	UNE EN ISO 10.545-6	Wear volume	mm³	125	106
		Length and width	%	0,11/-0,18	0,04/-0,08
Determination of the mpact strength		Thickness	%	0,50/-0,50	4,95/-2,20
		Straightness of sides	%	0,01/-0,01	0,03/-0,03
Determination of di-	UNE EN ISO	Orthogonality	%	0,07/-0,16	0,04/-0,09
mensions and surfa-	10.545-2	Lateral curvature	%	0,04/-0,08	-0,06
Ce quality		Central curvature	%	0,06/-0,06	0,02/-0,04
		Warping	%	-0,11	-0,07
		Surface appearance (Tile defect)	%	100	100
Determination of the impact strength	UNE EN ISO 10.545-5	Mean coefficient of restitution	-	0,85	0,85
Determination of li- near thermal expan- sion	UNE EN ISO 10.545-8	Expansion between 30-100°C	°C-1	6,5·10 <sup>-6</sup>	5,1·10 <sup>-6</sup>
Determination of resistance to thermal shock	UNE EN ISO 10.545-9	Damage	-	Passes/no damage	Passes/no damage
Determination of	UNE EN ISO	Maximum expansion	mm/m	0,1	0,1
moisture expansion	10.545-10	Intermediate expansion	mm/m	60 2548 14966 0 0,1 0,2 2,51 2,50 125 0,11/-0,18 0,50/-0,50 0,01/-0,01 0,07/-0,16 0,04/-0,08 0,06/-0,06 -0,11 100 0,85 6,5·10-6 Passes/no damage	0,0
Determination of frost resistance	UNE EN ISO 10.545-12	Damage	-		Passes/no damage
Determination of chemical resistance	UNE EN ISO 10.545-13	CINH /Cleaning products	Clase	UA	UA
		Bleach / Pool salts	Clase	UA	UA
		HCI (3% v/v)	Clase	ULA	ULA
		Citric A. (100g/l)	Clase	ULA	ULA
		HCI (18%)	Clase	UHA	UHA
		Lactic A. (5%)	Clase	UHA	UHA
		Green agent	Clase	5	5
Determination of stain	UNE EN ISO 10.545-14	Red agent	Clase	-	-
resistance		Mud (solution)	Clase	5	5
		Olive oil	Clase	5	5



TEST	STAND- ARD	DETERMINATION	Units	Family I	Family II
Moisture expansion	ASTM C370	Average moisture expansion	%	0,02	0,005
Breaking strength	ASTM C648	Average breaking strength	lbf	3.963	4.896
Flexural properties	ASTM C674	Average modulus of rupture	psi	10.828	13.997
Water absorption, bulk density, apparent poros- ity and apparent specific gravity	ASTM C373	Average water absorption	%	0,03 (Impervious)	0,05 (Impervious)
Static coefficient of fric-	ASTM	Static coef. Friction dry	-	0,96	0,96
tion (skid resistance)	C1028	Static coef. Friction wet	-	0,56	0,56
Wet dynamic coefficient of friction (DCOF)	ANSI A137.1 section 9.6.1	Average DCOF	-	0,16	0,16
Relative resistance to wear (Taber abrasion)	ASTM C501	Average Abrasive Wear Index		182,2	337
Thermal shock resistance	ASTM C484	Defects	-	No defects	No defects
Bond strength	ASTM C482	Average bond strength	psi	423	437
		Common Household and cleaning chemicals			
		Acetic acid, 3% (v/v)	-	Not affected	Not affected
		Acetic acid, 10% (v/v)	-	Not affected	Not affected
		Ammonium chloride, 100 g/L	-	Not affected	Not affected
	ASTM C650	Citric acid solution, 30 g/L	-	Not affected	Not affected
		Citric acid solution, 100 g/L	-	Not affected	Not affected
Resistance to chemicals		Lactic acid, 5% (v/v)	-	Not affected	Not affected
		Phosphoric acid, 3% (v/v)	-	Not affected	Not affected
		Phosphoric acid, 10% (v/v)	-	Not affected	Not affected
		Sulfamic acid, 30 g/L	-	Not affected	Not affected
		Sulfamic acid, 100 g/L	-	Not affected	Not affected
		Swimming pool chemicals			
		Sodium hypochlorite solution, 20 mg/L	-	Not affected	Not affected
		Acids and bases			
		Hydrochloric acid solution, 3% (v/v)	-	Not affected	Not affected
		Hydrochloric acid solution, 18% (v/v)	-	Not affected	Not affected
		Potassium hydroxide, 30 g/L	-	Not affected	Not affected
		Potassium hydroxide, 100 g/L	-	Not affected	Not affected
Absorption and specific		Average weight percent absorption	%	0,02	0,04
gravity	ASTM C97	Average density	lb/ft <sup>3</sup>	156	160,63
Modulus of Rupture	ASTM C99	Average modulus of rupture dry conditions	psi	8.128	9.042
		Average modulus of rupture wet conditions	psi	7.490	8.446
	AOTM 0000	Average flexural strength dry conditions	psi	6.840	3.118
Flexural strength	ASTM C880	Average flexural strength wet conditions	psi	6.205	4.187
0	AOTM 0470	Average compressive strength dry conditions	psi	34.409	>55.000
Compressive strength	ASTM C170	Average compressive strength wet conditions	psi	17.823	>55.000
Abrasion resistance	ASTM C1353	Average index of abrasion	-	349	349,48



# PRODUCT CERTIFICATION 04

# Certifications

DEKTON® by Cosentino is in the process of certification of the following worldwide institutions.

# NSF



# **GREENGUARD**



ETE / ETA



NSF International is an independent nonprofit organisation devoted to safety in public health and environmental protection. NSF, is a worldwide leader, in the development of standards, product certifications, education and risk management for health and public safety.

The different Dekton® by Cosentino products have been tested and evaluated by NSF in accordance with international standard 51.

Obtaining the NSF certification and thus, the right to use the logo for the certified products, entails, a toxicological evaluation of all the ingredients of all the different products, proficiency testing and successfully passing unannounced audits annually, in all manufacturing sites.

To see the list of products that currently have the certificate, visit the NSF website:

www.nsf.org.

The Greenguard Certification programme identifies those products that have been tested to guarantee that their chemical and particle emissions are in line with the strict guidelines for indoor contaminants.

Likewise, Greenguard has another certification, Greenguard Gold, which assesses the sensitive nature of schools along with the characteristics of this type of building. This certification includes maximum control of the requirements with regard to chemical product emissions.

Dekton® by Cosentino has been analysed by Greenguard, proving that it does not emit any type of VOC and thus has achieved the Greenguard Certified (Certificate No. 41572-410) and Greenguard Gold (Certificate No. 41572-420) Certifications. The certifications of the different Cosentino products can be downloaded from the Greenguard webpage: www.greenguard.org

www.greenguard.org

Evaluación Técnica Europea (ETE) European Technical Assessment (ETA)

An European Assessment Document is a document that contains at least a general description of the construction product, the list of essential characteristics, relevant for the intended use of the product provided by the manufacturer and agreed between the manufacturer and the technical assessment body, the methods and criteria for assessment of the product properties in relation to its essential characteristics, as well as controlling factory production.

A request for a European Technical Assessment is performed by a manufacturer of any manufactured product, if that product is not covered or not fully covered by a harmonised standard. This assessment will demonstrate its performance against its essential features and will be assessed by a technical evaluation body.

Dekton® by Cosentino has been tested by the ITeC (Institute of Construction Technology of Catalonia) as a product for ventilated façades. Once the European Technical Assessment is approved, the CE mark will be applied directly to the product for this type of applications.



DEKTON COLOURS





**LAURENT** 

562.58.416

3200 x 1440 x 8 MM

562.58.418

3200 x 1440 x 12 MM

562.58.411

3200 x 1440 x 4 MM



**BROMO** 

562.58.496

3200 x 1440 x 8 MM



**PORTUM** 

562.58.526

3200 x 1440 x 8 MM



**LAOS** 

562.58.516

3200 x 1440 x 8 MM

562.58.578

3200 x 1440 x 12 MM

562.58.571

3200 x 1440 x 4 MM



SOKE

562.58.488

3200 x 1440 x 12 MM

562.58.486

3200 x 1440 x 8 MM



**ETER** 

562.58.598

3200 x 1440 x 12 MM

562.58.591

3200 x 1440 x 4 MM



**AERIS** 

562.58.606

3200 x 1440 x 8 MM



SASEA

562.58.617

3200 x 1440 x 8 MM

562.58.610

3200 x 1440 x 4 MM





LIQUID SHELL

562.58.627

3200 x 1440 x 8 MM



**REM** 

562.58.637

3200 x 1440 x 8 MM



LIQUID SKY

562.58.647

3200 x 1440 x 8 MM



# **DOMOOS**

562.58.006

3200 x 1440 x 8 MM



**DANAE** 

562.58.156

3200 x 1440 x 8 MM



# **SIRIUS**

562.58.306

3200 x 1440 x 8 MM

562.58.308

3200 x 1440 x 12 MM

562.58.301

3200 x 1440 x 4 MM



SIROCOO

562.58.016

3200 x 1440 x 8 MM

562.58.588

3200 x 1440 x 12 MM

562.58.581

3200 x 1440 x 4 MM



KERANIUM

562.58.046

3200 x 1440 x 8 MM





**KEON** 

562.58.106

3200 x 1440 x 8 MM



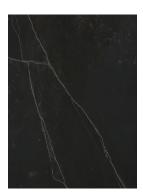
TRILIUM

562.58.196

3200 x 1440 x 8 MM

562.58.198

3200 x 1440 x 12 MM



# **KELYA**

562.58.066

3200 x 1440 x 8 MM

562.58.068

3200 x 1440 x 12 MM

562.58.061

3200 x 1440 x 4 MM



# **ZENITH**

562.58.116

3170 x 1420 x 8 MM



#### **KIRA**

562.58.446

3200 x 1440 x 8 MM

562.58.448

3200 x 1440 x 12 MM



## **KAIROS**

562.58.136

3170 x 1420 x 8 MM



**ENTZO** 

562.58.146

3170 x 1420 x 8 MM



# AURA 22

562.58.676

3170 x 1420 x 8 MM

562.58.678

3170 x 1420 x 12 MM

562.58.671

3200 x 1440 x 4 MM





#### Mumbai Design Centre:

Haji Moosa Patrawala Ind.(SOBO) Estate, Near Famous Studio, Mahalaxmi (West), Mumbai - 400 011 Tel.: 022 6264 7100

#### Mumbai Design Centre:

#2 Filix Building, Opp. Asian Paints, L.B.S. Marg, Bhandup (West), Mumbai - 400 078 Tel.: 022 2596 9660 / 2596 9787 /

2594 7305

#### **Pune Design Centre:**

Showroom No. 2, Ground Floor, F P No. 403, A/2, ICC Trade Tower. Senapati Bapat Marg, Shivaji Nagar, Pune - 411 016 Tel.: 020 2563 3301

Fax: 020 2563 3302

#### Pune Office:

Office No. 12, Vastushree Complex, Survey No.587, Near Hyde Park, Gultekdi, Market Yard, Pune - 411 037 Tel.: 020 2426 6264

Fax: 020 2426 6274

#### Ahmedabad Office:

Häfele India Pvt. Ltd., Office No. 302, 3rd Floor, Shangrila Arcade, Near Shyamal Cross Road, Satellite, Ahmedabad - 380 015

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# New Delhi Office & Design Centre:

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#### **Chandigarh Office:**

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### Jaipur Office:

Airport Plaza, Plot No.15, 1st & 2nd floor, Tonk Road, Next to Cocoon Hospital, Jaipur, Rajasthan - 302 016 Mob.: +91 98887 77796

# **Kolkata Design Centre:**

PS PACE, Premises No. 1/1A, Mahendra Roy Lane, Topsia, Kolkata - 700 046

Tel.: 033 4008 6814 / 4008 9268

Fax: 033 2498 8020

**Bangladesh Office:** 

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2<sup>nd</sup> Floor, House - 181, Road - 2,

Mohakhali DOHS, Dhaka - 1206.

Tel.: 018 4401 8431 / 32 / 33 / 37

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Block - E, Banani, Dhaka - 1213

House - 106, Road - 12,

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Incubex Nestavera Spaces Pvt Ltd, No:13, Langford Place, Langford Road, Shanti Nagar, Bangalore - 560 025 Tel.: 080 4132 6116

Fax: 080 4132 6226

#### **Bangalore** Häfele Appliances Gallery:

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Tel.: 040 2955 7578 / 88

#### Chennai Office & Design Centre:

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#### **Cochin Office:**

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UHS Holdings Pvt. Ltd. Kathmandu-2, Gairidhara Chowk, Nepal.

Mob.: +977 98023 38800

#### Bhutan:

**SMART HOMES** Gr. Floor, Druk Building (Opp Helipad) Babesa -Thimpu Expressway, Thimpu Tel.: +975 - 2 - 333 419

Mob.: +975 - 7727 7615 / 1783 9717 / 7711 4228 / 1760 0663 / 1766 9840



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