



Dekton for Facades

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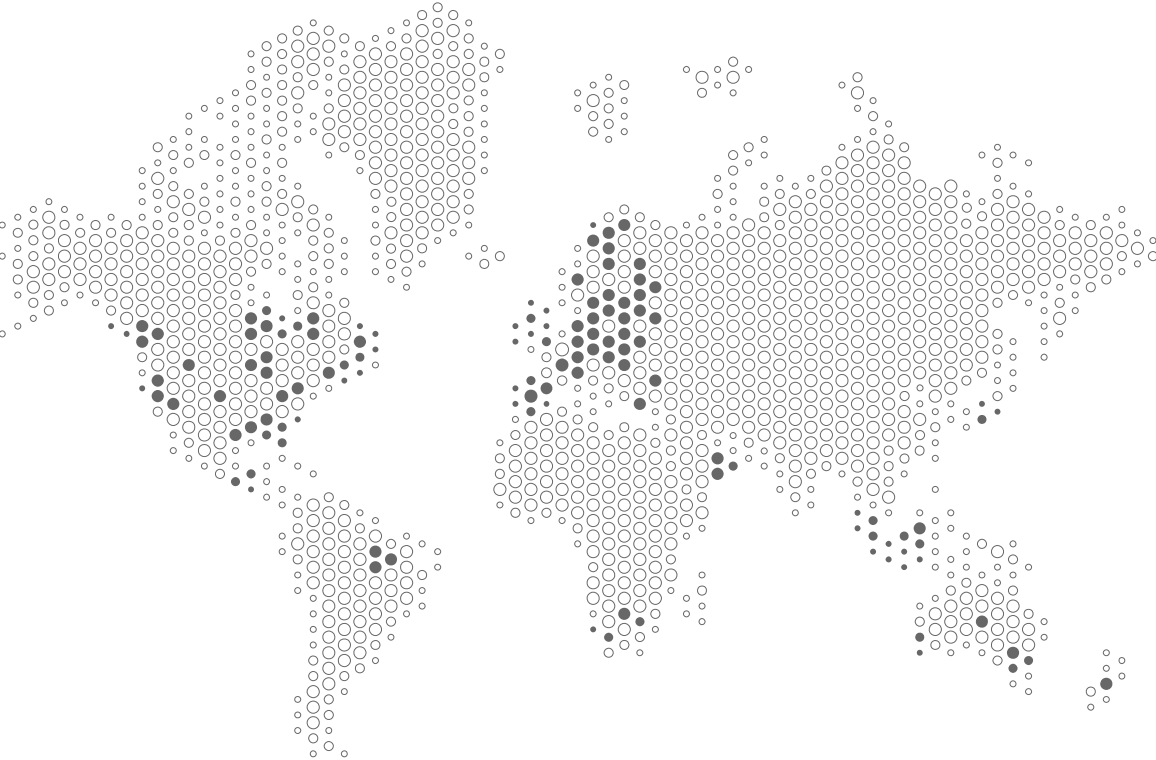


by **COSENTINO®**

Cosentino® is an international family-owned company that produces and distributes surfaces that enrich architecture and design. Founded in 1979 with business activities in natural stone, the company today has 5 worldwide brands that are considered industry standards. Its commitment to innovation has created an industrial park of more than 1,000,000 sqft which year after year continues to grow thanks to the passion of its more than 4000 employees around the world.

Cosentino's main offices® are located at the Cosentino Group Industrial Park® in Cantoria which is located in the province of Almería, Spain. These offices are the productive, administrative and logistical hub from which the Group manages and supervises its international distribution system.

By Cosentino®



Very Close to Our Customers and their Projects

Our Cosentino CENTERS are the heart of the company no matter where we might be in the world. Our warehouses are available to those curious and passionate about design who may want to touch and see our products on a real scale. We are witnesses of the chromatic richness that each Dekton® slab brings to the world of design.

Our Cosentino CITIES, which are located in some of the most iconic cities around the world, create spaces so that anyone can discover Dekton® and the latest market trends by using all five senses. Besides the fact that you can use them as your own office, they are spaces whose configuration encourages meetings, classrooms, exhibitions, etc. We consider them to be social, dynamic places where you can exchange ideas.

North America
43 Centers
2 Hubs
12 Workshops
6 Cosentino Cities

Latin America
26 Distributors
1 Granite Factory
8 Centers

Singapore
1 Centers
1 Cosentino City

Australia
3 Centers
1 Cosentino City

Turkey
3 Centers

Israel
1 Center

Europe
23 Centers
1 Cosentino City
14 Distributors

Iberia
20 Centers
1 Cosentino City





What is Dekton®?

Dekton® is a sophisticated blend of more than 20 minerals that have been extracted from nature. Its production process is the result of years of learning and gathering inspiration in the manufacture of glass, state-of-the-art porcelain and quartz surfaces.

The manufacturing of Dekton® uses exclusive TSP technology, which is capable of sintering mineral particles and causing them to bond with each other, as well as change and compact their internal structure. A unique and innovative technological process that involves an accelerated version of the metamorphic changes suffered by natural stone when exposed for millennia to high pressure and high temperatures.












In the span of a few hours, Dekton® emulates what took nature thousands of years thanks to the exclusive TSP technology.

The electronic microscopy allows you to appreciate the reduced porosity of the material, which is a consequence of the process of the sintering and of the ultra-compaction which is exclusive to Dekton®. This reduced porosity and the absence of microdefects that cause stress or weak points make up the differential characteristic of Dekton®.




Totzeret - CUSTOM COLORS

Dekton® Benefits

-  Highly Resistant to Ultraviolet Light
-  Highly Resistant to Scratches
-  Stain-resistant
-  Excellent Fire and Heat Resistance
-  Wear-resistant
-  Ice and Thaw-resistant
-  High Mechanical Resistance
-  Reduced Water Absorption
-  Dimensional Stability
-  Fireproof Material
-  High Resistance to Hydrolysis

Dekton® Benefits XGloss

-  Translucent Sheen
-  Water-repellent Surface



Customize Architectural Surfaces

A RD team, together with our internal designers, work in direct contact with the customer through our CustomColor ProductManager.

Providing a direct dialogue between the Cosentino team and the customer, being able to develop specific colors for our customers, always guaranteeing the properties and advantages that Dekton® has to offer.

We can develop your ideas, new mono-colors, specific images, logos, replicate aesthetics of materials that need to be replaced or restored... The possibilities are endless!

Dekton® Warranty

Dekton® is the only brand that provides you with a certified written warranty. Only Cosentino, a global company in surface production, can stand out once again by providing a 25-year real warranty for Dekton® products. Cosentino once again demonstrates its innovation by offering consumers a long warranty. Trusting in high-performance materials such as Dekton for facades is synonymous with success, reliability and warranties.

Below we detail the steps to follow and the requirements needed to fulfill the terms of the Dekton® warranty.



Warranty conditions:

This warranty covers Dekton by Cosentino® ultra-compact surfaces intended for the defined applications within the scope of the warranty. It is important that your color choice and finish be made definitively before closing the purchase, since any changes made after this decision will not be covered by the guarantee.

- ▶ The user must have the purchase receipt for the warranty to be applicable.
- ▶ The warranty covers products that were maintained according to the care and maintenance directions provided by Dekton Surfaces which can be found on www.cosentino.com.
- ▶ The workshops must be certified by Cosentino after getting trained by our Dekton® Trainers.



Aura Book Match - NATURAL

Certificates

Dekton® is internationally certified, guaranteeing maximum safety and protection.

ETA 14/0413



BBA



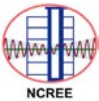
ISO 14001



ISO 9001



NCRE Earthquakes



A1 Fire Classification



EPD



DoP



NOA*

HPD



NSF



VOC Eurofins



VOC Greenguard



VOC Greenguard Gold



Kosher



CSTB



*In process.

Why use Dekton® for Facades?

Because of their design, technical features and service as a company

Design

Infinite colors and designs

Chromatic varieties in monochrome bases, different textures and high quality graphics. Possibility of creating customized designs and colors thanks to our CustomColors department

Edges with decoration

Integration between surface and edge unlike conventional ceramics, which is perfect for encounters or pieces with visible edges.

Wide range of thicknesses

Different thicknesses of 4, 8, 12, 20 and 30 mm according to the technical requirements of anchoring or design.

Large format

Due to its minimum size of 3200 x 1440 mm, the distance between floors is covered with a single piece, facilitating installation and reducing installation times.

Variety of cuts

Standard formats

Maximum use of the slab. Reduction in the number of joints, thus achieving a monolithic surface.

Personalized

Possibility of making custom facade modulations with customized panels or pieces directly assembled from the factory.



Halo - XGloss SOLID

Technical Features

Dekton® has the necessary technical characteristics for any hard of surface, especially one as demanding as facades.



High mechanical resistance

Excellent performance in wind and resulting impacts.



Apt for adverse weather conditions

Ideal performance in freeze/thaw environments.



UV-ray resistant

There is no degradation of color due to using inorganic materials.



Low and easy maintenance

As a material, Dekton offers low maintenance using conventional cleaning products and tools.



Stain- and graffiti-resistant

Nearly zero porosity (<0.2%), preventing penetration of stains and external agents.



Water-repellent surface

Dekton products such as the XGloss range offer a totally water repellent surface in addition to having a spectacular gloss.



Unbeatable performance in fire

A1 classification certification and A2 safety mesh.



High chemical resistance.

One can easily eliminate resistant stains which are a result of the useful life of the building with aggressive chemical products, if necessary

Service and Technical Support

Initial Help and Technical Analysis

Detailed study of all of the parts of your project:

- Assignment of a Project Manager
- Team of more than 15 experts (architects, engineers, etc.) in the analysis and execution of projects.
- Software for the management and carrying out of plans.
- Team of designers.
- Visit from the different Study teams.
- Help regarding construction regulations.
- Availability of receiving any certificate.
- Help and solutions for LEED v4 certification.

Layout and Mock Up



Availability of DIgital 3D with the final project rendering



Sending of samples



Possibility of onsite Mock Up.

Quotation and Technical Proposal

- Study of the proposals of the client and contribution of new ideas by our team of experts.
- Recalculation of the lay-out:
- Lower Waste = Greater savings / Improve final aesthetic finish.
- Detailed budget for items.
- Rapid budget execution.
- Completion of certificates or specific tests for the project.
- Coordination of security documentation.



Quality Production and Control

Project-Factory Warranty

- Project Manager.
- Client-Production Dialog.
- Translation of specifications from Project to factory.
- Validation of production plans by the customer.
- Plan of Production dates.
- Photographs of shipments before loading.

Factory for Finished Goods Manufacturing

- More than 140 employees.
- Maximum Capacity of 240,000 sqf CTS / month (approx. 5,500 slabs). Average production: 100,000 sqf – 120,000 sqf per month.

Project Factory. Facades, flooring and tiling

More than 187 employees Maximum capacity 1,500,000 sqft. per month.

Automatic tile line
Measurements: From 12x6” to 79x47”
Average capacity: 10,000 sqft/day

Automatic large format line
Measurements: From 24x24” to 126x56”
Capacity: 30,000 sqft/day

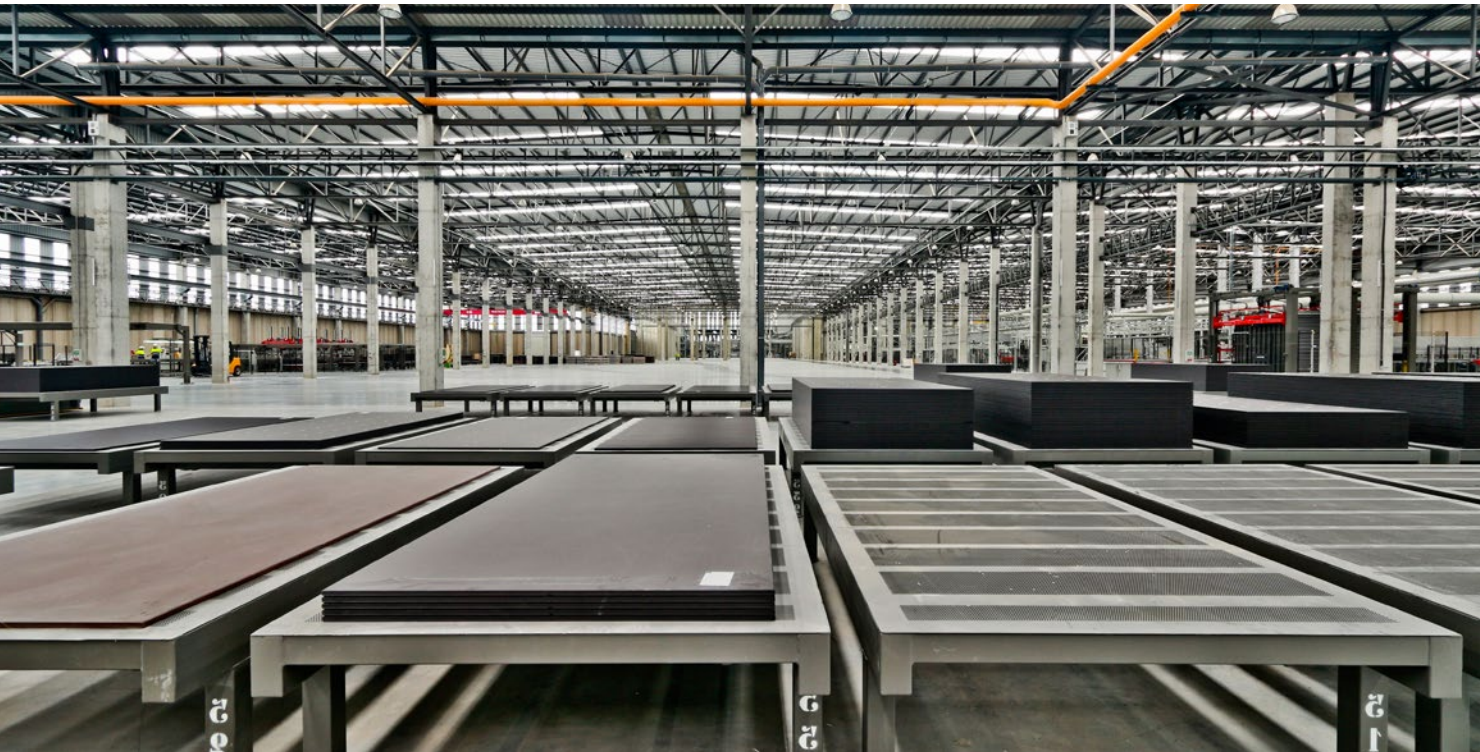
Special jobs

Development, supply and placement of all types of grooves and holes for anchors, trims, etc. Any finish on the edge of the pieces. Meshing of the pieces to improve the physical, safety and mechanical properties of the materials.

Quality Control

Guarantee of deadlines and link between the project and factory thanks to our Project Managers.

- Daily review of Production Dates Plans.
- Quality Control during the production of the material
- Quality Control in the production of pieces
- Quality Control in the packaging, with a photographic record of shipments before loading
- Support in the reception of the material/piece currently being worked on by our technicians depending on the project.



Execution and Technical Support

- ▶ Help regarding handling and transport.
- ▶ Help regarding handling on site.
- ▶ Manuals on placement, cleaning and maintenance, special works, etc. available to the customer.
- ▶ Training in the preparation and installation of the material by the Quality Department (onsite or in a workshop).
- ▶ Technical support during the execution of the project. Possibility of the Project Manager visiting the work site for support or evaluation of changes.
- ▶ Official and public documentation on the material, application, Use, Maintenance. Available on our website: www.dekton.es

Post-Sales Service and Warranties

- ▶ Monitoring and traceability of all our shipments until the destination.
- ▶ Guaranteed delivery of our products to customers.
- ▶ Transportation insurance to guarantee the perfect state of our shipments.
- ▶ Standard warranties of the materials made by Cosentino.
- ▶ "Custom" warranties for each project depending on the needs.

Cosentino is committed to the end

- ▶ 25 year warranty.
- ▶ Customer service from our Corporate team.
- ▶ Customer service from inception to final project execution.

Logistics

Packaging

Personalized packaging:

- ▶ Weight per package (weight limit).
- ▶ Measurements per package (measurement limit).
- ▶ Design (Vertical, horizontal, etc.).
- ▶ Materials. (Possibility ECO- Packaging).
- ▶ Organization (by lots, by items, by size, etc.).
- ▶ Shipments by manufacture order
- ▶ Information sheets (safety, material, use, maintenance, etc.)

Support for construction efficiency:

- ▶ Packing list with positioning order/sequencing of panels.
- ▶ Laying out of our material
- ▶ Support of reception and installation of the material/piece by our technical team.

Shipping

- ▶ Logistics and Planning Team of more than 170 people.
- ▶ More than 40 Containers and 20 Trucks on a daily basis.
- ▶ Preferential agreements with the main shipping companies based around the world.
- ▶ Inland port at our Facilities with a capacity for more than 150 containers.
- ▶ Quick passage through customs and ports

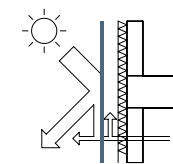


Systems for Facades

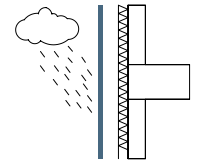
With Dekton® you can form projects and design globally: it's an ideal material for all types of environments and spaces, achieving (if you so desire) continuity in the architecture by breaking down the boundaries between exterior and interior. The facade is the building's surface. With Dekton® we offer both direct adhere facade and ventilated facade solutions.

The **direct adhere facade** is a system that allows to refurbish buildings with good aesthetic and energetic results. This type of set exterior refurbishing adapts to the building's contours, even the most complicated ones. Dekton® as a direct adhere surface in new construction projects or refurbishing guarantee the necessary protection for the system.

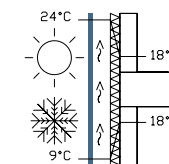
The **ventilated facade** is a construction solution that allows for the establishment of a physical separation between the exterior and the interior wall of the building. This separation creates an open chamber that allows the renewal of the air, which implies a series of thermal, acoustic and functional advantages that lend the building a great added value.



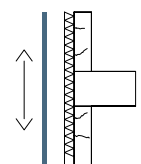
Energy Saving



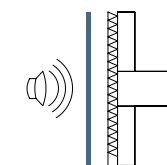
Water leak protection



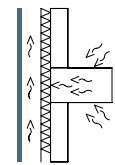
Protection of Supporting Wall



Avoid thermal bridges and condensation



Soundproofing



Thermal Isolation



Ventilated Facade - DKT1 Undercut Anchor System

Discreet fixing system by using metal clamps anchored to the panel via an undercut screw on the back of the pieces.

The panels are fixed to the wall by hanging the clamps in the horizontal profiles.

Each plate has two adjustment points and a fixed point at the top, which makes possible the adjustment while preventing undesirable movements of the entire plate.

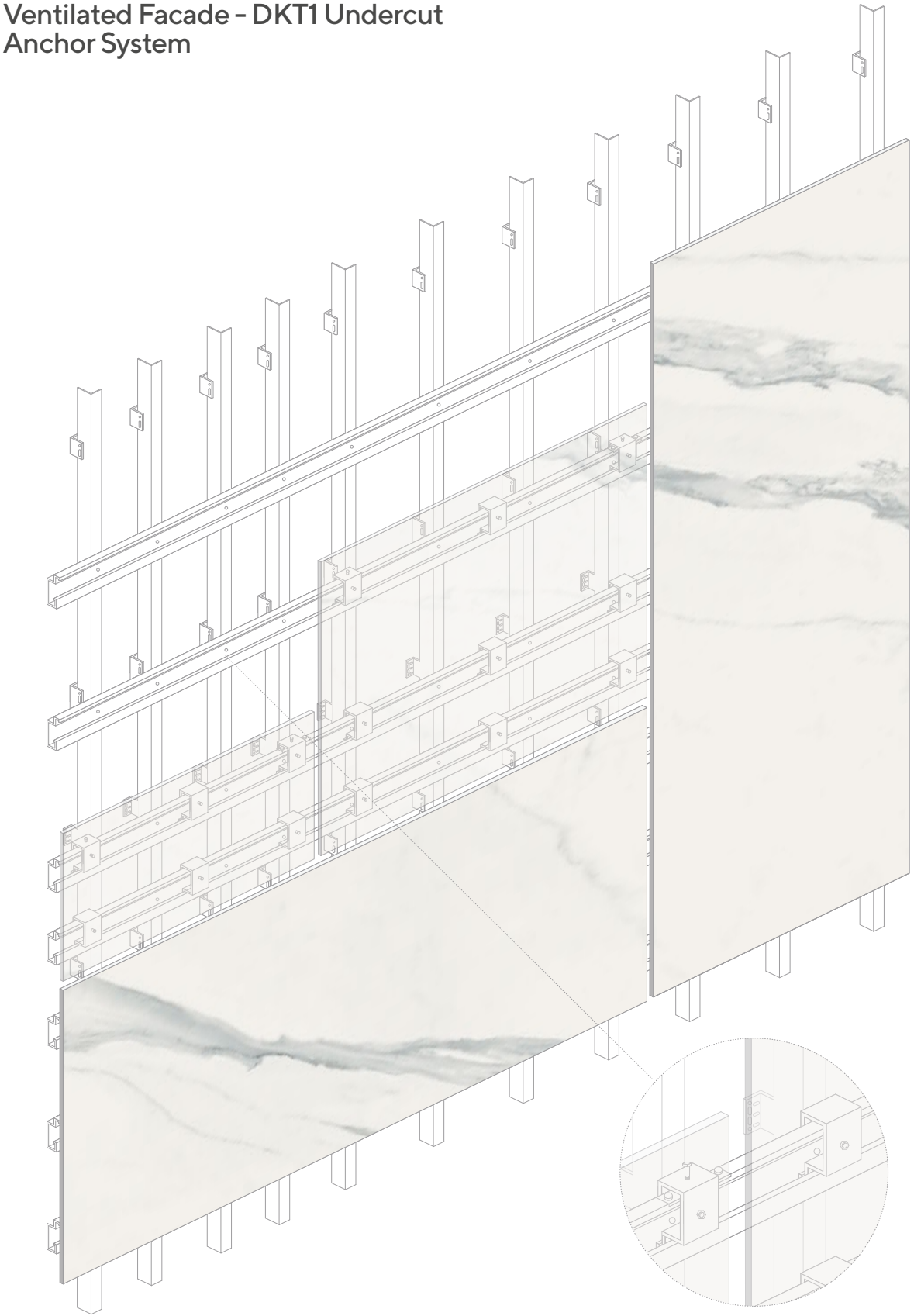
The DKT1 system lends lots of freedom of design and a wide possibility of combinations to be able to modify the size of the boards both horizontally and vertically.

Available

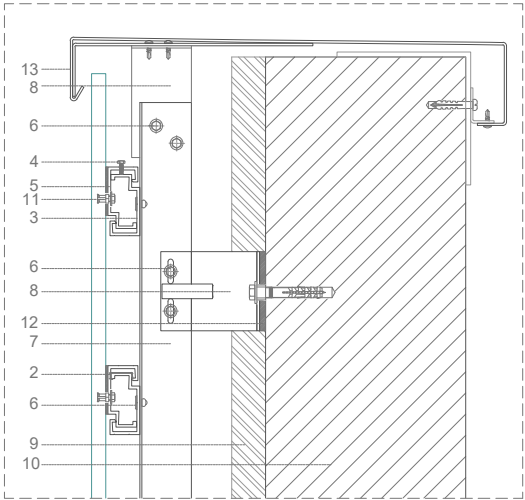
Thickness	Available	Notes
8 mm	✓	Limited in some limitations*
12 mm	✓	Unlimited
20 mm	✓	Unlimited

*Recommended for direct adhere applications

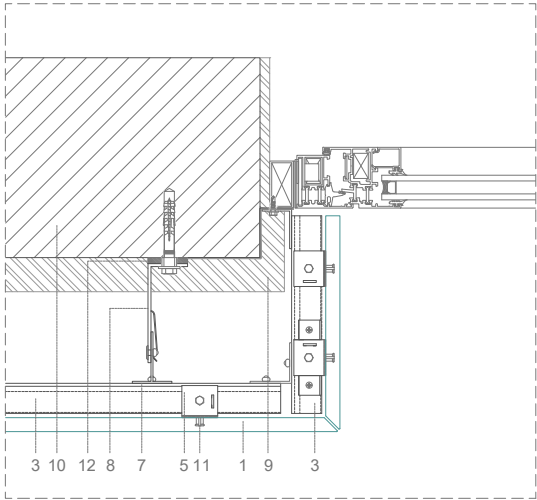
Ventilated Facade - DKT1 Undercut Anchor System



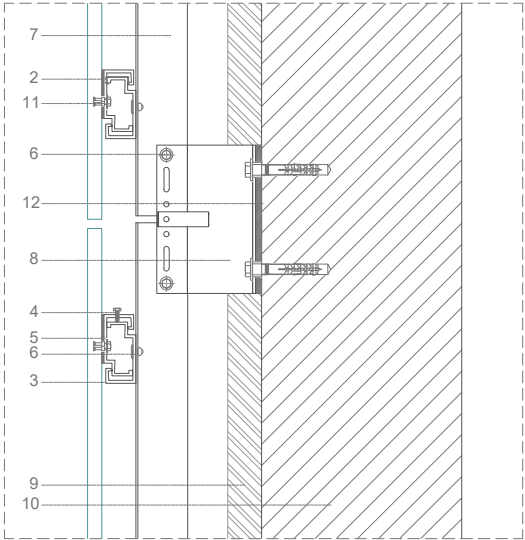
Construction Detail



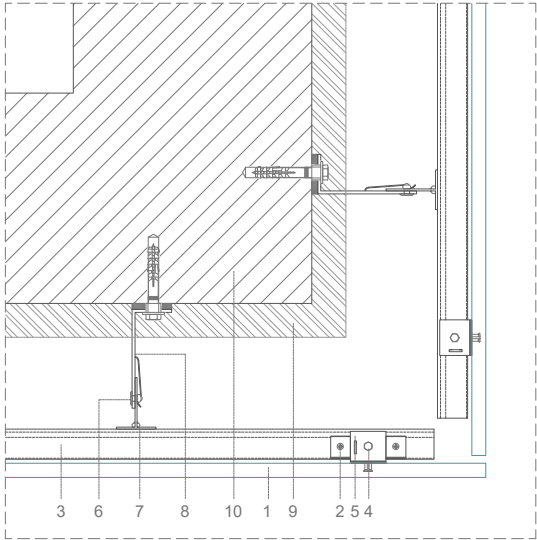
Vertical section



Horizontal section



Vertical section



Horizontal section

- 1. Dekton
- 2. Fixing clamp
- 3. Horizontal profile
- 4. Drilling screw
- 5. Adjustable clamp
- 6. Auto-drilling screw
- 7. Vertical profile
- 8. "I" Separator
- 9. Thermal isolation
- 10. Support wall
- 11. Keil anchor or other approved anchoring system
- 12. Thermal bridge rupture
- 13. Padding



Ventilated Facade - DKT2 Continuous Grooved Edge System

DKT2 concealed fixing system by using a continuous profile housed in grooves made in the horizontal edges of the pieces.

The horizontal profiles that serve as fixing for the plates are anchored on a vertical structure.

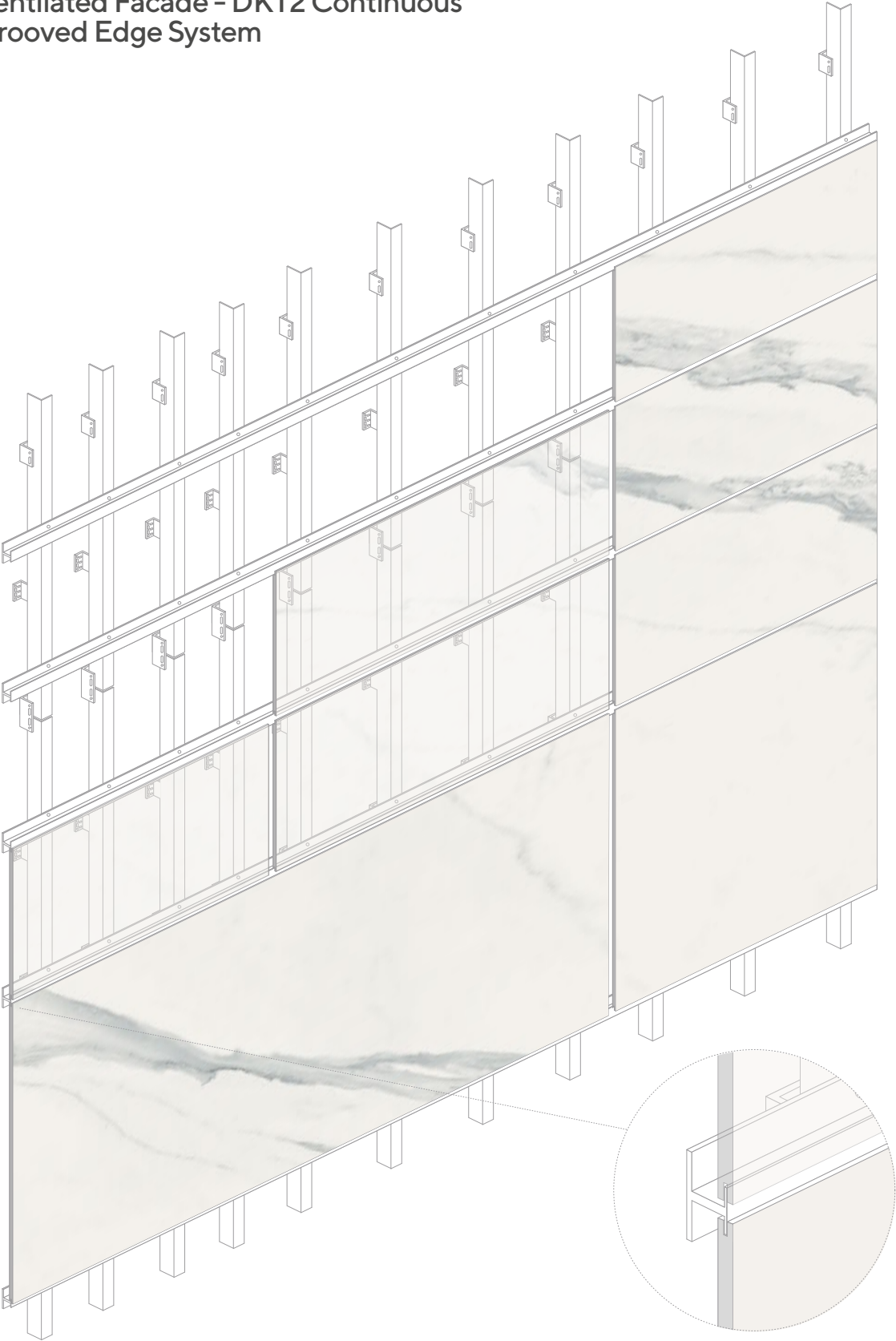
Plate regulation is achieved thanks to the continuous horizontal profiles located in the slots.

The DKT2 system requires a minimum joint of 6 mm horizontally and 3 mm vertically. Especially apt for the closing of large surfaces of facades with horizontal modulations and interlocking joints.

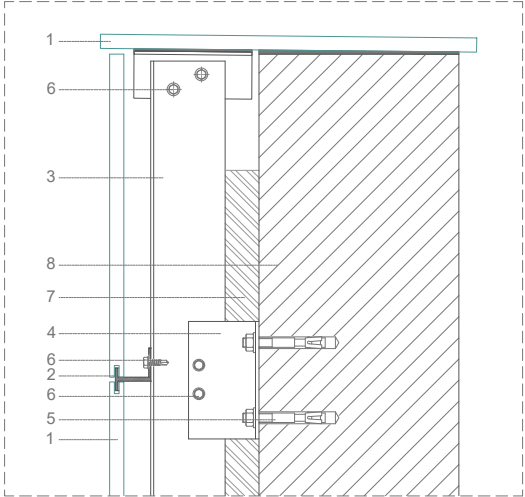
Available

Thickness	Available
12 mm	✓
20 mm	✓

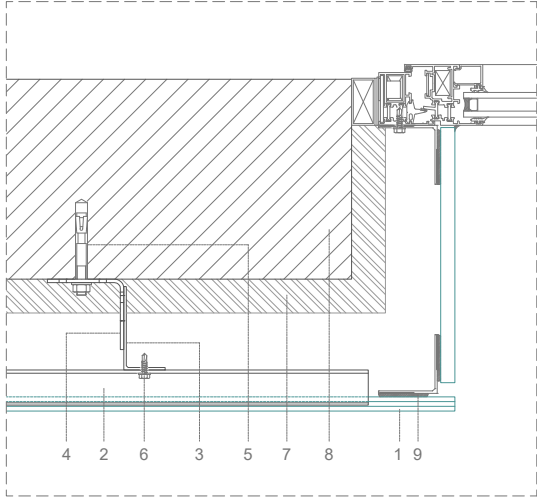
Ventilated Facade - DKT2 Continuous Grooved Edge System



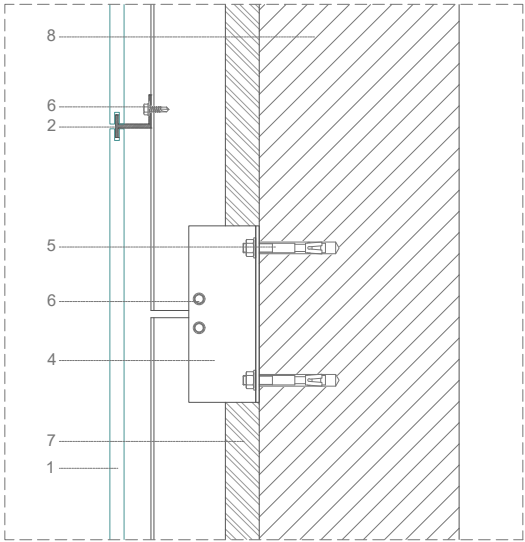
Construction Detail



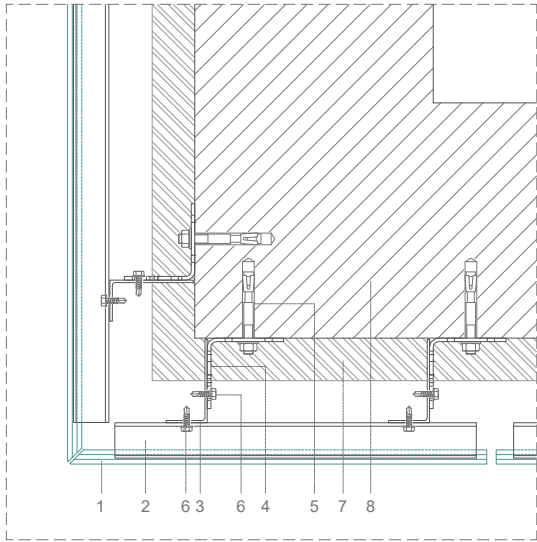
Vertical section



Horizontal section



Vertical section



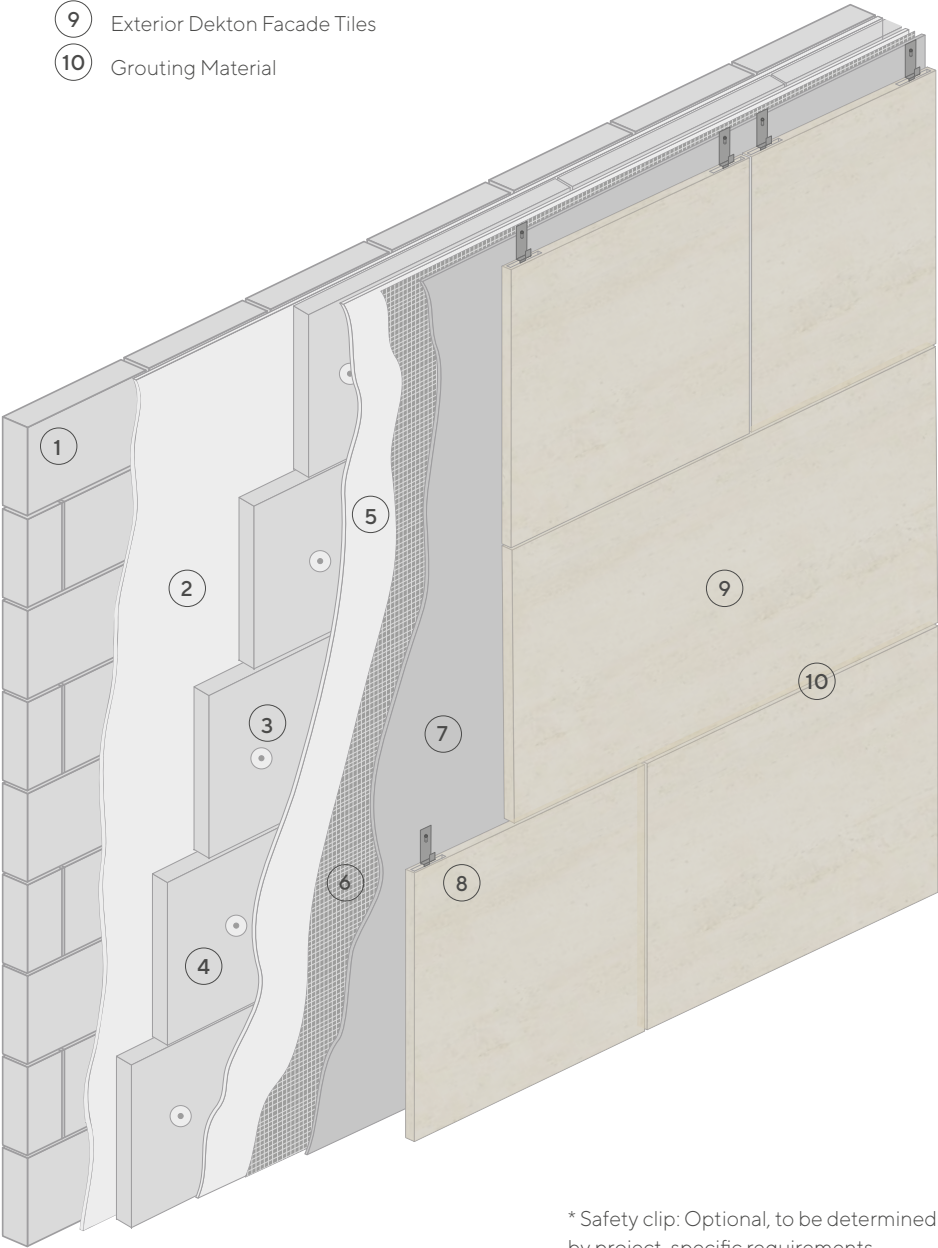
Horizontal section

- 1. Dekton
- 2. Horizontal profile
- 3. Vertical profile
- 4. "I" Separator
- 5. Mechanical anchor
- 6. Auto-drilling screw
- Thermal insulation
- Wall support
- Adhesive



Direct Adhere Facade - DKS External Thermal Insulation System

- | | |
|------------------------|--------------------------------|
| ① Support Wall | ⑥ Reinforcement Mesh |
| ② Adhesive | ⑦ Adhesive |
| ③ Insulation | ⑧ Safety Clips |
| ④ Mechanical Fastening | ⑨ Exterior Dekton Facade Tiles |
| ⑤ Regularization Layer | ⑩ Grouting Material |



* Safety clip: Optional, to be determined by project-specific requirements.

References

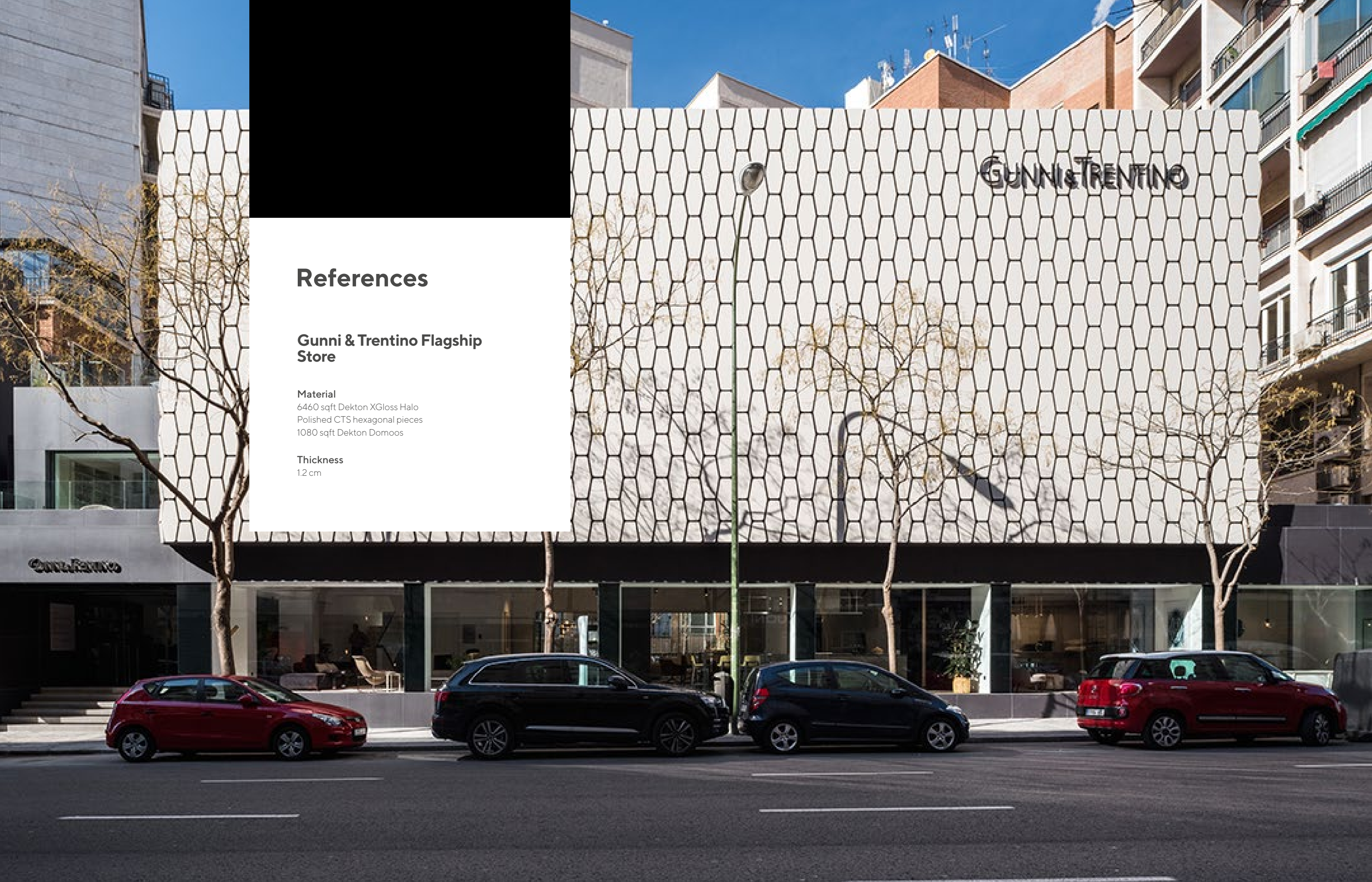
Gunni & Trentino Flagship Store

Material

6460 sqft Dekton XGloss Halo
Polished CTS hexagonal pieces
1080 sqft Dekton Domoos

Thickness

1.2 cm



Totzeret

Tel Aviv, Israel

Material

199,875 sqft Dekton® Totzeret Items cut to measure
Custom colors: 7

Thickness

1.2 cm





Armonk Professional Center
New York City

Material
1350 sqft Dekton Trilium

Thickness
1.2 cm



Porsche Design Boutique Illinois

Material

Dekton® Domoos CTS Cut-to-Size 5ft. x 10ft.

Thickness

1.2 cm





Skallan Private Villa
Sweden

Material
5380 sqft Dekton® Kadum

Thickness
1.2 cm



Schauffauserstrasse
Zurich, Switzerland

Material
5,920 sqft Dekton Sirius

Thickness
2 cm





MK8 – Kap West Munich

Material

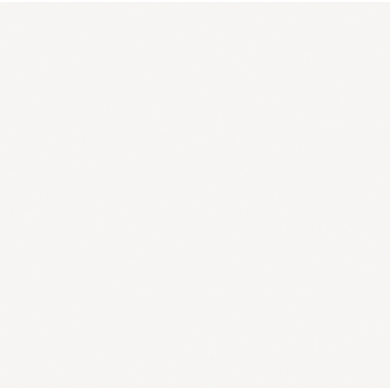
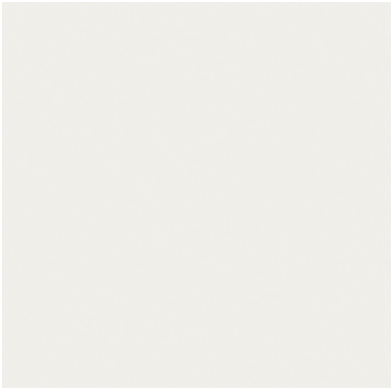












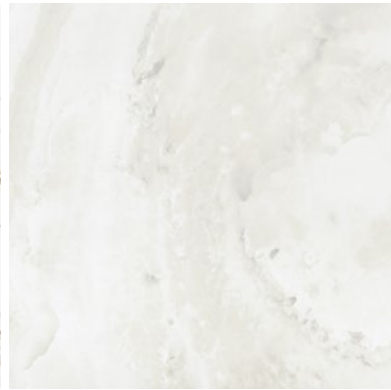




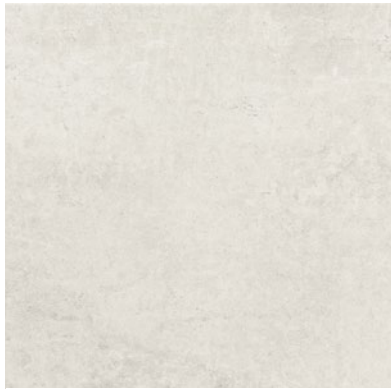



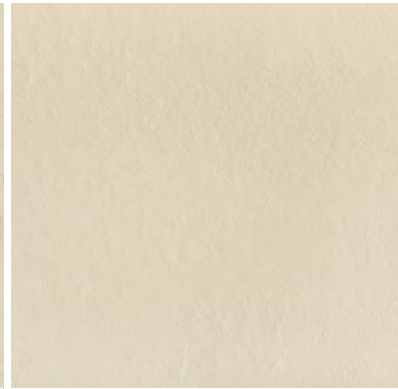




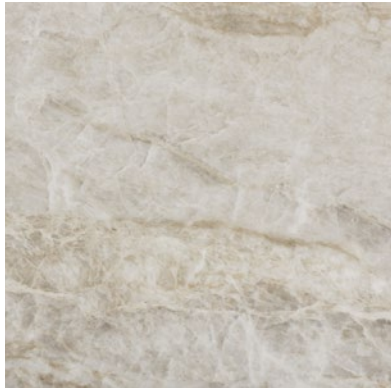



135625 sqft Dekton Keon
Facade through independent modules. Pieces cut to size and pre-assembled in the factory to create modules that are placed directly on site.

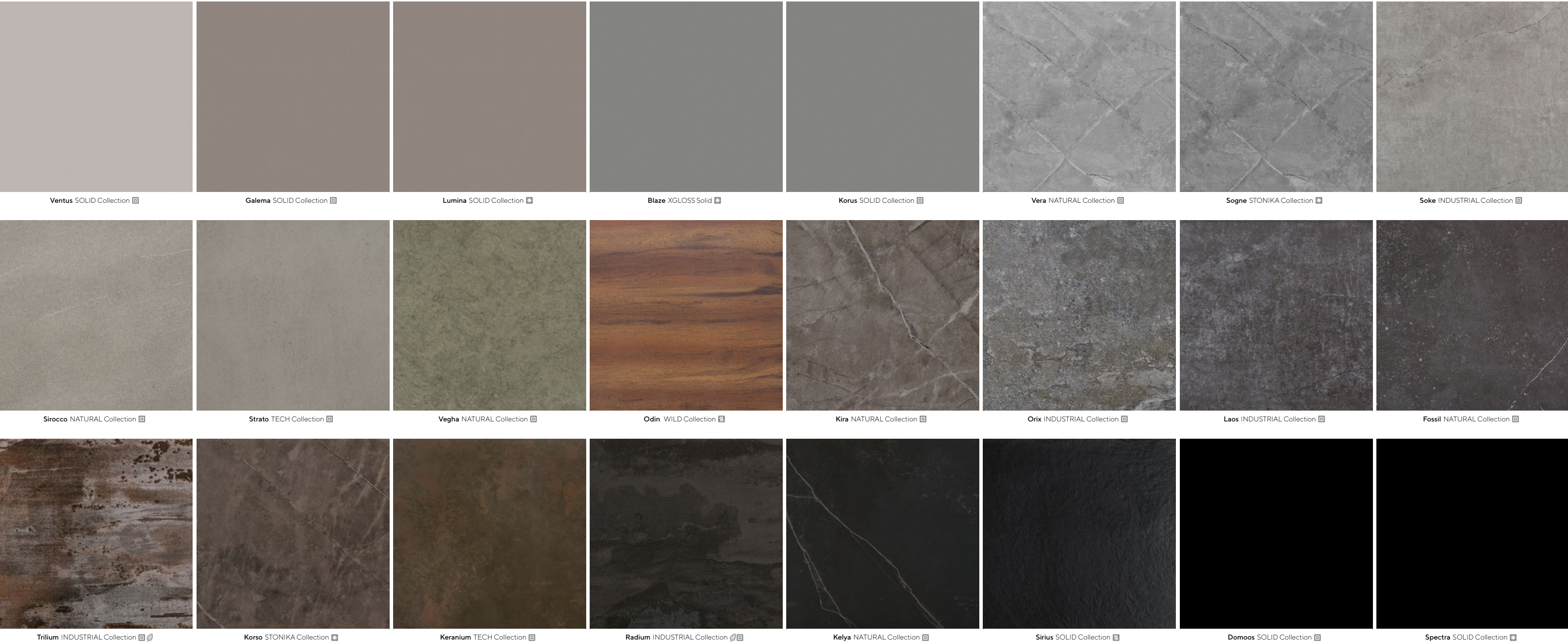
Thickness

1.2 cm

Color Chart

Ultra Texture Ultra Mate Velvet Texture XGloss Eco Dekton Thickness 3 cm

							
Zenith SOLID Collection	Halo XGLOSS Solid	Nayla NATURAL Collection	Vienna XGLOSS Basic	Glacier XGLOSS Natural	Tundra XGLOSS Natural	Aura 15 NATURAL Collection	Natura XGLOSS Natural
							
Opera NATURAL Collection	Olimpo STONIKA Collection	Kairos Natural Collection	Entzo NATURAL Collection	Nilium INDUSTRIAL Collection	Bedrock NATURAL Collection	Fiord XGLOSS Natural	Vapour NATURAL Collection
							
Sand Drift NATURAL Collection	Bergen STONIKA Collection	Portum NATURAL Collection	Lunar INDUSTRIAL Collection	Blanc Concrete TECH Collection	Gada NATURAL Collection	Danae NATURAL Collection	Edora NATURAL Collection
							
Makai WILD Collection	Aged Timber WILD Collection	Sterling NATURAL Collection	Arga STONIKA Collection	Taga STONIKA Collection	Aldem WILD Collection	Keon TECH Collection	Splendor XGLOSS Solid



Environment

Water Management

Water is a limited resource. This has been taken into account in the manufacture of Dekton® and taking the following measures:

- Four tanks located in different points of the factory, allowing for the collection of cleaning water and its reuse in the process.
- System for obtaining technological water through reverse osmosis.
- Decanting and clarification system that allows for the treatment and recovery of process waters.

Terrestrial Atmosphere

Protecting the air is fundamental not only at the environmental level but also for the health of the people. Among the measures that have been taken in the manufacture of Dekton® we can highlight:

- Hermetic transport systems for micronized raw materials from the truck to the mill.
- Integral transportation systems to minimize possible emissions from the origin point of the colored raw material (atomizers) to the storage point (24 hermetic silos).
- Centralized dust collection and purification systems via 7 bag filters which are located in the different sections of the factory.
- Installation for the vacuuming, treatment, and recovery of fumes coming from those of the ovens.
- MRD and SPR systems for heat recovery in ovens.

Sustainable Mode

Within the Cosentino sustainability policy, sustainable mobility plays a prominent role. In this line, and associated with the new industrial park where Dekton® is produced, more than 2 kilometers of bike lanes have been designed and bicycles have been purchased for the workers to be able to move around.

On the other hand, sustainable mobility around the industrial park is also encouraged, with the use of electric vehicles to transport both workers as well as suppliers.

Green Areas

Associated with the new industrial park, more than 25,000 m² of green areas have been enabled. Native species and more than 200 trees have been used, which are adapted to the arid conditions of the area.

Waste Evaluation

The following systems have been installed for the recovery of waste generated in the production process:

- Set of facilities aimed at reusing raw waste prior to the cooking process.
- System for recovering dust from the different emission collection areas.
- Cleaning machine (sweeper-scrubber types) with water recycling system.

Energy Efficiency

Apart from the aforementioned savings measures (such as reusing heat from furnace fumes), other efficiency measures have been programmed. For the exterior lighting of vials, LED lighting has been used with time adjustments depending on the total traffic. For the interior lighting of the factories, we make maximum use of the natural lights with skylights.



Technical Characteristics

TRIAL	REGULATION	DETERMINATION	UD	FAMILY I	FAMILY II	FAMILY III
Humidity expansion	ASTM C370	Average humidity expansion	%	0.020	0.005	0.004
Rupture resistance	ASTM C648	Average expansion by fracture	lbf	3.963	4.896	3.932
Flexibility properties	ASTM C674	Average rupture module	psi	10.828	13.997	9.005
Water absorption, bulk density, porosity)	ASTM C373	Average water absorption	%	0.03 (non-porous)	0.05 (non-porous)	0.01 (non-porous)
Adhesion and friction coefficient (slip re- sistance)	ASTM C1028	Dry adhesion and friction coeffi- cient	-0	0.800	0.770	0.77
		Dry and wet adhesion and friction coefficient	-0	0.660	0.560	0.69
Wear resistance (TABER Abrasion)	ASTM C501	Average wear index because of abrasion		182.23	337	240
Resistant to thermal shock	ASTM C484	Defects	-	No defects	No defects	No defects
Adhesion strength	ASTM C482	Average adhesion strength	psi	423	437	357
Resistance to chemical substances	ASTM C650	Daily use cleaning products				
		Acetic acid, 3% (v/v)	-	Does not affect	Does not affect	Does not affect
		Acetic acid, 10% (v/v)	-	Does not affect	Does not affect	Does not affect
		Ammonium chloride, 100 g/l	-	Does not affect	Does not affect	Does not affect
		Citric acid solution, 100 g/l	-	Does not affect	Does not affect	Does not affect
		Lactic acid, 5% (v/v)	-	Does not affect	Does not affect	Does not affect
		Phosphoric acid, 3% (v/v)	-	Does not affect	Does not affect	Does not affect
		Phosphoric acid, 10% (v/v)	-	Does not affect	Does not affect	Does not affect
		Sulfamic acid, 30 g/l	-	Does not affect	Does not affect	Does not affect
		Sulfamic acid, 100 g/l	-	Does not affect	Does not affect	Does not affect
		Chemical pool products	-	Does not affect	Does not affect	Does not affect
		Sodium hypochlorite solution, 20 mg/l	-	Does not affect	Does not affect	Does not affect
		Acids and bases	-	Does not affect	Does not affect	Does not affect
		Hydrochloric acid solution, 3%	-	Does not affect	Does not affect	Does not affect
		Hydrochloric acid solution, 18% (v/v)	-	Does not affect	Does not affect	Does not affect
		Potassium hydroxide, 30 g/l	-	Does not affect	Does not affect	Does not affect
		Potassium hydroxide, 100 g/l	-	Does not affect	Does not affect	Does not affect

TRIAL	REGULATION	DETERMINATION	UD	FAMILY I	FAMILY II	FAMILY III
Specific density and absorption	ASTM C97	Average absorption percentage of by weight	%	0.020	0.040	0.02
		Average density	lb/ft²	156	160.63	157.6
Rupture module	ASTM C99	Average condition of dry rupture	psi	8128	9.042	7.369
		Average condition of wet rupture	psi	7.490	8.446	7.480
Flexibility resistance	ASTM C880	Average condition of dry flexibility	psi	6.840	3.118	5.858
		Average condition of wet flexibility	psi	6.205	4.187	5.119
Resistant to compression	ASTM C170	Average strength condition of dry compression	psi	34.409	>55.000	44.882
		Average strength condition of wet compression	psi	17.823	>55.000	40.165
Wear-resistant	ASTM C1353	Average abrasion index	-	349	349.48	265.8

*View references by families.

TITLE	DESIGNATION CODE	UNITS	RESULT
Freeze Thaw of Panels	ASTM C1026	300 Cycles	Pass / No Damage
Full System Temperature Cycling with Water Spray	Temperature Cycling	25 Cycles	No Damage
Strength of Anchor in Panel (Negative) Strenght of Anchor in Panel (Positive) Strenght of Anchor in Panel (Lateral)	ASTM C1354	LB LB LB	496 932 1,368
Test to Determine Combustibility	ASTM E136	N/A	Noncombustible
Flame Spread and Smoke Development	ASTM E84	N/A	Class A

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* See specific warranty conditions.




** To obtain more information about hues with NSF certificate, please visit www.nsf.org

***Colors on this brochure are indicative. Please refer to real samples or slabs.

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