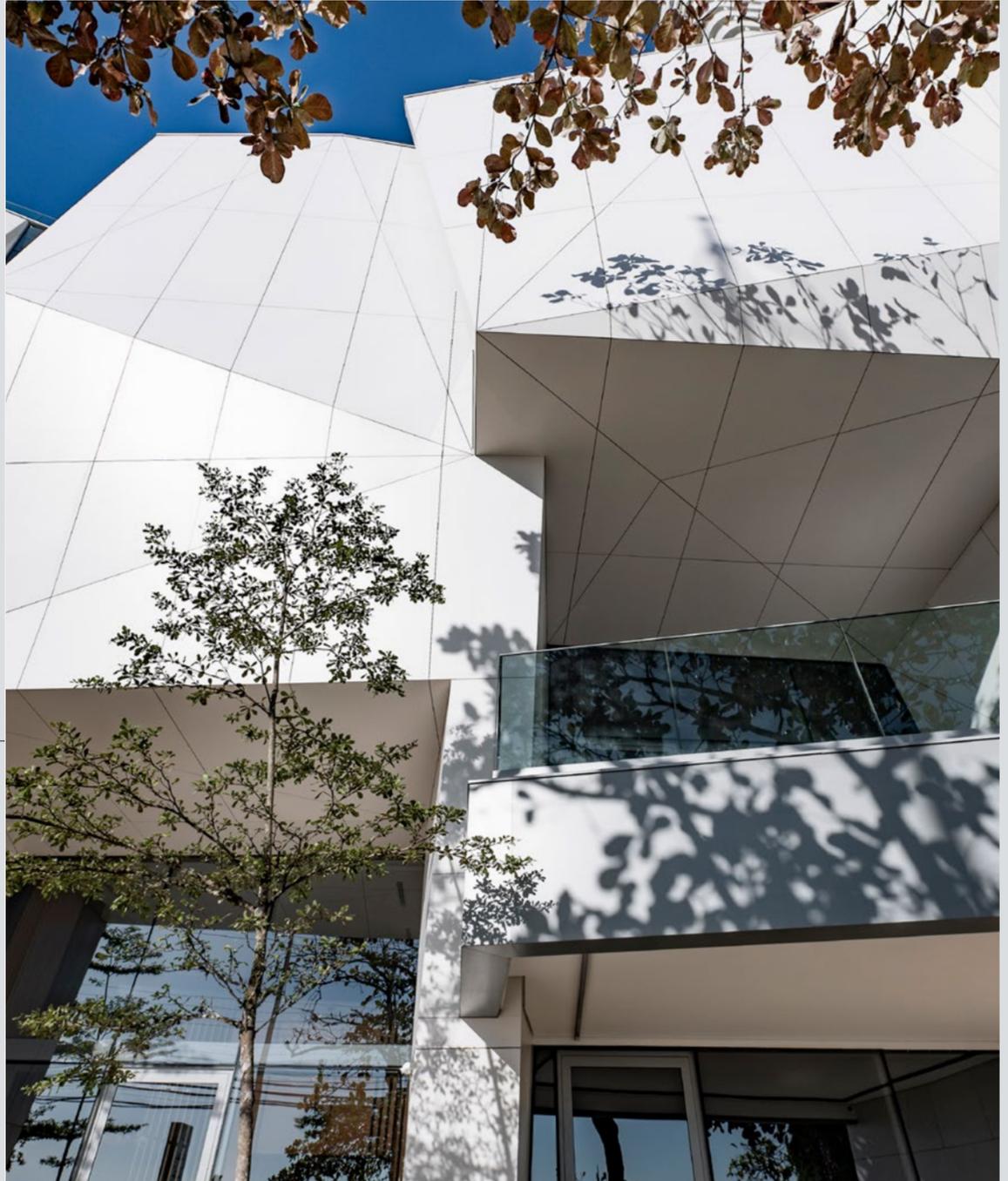


COSENTINO®

# Cosentino Facades

Pocket Version

COSENTINO FACADE  
FIXING SYSTEMS



DEKTON®

---

# Cosentino Facades

Pocket Version

This manual is a condensed version of the Cosentino Facades Technical Manual. You can consult the full version available online at [www.cosentino.com](http://www.cosentino.com) or by requesting it from our Facades Technical Department.

# Cosentino Facades

→ 06

## 01 DEKTON BY COSENTINO



Product description & characteristics → 06

Technical specifications → 14

Sustainability in the factory → 20

Certifications → 24

→ 26

## 02 PRODUCT RANGE



Sizes, formats and thicknesses → 26

Textures → 27

Colours and surfaces → 28

Dekton iD → 40

→ 46

## 03 CLADDING SYSTEM



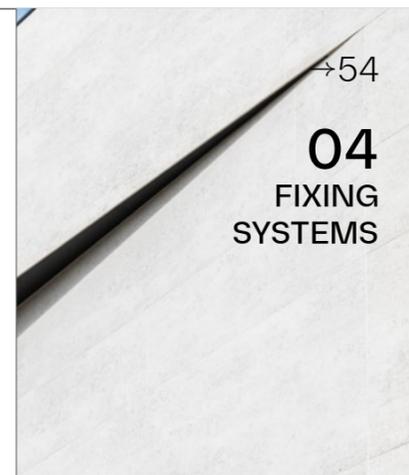
Types of fixing → 46

Cladding system → 48

## Meaningful Design to Inspire People's Lives

→ 54

## 04 FIXING SYSTEMS



→ 56

## 4.1 FACADE VENTILÉE



**DKT1** Hidden undercut drill holes (Keil and Fischer) → 56

**DKT2** Continuous groove on the edge and fixing with profile → 86

**DKT3** Continuous groove on the edge and fixing with clip → 96

**DKBG** Groove on the reverse with clips → 104

**DKT4** Visible clips → 120

**DKR** Rivets → 128

**DKC** Chemical fixing with adhesive → 138

→ 156

## 4.2 FACADE COLLÉE



**DKB** Glued on continuous substrate → 156

**DKS** Glued on ETICS system → 174

→ 178

## 4.3 CURTAIN WALL



**DKCW** Curtain wall → 178

→ 186

## 05 PROJECT QUOTATION

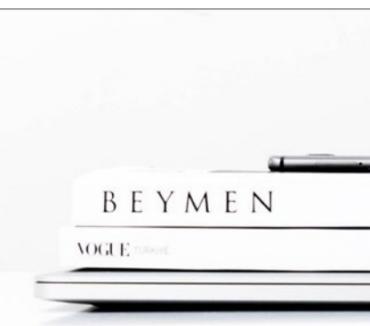


General terms and conditions of sale → 186

Technical conditions of Dekton facades → 190

Notes for Dekton prescription on facades → 193

Dekton warranty → 194



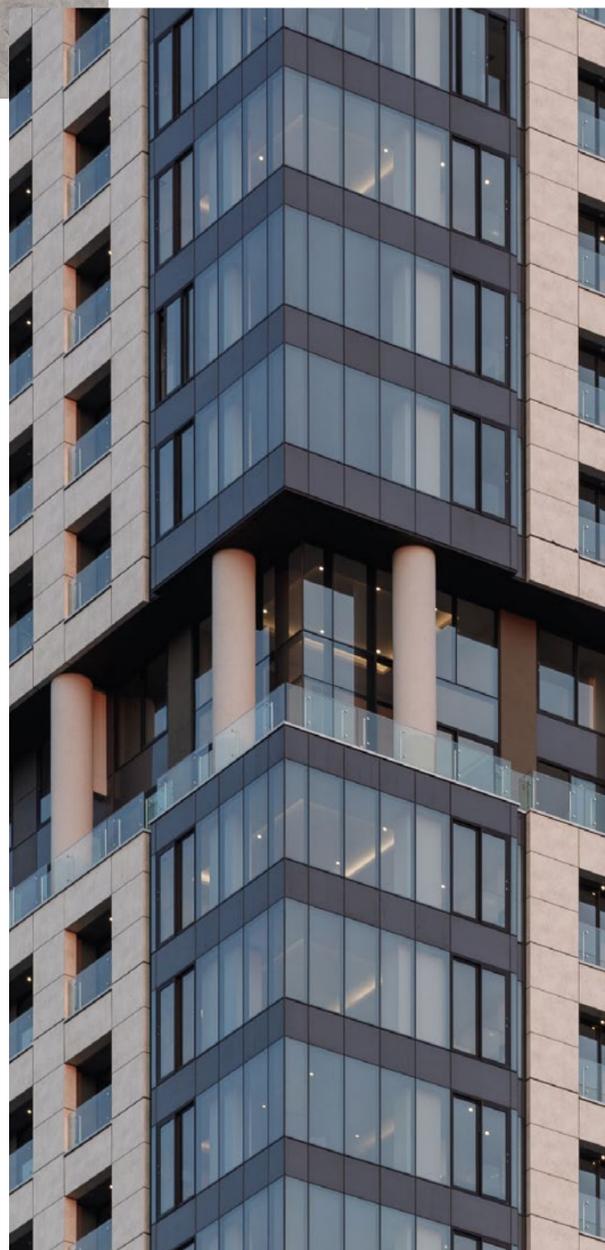
# Content



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

## Product description & characteristics

Dekton is D an ultra-compact material, manufactured using a 25,000 ton press (>450 kg/cm<sup>2</sup>) and a sintering process at around 1,200 °C, with useful dimensions of 3,200 x 1,440 mm in standard format, thicknesses of 30/ 20 / 12 / 8 and 4 mm (it has a safety mesh glued on the reverse for 8, 12 and 20 mm thick ventilated facades and all 4mm thick applications) Fire reaction A2 s1 d0 (according to EN 13501) for thicknesses 8, 12, 20 mm, and B s1 d0 for 4mm thickness, unaffected by UV radiation (ΔE<1 tested in Xenon chamber to 5.000 h), with thermal conductivity ≤ 0,483 W/m °K (according to EN 12664), Specific heat < 700 J/kg°C (measured with DSC), Surface resistivity < 65 TΩ/m (at 1000V) and must fulfil these functional mechanical properties according to EN 10545: Bending strength>45 N/mm<sup>2</sup>, Density > 2,52 ± 4% g/cm<sup>3</sup>. Porosity <0,2%. Linear expansion 5,1-6,5 x 10<sup>-6</sup> °C<sup>-1</sup> and Average absorption [according to ASTM C97] < 0.05%. Suitable for outdoor applications even in aggressive environments (petrol, diesel, various solvents) and can be cleaned with water or other products using pressurised water, with commercial cleaning products or, in the case of persistent stains, specific chemical products (e.g. sulphuric acid, bleach, hydrogen peroxide, acetone, caustic soda).

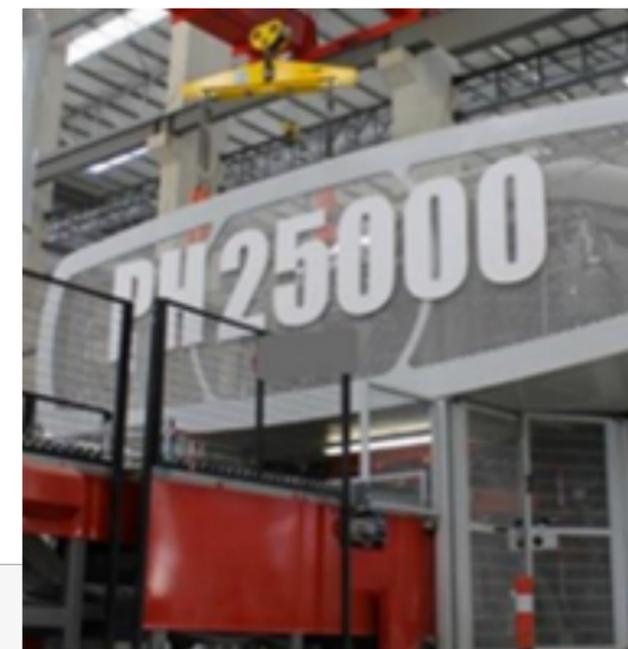


The production takes a number of hours, but a manufacturing plant can produce up to 3.000 slabs a day.

## Composition

Dekton is made from inorganic materials, which naturally exist in over 90% of the Earth's crust.

- Dekton is a totally inorganic material.
- Dekton uses inorganic materials not only for the bulk of the product but also for pigmentation and veining.
- More than 20 different inorganic materials are used to create a Dekton slab.

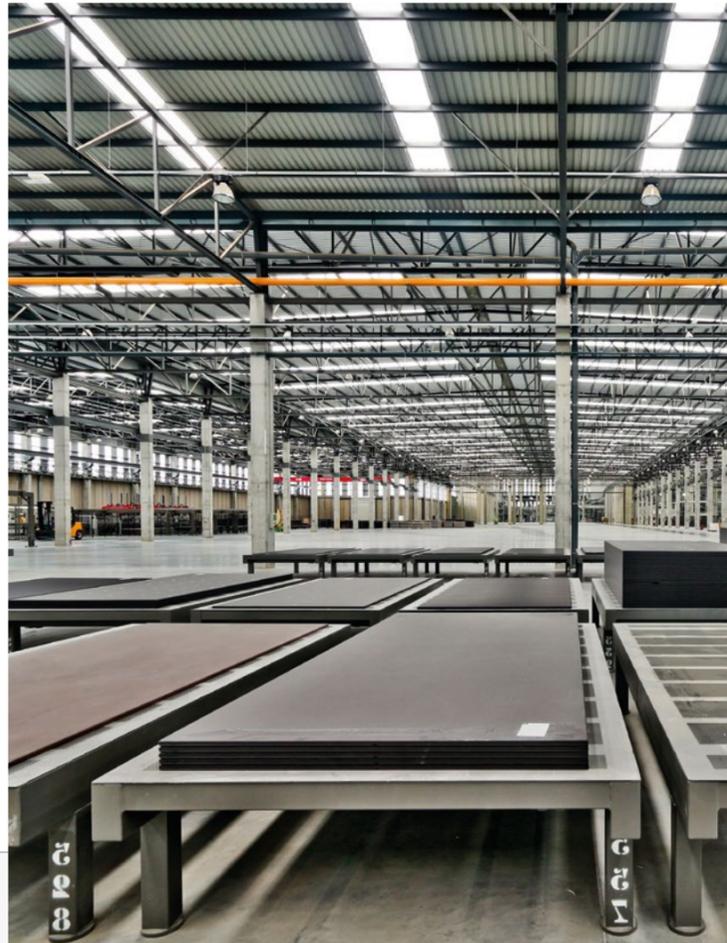


## Production

Dekton uses exclusive TSP Technology (Sinterized Particle Technology), a high tech process which represents an accelerated version of the metamorphic change that natural stone undergoes when subjected to high temperatures and pressure over thousands of years. TSP technology synthesises truly 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.

The production process takes approximately 4 hours and Cosentino's manufacturing plant can produce up to 3,000 slabs a day. From start to finish the process includes the following steps:

1. Decontamintaion of the raw materials.
2. Mixing of materials.
3. Addition of pigments
4. Distribution of material on conveyor belts.
5. Volume decoration process.
6. Compaction.
7. Drying and secondary decoration.
8. Sintering.



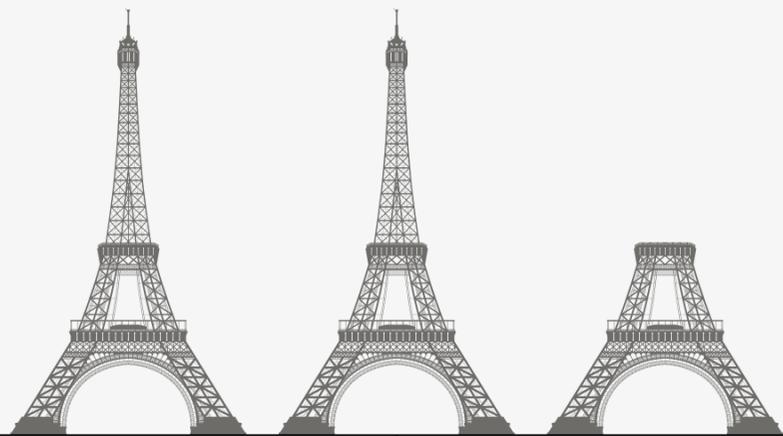
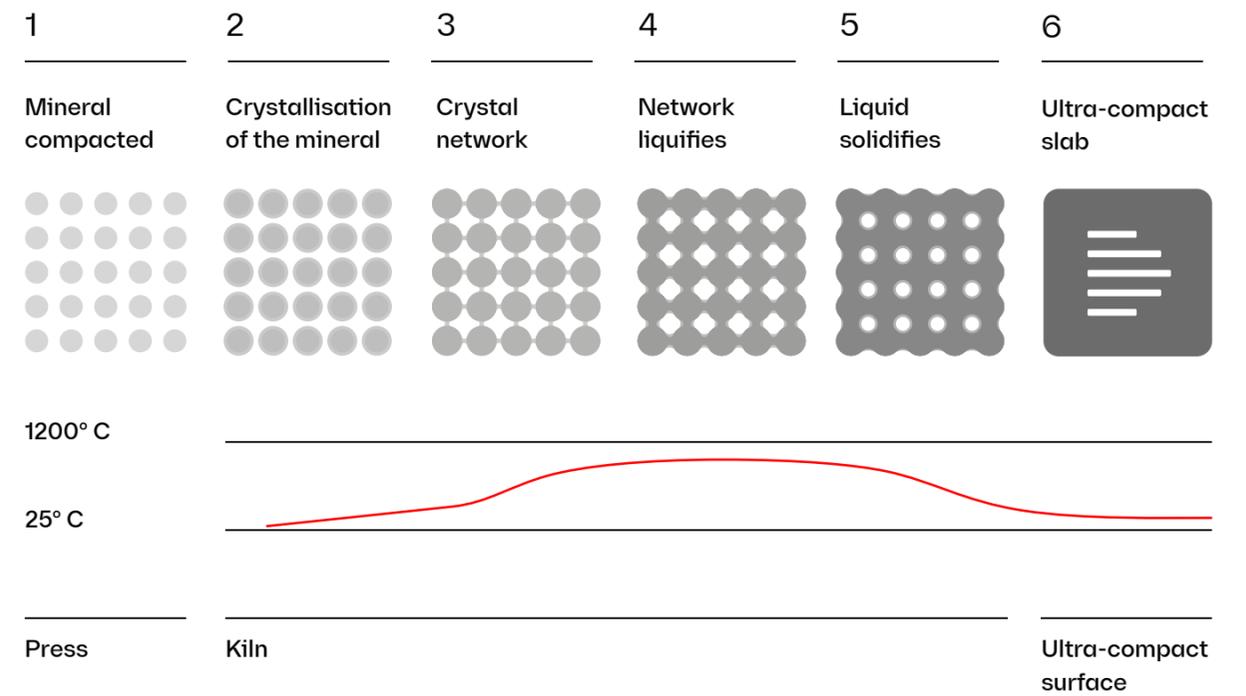
**Compaction**

Compaction using a unique press made specifically to manufacture ultra-compact panels. Panels are pressed at 25,000 cubic tons (50,000,000 lb.). This compaction helps to align particles to achieve almost zero-porosity by forcing air and moisture out, hence the need for the homogeneous particle sizes. Superficial textures (slate, wood, leather, linen, etc...) can also be added during the compaction stage.

**Sintering process**

During this process, the transformation of the raw materials and pigments takes place. By using heat, reactions are controlled so that the correct synthesis path is followed.

- The kiln is 200 metres (218 yards) long.
- Temperatures reach approximately 1250°C (2300 °F).
- The total process time depends on the thickness of the slab (around 4 hours).



Two and a half Eiffel Towers = 25,000 cubic tons (50,000,000 lbs)

Ultra-compact surface panel

**Dekton Protek**

For use in ventilated facades, Dekton has a reinforcing mesh on the back to prevent pieces from falling off in the event of accidental breakage during installation or maintenance.

## Standard applications

Dekton is a material suitable for multiple applications, both interior and exterior, in different scales and with infinite design possibilities.



Outdoor worktops



Kitchen worktops



Flooring for bathrooms and pools



Exterior walls & facades



Bathroom surfaces



Outdoor flooring



Interior walls



Bathroom walls



Indoor floors



Stairs

## Some facade applications

- Ventilated facades.
- Adhere facades.
- Cladding on EIFS systems.
- Facades of industrialized systems.
- Curtain wall.
- Facade gap filling.
- Facade panelling (e.g. insulation panels, honeycomb panels, etc.)
- Facade complements.

## Product features

Dekton has all the technical features required for any hard surface, even in a demanding application such as a facade.



### Fireproof material

Dekton can withstand high temperatures without burning, scorching or cracking. European Standard EN 13501 and ASTM E84 testing, classifies Dekton as a noncombustible material.



### Highly resistant to ultraviolet (UV) light

Dekton is highly resistant to UV light and will not fade or degrade over time in any kind of outdoor application.



### Superior mechanical resistance

Dekton's variety of thicknesses and its average flexural strength >45 N/mm<sup>2</sup> allow it to be used in applications where resistance to wind or impact are a project requirement.



### Low water absorption

Dekton's water absorption is negligible so it does not undergo any expansion movement due to it nor does it degrade due to humidity.



### Colour durability

Dekton's control of pigmentation and decoration in the manufacturing process provides better colour consistency from one slab to another, resulting in a long lasting product that will not fade over time.



### Scratch resistant

Dekton is one of the most scratch-resistant surfaces on the market with a resistance of 7 out of 10 on the Mohs scale.



### Dimensional stability

Dekton expansion is minimal so it can be installed with thin joints between panels. These joints will keep their width in all conditions with very low expansion.



### Resistance to freezing and thawing

Dekton resistance to durability tests in freezing and thawing situations and its application in various weather conditions prove its high performance.



### Abrasion resistant

Dekton is even more resistant to abrasion than granite and porcelain, making it the ideal surface for facades or high-traffic flooring in commercial applications.



### Maximum fire and heat resistance

Dekton has been successfully installed on facades in areas exposed to high temperatures.



### Easy cleaning and low maintenance

Most graffiti can be removed from Dekton with standard cleaning products. Maintenance costs are reduced.



### Stain resistant

Dekton is resistant to stains from a variety of sources. The stains will not be permanent so they can easily be removed without altering their finish.

## Advantages of Dekton facade system

Dekton offers clear advantages in its application on facades.

1

### Large format

Thanks to the large standard format that Dekton allows of 3200 x 1440 mm and possible up to 3300 x 1630 mm depending on portfolio, it gives freedom to the design of the facade and the ability to use different formats in order to make the best use of the material.

4

### Endless design and colour possibilities

The variety of Dekton colours allows for a wide range to be used as another design tool, maintaining uniformity and character.

7

### Solutions for joints

Dekton allows for angled joints with straight or bevelled edges, and even with bespoke pieces to create a monolithic look, thanks to its reduced resistance to expansion.

2

### Wide range of thicknesses

The variety of Dekton thicknesses available, 4, 8, 12, 20 and 30 mm, allows you to apply thicker or thinner pieces as required. This maintains the consistency of the whole and gives each section the required technical features.

5

### Adaptation to complex geometric shapes

The possibility to produce Dekton in simple or complex pieces makes it a versatile material for covering complicated volumes.

8

### Unlimited shapes

Architectural plans with different gradients and complex geometrics can push materials to their limits. Few of them can work under traction and compression in the face of inclement weather and remain unchanged and requiring little maintenance over time.

3

### Colour perfection

Thanks to a rigorous system of measurements and quality controls from its production onwards, Dekton ensures the stability of its tone throughout the facade, making it possible to use the material in large panels while maintaining visual harmony.

6

### Flat surfaces: visual continuity

The excellent flatness offered by Dekton ensures that facade surfaces are virtually free of any gaps. This means that it is ideal for promoting design around it, where visual continuity and uniformity are key.

9

### Uniform colour

Dekton is coloured throughout the whole mass of the product allowing better integration of the edges with the surface of the piece.



# Technical specifications

## Key technical data

- Density  $2.52 \pm 4 \%$  g/cm<sup>3</sup>
  - Average bending strength  $\geq 45$  N/mm<sup>2</sup>
  - Modulus of elasticity: 73,000 N/mm<sup>2</sup>
  - Linear thermal expansion  $5,1-6,5 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$
  - Water absorption 0.1%. (Bla Group)
  - Porosity 0.2%.
  - Maximum expansion 0.1 mm/m.
  - Thermal conductivity 0.483 W/m °K
  - Reaction to fire.
    - Dekton A1 (withouth ancillary mesh)
    - Dekton Protek 8/12/20: A2-s1-d0 (with ancillary mesh)
    - Dekton Slim Protek 4mm: B-s1-d0 (with ancillary mesh)
- EN 13501-1 2018 and NFPA/IBC class A ASTM E 84.



## Dekton technical data sheet

According to EN 14411, ANSI A137.1, ISO 13006 standards

	Thickness	Unit	Family I	Family II	Family III	Family IV
Peso	8 mm	Kg/m <sup>2</sup> [lb/ft <sup>2</sup> ]	20 [4.10]	20 [4.10]	20 [4.10]	20 [4.10]
	12 mm		30 [6.20]	29 [6.00]	30 [6.20]	31 [6.40]
	20 mm		50 [10.30]	48 [9.90]	50 [10.30]	51 [10.50]
	30 mm		77 [15.80]	72 [14.80]	77 [15.80]	76 [15.60]

Flexural strength EN ISO 10545-4 Tested format: 200 x 200 mm	Thickness	Unit	Family I	Family II	Family III	Family IV
Breaking strength	8 mm	N	2,304	2,282	1,993	2,164
Flexural resistance		N/mm <sup>2</sup>	55	53	50	50
Breaking strength	12 mm	N	4,992	4,616	4,947	4,509
Flexural resistance		N/mm <sup>2</sup>	54	48	54	49
Breaking strength	20 mm	N	14,174	13,708	13,629	13,614
Flexural resistance		N/mm <sup>2</sup>	54	50	52	53

Test   Standard	Determination	Unit	Family I	Family II	Family III	Family IV
Water absorption, open porosity and density EN ISO 10545-3	Water absorption (Ev)	%	0.1	0.1	0.1	0.1
	Open porosity	%	0.2	0.2	0.2	0.2
	Apparent relative density	g/cm <sup>3</sup>	2.51	≤ 2.43	2.53	2.44
	Apparent density	g/cm <sup>3</sup>	2.50	≤ 2.43	2.53	2.44
Impact resistance EN ISO 10545-5	Coefficient of restitution (COR)	-	0.85	0.85	0.85	0.92
Resistance to deep abrasion EN ISO 10545-6	Wear volume	mm <sup>3</sup>	125	106	115	119
Determination of linear thermal expansion EN ISO 10545-8	Expansion 30 - 100 °C	10 <sup>-6</sup> . °C <sup>-1</sup>	6.5	5.1	6.3	5.8
Thermal shock resistance EN ISO 10545-9	Damage	-	Pass/ no damage	Pass/ no damage	Pass/ no damage	Pass/ no damage
Moisture expansion EN ISO 10545-10	Maximum expansion	mm/m	0.1	0.1	0.1	0.1
	Average expansion		0.0	0.0	0.0	0.1
Frost resistance EN ISO 10545-12	Damage	-	Pass/ no damage	Pass/ no damage	Pass/ no damage	Pass/ no damage
Resistance to chemicals EN ISO 10545-13	CINH <sub>4</sub> / Cleaning products	Class	A (no damage)	A (no damage)	A (no damage)	A (no damage)
	Bleach / Swimming pool salts		A (no damage)	A (no damage)	A (no damage)	A (no damage)
Resistance to staining EN ISO 10545-14	Green agent	Class	5	5	5	5
	Iodine (solution)		5	5	5	5
	Olive oil		5	5	5	5
Absorption and bulk specific gravity ASTM C97	Average absorption	%	0.05	0.04	0.04	0.03
	Bulk specific gravity	lb/ft <sup>3</sup>	157.3	159.6	150.9	154.4
Modulus of rupture* ASTM C99	Modulus of rupture (dry conditions)	psi	7,918	7,821	8,144	7,510
	Modulus of rupture (wet conditions)		7,948	7,573	7,251	6,705
Moisture expansion ASTM C370	-	%	0.003	0.003	0.001	0.005
Linear thermal expansion ASTM C372	-	10 <sup>-6</sup> . °C <sup>-1</sup>	6.10	5.11	5.69	5.78

### Dekton technical data sheet

According to EN 14411, ANSI A137.1, ISO 13006 standards

Test   Standard	Determination	Unit	Family I	Family II	Family III	Family IV
<b>Water absorption</b> ASTM C373	-	% Class	0.0 Impervious	0.0 Impervious	0.0 Impervious	0.0 Impervious
<b>Crazing resistance</b> ASTM C424	-	-	No crazing observed	No crazing observed	No crazing observed	No crazing observed
<b>Bond strength</b> ASTM C482	-	psi	189	367	133	409
<b>Edge and diagonal warpage</b> ASTM C485	Edge warpage	% in	- 0.01 / 0.01 0 / 0	0 / 0.04 0 / 0.01	- 0.01 / 0.02 0 / 0.01	- 0.01 / 0.03 0 / 0.01
	Diagonal warpage	% in	- 0.02 / 0 - 0.01 / 0	0 / 0.04 0 / 0.01	- 0.01 / 0.01 0 / 0	- 0.02 / 0.03 - 0.01 / 0.01
<b>Facial dimensions and thickness</b> ASTM C499	Maximum variation from nominal	%	0.05	0.08	0.07	0.09
	Maximum variation from average	%	- 0.05	- 0.06	0.04	- 0.08
	Thickness (range)	in	0.008	0.012	0.019	0.013
<b>Wear resistance (Taber abrasion)</b> ASTM C501	Average wear resistance index	-	182.2	337	240	239
<b>Wedging</b> ASTM C502	Average wedging	% in	0 0	0 0	0 0	0 0
	Average breaking strength	lbf	1,192	1,176	1,171	1,138
<b>Breaking strength</b> ASTM C648	Minimum breaking strength		1,144	1,070	1,067	1,013
	<b>Common cleaning chemicals</b>		<b>Class A</b>	<b>Class A</b>	<b>Class A</b>	<b>Class A</b>
<b>Chemical resistance</b> ASTM C650	Acetic acid, 3% (v/v)		Not affected	Not affected	Not affected	Not affected
	Acetic acid, 10% (v/v)		Not affected	Not affected	Not affected	Not affected
	Ammonium chloride, 100 g/L		Not affected	Not affected	Not affected	Not affected
	Citric acid solution, 30 g/L		Not affected	Not affected	Not affected	Not affected
	Citric acid solution, 100 g/L		Not affected	Not affected	Not affected	Not affected
	Lactic acid solution, 5% (v/v)	-	Not affected	Not affected	Not affected	Not affected
	Phosphoric acid, 3% (v/v)		Not affected	Not affected	Not affected	Not affected
	Phosphoric acid, 10% (v/v)		Not affected	Not affected	Not affected	Not affected
	Sulfamic acid, 30 g/L		Not affected	Not affected	Not affected	Not affected
	Sulfamic acid, 100 g/L		Not affected	Not affected	Not affected	Not affected
	<b>Swimming pool chemicals</b>		<b>Class A</b>	<b>Class A</b>	<b>Class A</b>	<b>Class A</b>
	Sodium hypochlorite sol., 20 mg/L	-	Not affected	Not affected	Not affected	Not affected
	<b>Acids and bases</b>		<b>Class A</b>	<b>Class A</b>	<b>Class A</b>	<b>Class A</b>
	Hydrochloric acid sol., 3% (v/v)		Not affected	Not affected	Not affected	Not affected
	Hydrochloric acid sol., 18% (v/v)	-	Not affected	Not affected	Not affected	Not affected
	Potassium hydroxide, 30 g/L		Not affected	Not affected	Not affected	Not affected
	Potassium hydroxide, 100 g/L		Not affected	Not affected	Not affected	Not affected
	<b>Flexural strength</b> ASTM C880	Flexural strength (dry conditions)	psi	3,471 3,030	3,594 3,045	3,520 3,172
Flexural strength (wet conditions)						
<b>Resistance to freeze-thaw cycling</b> ASTM C1026	-	-	Not affected	Not affected	Not affected	Not affected
<b>Resistance to deep abrasive wear</b> ASTM C1243	Average resistance	mm <sup>3</sup>	82.6	65	76.4	87.3
	Maximum resistance		89.1	72	83.1	95.3
<b>Resistance to staining</b> ASTM C1378	<b>Contrasting grout</b>		<b>Class A</b>	<b>Class A</b>	<b>Class A</b>	<b>Class A</b>
	Carbon lamp black		Not affected	Not affected	Not affected	Not affected
	Waterproof ink (black)	-	Not affected	Not affected	Not affected	Not affected
	Washable ink		Not affected	Not affected	Not affected	Not affected
	Potassium permanganate sol., 1%		Not affected	Not affected	Not affected	Not affected
	Methylene Blue solution, 1%		Not affected	Not affected	Not affected	Not affected

→ ( \* ) Tested thickness: 12 mm. ( n/c ) Does not classify. ( N/A ) Does not apply.

### Dekton XGloss Technical Data Sheet

According to EN 14411, ANSI A137.1, ISO 13006 standards

Test   Standard	Determination	Unit	Family I	Family II	Family III	Family IV
<b>Water absorption, open porosity and density</b> EN ISO 10545-3	Water absorption (Ev)	%		0.1	0.1	
	Open porosity	%	N/A	0.2	0.2	N/A
	Apparent relative density	g/cm <sup>3</sup>		≤ 2.43	2.53	
<b>Flexural tensile strength or modulus of rupture</b> EN ISO 10545-4	Apparent density	g/cm <sup>3</sup>		≤ 2.43	2.53	
	Average flexural resistance	N/mm <sup>2</sup>		45	55	
	Average break load	N	N/A	2.313	2.356	N/A
<b>Impact resistance</b> EN ISO 10545-5	Average break strength	N		13.559	13.818	
	Coefficient of restitution (COR)	-	N/A	0.85	0.85	N/A
<b>Resistance to deep abrasion</b> EN ISO 10545-6	Wear volume	mm <sup>3</sup>	N/A	106	115	N/A
<b>Determination of linear thermal expansion</b> EN ISO 10545-8	Expansion 30 - 100 °C	10 <sup>-6</sup> · °C <sup>-1</sup>	N/A	5.1	6.3	N/A
<b>Thermal shock resistance</b> EN ISO 10545-9	Damage	-	N/A	Pass/ no damage	Pass/ no damage	N/A
<b>Moisture expansion</b> EN ISO 10545-10	Maximum expansion	mm/m	N/A	0.1	0.1	N/A
	Average expansion			0.0	0.0	
<b>Frost resistance</b> EN ISO 10545-12	Damage	-	N/A	Pass/ no damage	Pass/ no damage	N/A
<b>Resistance to chemicals</b> EN ISO 10545-13	CINH <sub>4</sub> / Cleaning products	Class	N/A	A (no damage) A (no damage)	A (no damage) A (no damage)	N/A
	Bleach / Swimming pool salts					
<b>Resistance to staining</b> EN ISO 10545-14	Green agent			5	5	
	Iodine (solution)	Class	N/A	5	5	N/A
	Olive oil			5	5	
<b>Absorption and bulk specific gravity</b> ASTM C97	Average absorption	%	N/A	0.04	0.04	N/A
	Bulk specific gravity	lb/ft <sup>3</sup>		159.6	150.9	
<b>Modulus of rupture*</b> ASTM C99	Modulus of rupture (dry conditions)	psi	N/A	7,821	8,144	N/A
	Modulus of rupture (wet conditions)			7,573	7,251	
<b>Compressive strength*</b> ASTM C170	Compressive strength (dry conditions)	psi	N/A	38,864	52,955	N/A
	Compressive strength (wet conditions)			42,980	20,648	
<b>Moisture expansion</b> ASTM C370	-	%	N/A	0.003	0.001	N/A
<b>Water absorption</b> ASTM C373	-	10 <sup>-6</sup> · °C <sup>-1</sup>	N/A	5.11	5.69	N/A
<b>Linear thermal expansion</b> ASTM C372	-	10 <sup>-6</sup> · °C <sup>-1</sup>	N/A	5.11	5.69	N/A
<b>Crazing resistance</b> ASTM C424	-	-	N/A	No crazing observed	No crazing observed	N/A

→ ( \* ) Tested thickness: 12 mm. ( n/c ) Does not classify. ( N/A ) Does not apply.

## Dekton XGloss Technical Data Sheet

According to EN 14411, ANSI A137.1, ISO 13006 standards

Test   Standard	Determination	Unit	Family I	Family II	Family III	Family IV
<b>Bond strength</b> ASTM C482	-	psi	N/A	367	133	N/A
<b>Facial dimensions and thickness</b> ASTM C499	Maximum variation from nominal	%		0.08	0.07	
	Maximum variation from average	%	N/A	- 0.06	0.04	N/A
	Thickness (range)	in		0.012	0.019	
<b>Wear resistance (Taber abrasion)</b> ASTM C501	Average wear resistance index	-	N/A	337	240	N/A
<b>Wedging</b> ASTM C502	Average wedging	% in	N/A	0 0	0 0	N/A
	Average breaking strength Minimum breaking strength	lbf	N/A	1,176 1,070	1,171 1,067	N/A
<b>Chemical resistance</b> ASTM C650	<b>Common cleaning chemicals</b>			<b>Class A</b>	<b>Class A</b>	
	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	
	Citric acid solution, 30 g/L			Not affected	Not affected	
	Citric acid solution, 100 g/L			Not affected	Not affected	
	Lactic acid solution, 5% (v/v)	-	N/A	Not affected	Not affected	N/A
	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	
	<b>Swimming pool chemicals</b>			<b>Class A</b>	<b>Class A</b>	
	Sodium hypochlorite sol., 20 mg/L	-	N/A	Not affected	Not affected	N/A
	<b>Acids and bases</b>			<b>Class A</b>	<b>Class A</b>	
	Hydrochloric acid sol., 3% (v/v)			Not affected	Not affected	
	Hydrochloric acid sol., 18% (v/v)	-	N/A	Not affected	Not affected	N/A
	Potassium hydroxide, 30 g/L			Not affected	Not affected	
Potassium hydroxide, 100 g/L			Not affected	Not affected		
<b>Flexural strength</b> ASTM C880	Flexural strength (dry conditions)	psi	N/A	3,594	3,520	N/A
	Flexural strength (wet conditions)			3,045	3,172	
<b>Resistance to freeze-thaw cycling</b> ASTM C1026	-	-	N/A	Not affected	Not affected	N/A
<b>Resistance to deep abrasive wear</b> ASTM C1243	Average resistance	mm <sup>3</sup>	N/A	71.1	74.2	N/A
	Maximum resistance			77.4	77.4	
<b>Resistance to staining</b> ASTM C1378	Contrasting grout			<b>Class A</b>	<b>Class A</b>	
	Carbon lamp black			Not affected	Not affected	
	Waterproof ink (black)	-	N/A	Not affected	Not affected	N/A
	Washable ink			Not affected	Not affected	
	Potassium permanganate sol., 1%			Not affected	Not affected	
	Methylene Blue solution, 1%			Not affected	Not affected	

→ ( \* ) Tested thickness: 12 mm. ( n/c ) Does not classify. ( N/A ) Does not apply.

## Dekton Slim Technical Data Sheet

Test   Standard	Determination	Unit	Value
<b>Water absorption, open porosity and density</b> EN ISO 10545-3	Water absorption by boiling	%	0
	Water absorption by vacuum	%	0.1
	Open porosity	%	0.2
	Apparent relative density	g/cm <sup>3</sup>	2.51
	Apparent density	g/cm <sup>3</sup>	2.50
<b>Flexural tensile strength or modulus of rupture</b> EN ISO 10545-4	Average flexural resistance	N/mm <sup>2</sup>	46
<b>Impact resistance</b> EN ISO 10545-5	Coefficient of restitution (COR)	-	0.82
<b>Resistance to deep abrasion</b> EN ISO 10545-6	Wear volume	mm <sup>3</sup>	142
<b>Linear thermal expansion</b> EN ISO 10545-8	Expansion 30 - 100 °C	10 <sup>-6</sup> . °C <sup>-1</sup>	5.7
<b>Thermal shock resistance</b> EN ISO 10545-9	Damage	-	Pass/ no damage
<b>Reaction to fire</b> EN 13501-1	Class	-	A1
<b>Impact resistance</b> EN 14617-9	Breaking height	cm	25
	Average fracture work	J	2.4
<b>Water absorption, apparent porosity</b> ASTM C373	Average water absorption	%	0.2
<b>Breaking strength</b> ASTM C648	Average breaking strength	lbf	528

## Dekton Slim Protek\* Technical Data Sheet

Test   Standard	Determination	Unit	Value
<b>Flexural tensile strength or modulus of rupture</b> EN ISO 10545-4	Average flexural resistance	N/mm <sup>2</sup>	48
<b>Impact resistance</b> EN ISO 10545-5	Coefficient of restitution (COR)	-	0.82
<b>Resistance to deep abrasion</b> EN ISO 10545-6	Wear volume	mm <sup>3</sup>	142
<b>Linear thermal expansion</b> EN ISO 10545-8	Expansion 30 - 100 °C	10 <sup>-6</sup> . °C <sup>-1</sup>	6
<b>Thermal shock resistance</b> EN ISO 10545-9	Damage	-	Pass/ no damage
<b>Reaction to fire</b> EN 13501-1	Class	-	B,s1,d0
<b>Impact resistance</b> EN 14617-9	Breaking height	cm	32
	Average fracture work	J	3.2
<b>Water absorption, apparent porosity</b> ASTM C373	Average water absorption	%	0.2
<b>Breaking strength</b> ASTM C648	Average breaking strength	lbf	661

→ ( \* ) Includes 300 g/m<sup>2</sup> fiberglass mesh with epoxy resin.

# Our environmental pillars

## Sustainability in the factory

**We measure and monitor, prevent, reduce and offset those emissions we cannot yet reduce.**



We promote the efficient use of natural resources and encourage the use of renewable energy to reduce our carbon footprint.



We recycle and reuse water, thus reducing our water footprint.

**€29,4 MILL Investment in environment and safety.**



We reduce and address our Organizational Carbon Footprint, mitigating emissions and transforming them into added value through offset projects.



E-Smart mobility is our plan to measure and optimize our logistics routes and the mobility of our employees.

## Circular Economy



We recover and reuse waste.



We innovate to encourage the use of waste for new uses.

## CoMA

We are the only company in the sector with its own waste recovery plant.



We are researching a new generation of sustainable composite materials.

## We design low impact products

A more sustainable future is what we all want. And we are developing the materials to make it possible.

Dekton is Carbon neutral from cradle to grave. Sunlit Days is the first Silestone® collection to be carbon neutral.

We analyse the life cycle of our products throughout the entire value chain.

## Environmental Declaration of Product

This document contains the Environmental Product Declaration (EPD) of the Dekton construction surface and the results of its Life Cycle Assessment (LCA). For this purpose, we have based this on data collected during 2020 and on the previous Dekton® EPD published in 2016, with EPD N°. S-P-00916. The calculations were carried out using the SimaPro software, version 9.1.1.1, which is fed by more than 4,000 Ecoinvent databases, version 3.7.

60 years is considered a typical life for the product.

This study has been carried out to understand the environmental impact of this construction surface, including all the stages of the life cycle ("from the cradle to the grave"). This means that the results reflect the analysis of the production, transport, installation, use and end-of-life phases. Other objectives of this study are to establish a systematic process of continuous improvement in all phases of this cycle, and to achieve the basic results to publish an Environmental Product Declaration (EPD).

The system boundaries determine which processes are included in this declaration. This document considers each of the processes of raw material procurement and product manufacture, transport to the customer and end of life of the product ("from cradle to grave with options").

The general description of the processes considered and the system boundaries is as follows:



### EPD SYSTEM

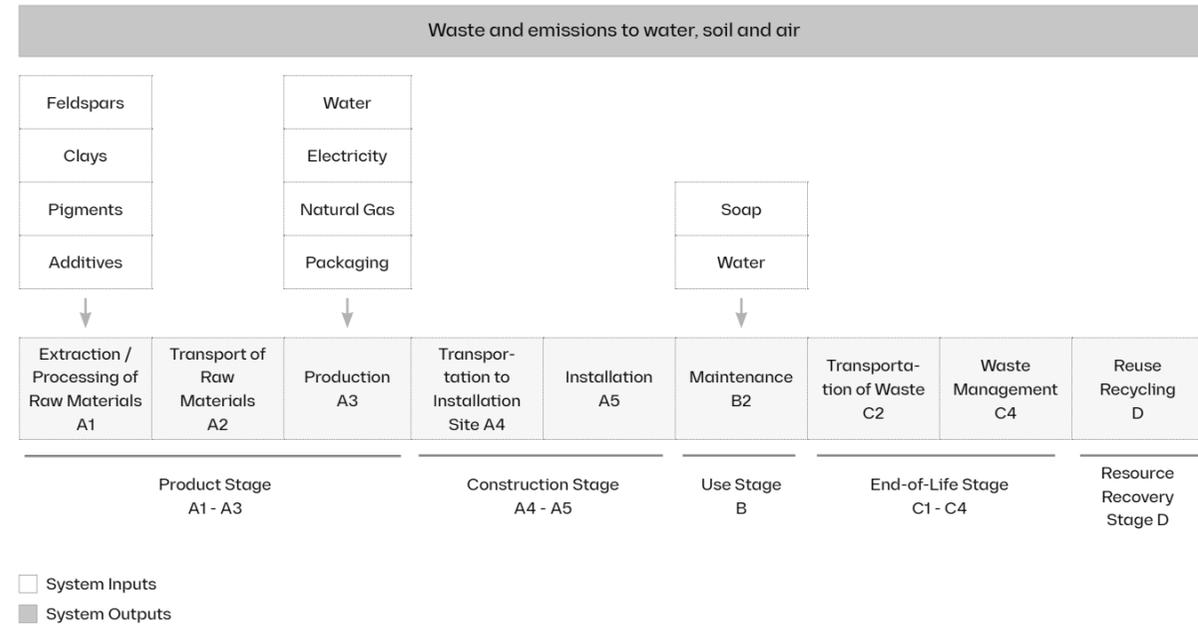
- In accordance with standards ISO 14025:2006 and UNE-EN 15804:2012+A2:2019
- Based on the PCR 2019:14 Construction Products version 1.11
- EPD N°. S-P-00916 – version 3  
Publication date: 01/10/2016  
Date of the update: 29/04/2024  
Valid until: 08/12/2026
- The International EPD System,



## Description of system boundaries

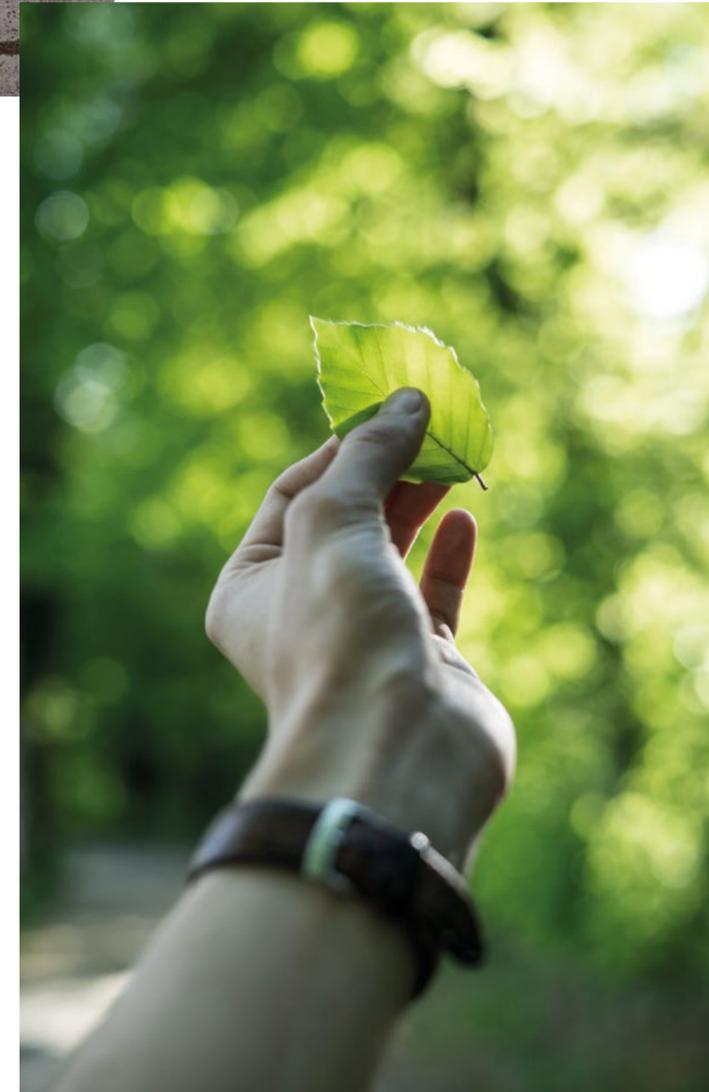
	PRODUCT STAGE					CONSTRUCTION STAGE					USE STAGE				END-OF-LIFE STAGE				RESOURCE RECOVERY STAGE
	A1. Raw materials	A2. Transportation	A3. Production	A4. Transportation	A5. Installation	B1. Use	B2. Maintenance	B3. Repair	B4. Substitution	B5. Rehabilitation	B6. Energy use	B7. Water use	C1. Demolition	C2. Transportation	C3. Waste treatment	C4. Discharge	D. Reuse, recycling and recovery		
Declared modules	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
Geographic location	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.	Int.		
Specific data	More than 99 % specific data is used in this EPD																		
Variation - products	Less than 10 % within each product group																		
Variation - sites	Less than 10 %																		

System boundaries including modules



Dekton Trilium

A building is energy efficient when it is designed to minimise the amount of conventional energy used on a daily basis.



**Energy efficiency: Leed and Bream**

The sustainability of architectural projects has gone from being an interesting and desirable addition, to representing a real need that must be considered from the very beginning of the design stage. A building or infrastructure will be sustainable as long as it complies with different criteria, from its impact on the environment where it is located, to the origin of the materials used in its construction.

A building is energy efficient when it is designed to minimise the amount of conventional energy used on a daily basis. It is not just about saving on the energy bill. There are many other benefits to this approach: easier fitting of materials, lower maintenance costs and reduced obsolescence and material degradation. In order to undertake the construction of a sustainable energy building, two types of strategy must be developed: passive design strategies, focused on taking advantage of the climate and the environment in which the building is located; and active design strategies, such as the use of different renewable energy sources to supply the building.



# Certifications

Dekton is in the process of certification of the following worldwide certifications with environmental implications.

## ISO 9001



Cosentino has been found to conform to the Quality Management System standard: ISO 9001:2015 This certificate is valid for design, manufacturing, production, distribution, sales and marketing of Dekton ultra-compacted surfaces.

## ISO 14001



This recognition certifies and consolidates the quality of the Cosentino Environmental Management System. This certificate covers the entire process in which the company is involved in from the design, manufacture and processing of Dekton, to its distribution and marketing. It certifies, among other aspects, the efficient use of raw materials, control of emissions into the atmosphere, waste management programmes, treatment systems and re-use of industrial water, disposal of chemical substances, and control of environmental hazards.

## NFPA 285



This standard provides a test method for determining the fire spread characteristics of exterior wall and panel assemblies used as components of curtain wall assemblies that are constructed of combustible materials or contain combustible components.

Wall assemblies are tested for the following capabilities: resistance to flame spread on the outside face, vertical flame spread from floor to floor, lateral flame spread from the wall compartment of fire origin to adjacent spaces.

## ETA 14/0413



It is a European technical approval based on EAD 090062-00-0404 "Mechanically Fastened Exterior Facade Cladding Kits". It is a reference document for application in Europe and other markets. It includes technical data for three different ventilated facade systems for 12 and 20 mm. DKT1 for undercut anchor system and DKT2 and DKT3 for edge grooving systems with continuous profile or clips.

## NOA



NOA certificate has been approved and designed to comply with the Florida Building code including the High Velocity Hurricane Zone. It includes two types of systems, with Dekton 12mm installed on aluminium profiles and hangers fixed to plywood attached to wooden battens, steel stud framing or masonry, and Dekton 8 mm installed with an adhere system. It includes test reports about static air pressure, cyclic wind pressure loading, flame spread and smoke generation, freeze and thaw cycles and water absorption.

## BS 8414

The test method BS 8414 Part 1:2020 assesses the performance of an external non-loadbearing cladding system, a ventilated facade and external wall insulation systems when applied to the face of a building and exposed to an external fire under controlled conditions.

The fire exposure is representative of an external fire source or a fully-developed (post-flashover) fire in a room, venting through an opening such as a window aperture that exposes the cladding to the effects of external flames. Internal and external fire spread, visible flames and mechanical stability are assessed.

## BBA 16/5346



This Agreement certifies Dekton relating to ventilated cladding for fixing to an aluminium support subframe, and for use ventilated facade on external masonry, concrete or steel frame walls of new and existing buildings.

## Greenguard



Greenguard Environmental Institute is a non-profit organisation whose mission is to protect public health and improve quality of life through programmes that improve air quality indoors. Some studies by the Environmental Protection Agency in the USA have proved that indoor air contamination can be 100 times higher to outdoor contamination levels.

In energy efficient constructions, pollutants tend to become trapped in living spaces instead of moving freely in the environment. Some of the most harmful contaminants indoors are Volatile Organic Compounds (VOCs), carbon monoxide, particles from cooking and nitrogen oxide. These contaminants can cause sick building syndrome, which causes dizziness, nausea and related illnesses.

Dekton has been analysed by Greenguard, proving that it does not emit any type of VOC and thus has achieved Greenguard Certified (Certificate No. 41572-410) and Greenguard Gold (Certificate No. 41572-420) Certifications.

## Other product certifications

### EPD



### VOC Eurofins



### DGNB LABEL



### DoP



### NSF



### DBCe



### ICC



### Carbon Neutral



### APPLUS



### KOMO



### CoC (Civil Defence)



### Incombustible



Dekton A1; Dekton Protek A2 s1 d0 8/12/20mm (with mesh). Dekton Slim Protek 4mm (with mesh) B s1 d0.

\* To obtain more information about hues with NSF certificate please visit [www.nsf.org](http://www.nsf.org)

# Sizes, formats and thicknesses

## Formats

Dekton offers a wide variety of slab formats and customization, along with thicknesses of 4; 8; 12; 20 and 30 mm that respond to designers' functional and creative needs in any interior or exterior project, no matter its complexity.



## Large format slabs

- From 320 x 144 cm. Our standard format varies from 320 x 144 cm as a minimum nominal size to a maximum size of 330 x 163 cm in colors with QuickCut technology.
- 300 x 100 cm. New format in 8 mm for a selection of colors.
- From 330 x 163 cm. Our new ultra large format available in a colors selection from the portfolio.



## Standard slabs, ready to install:

- 260 x 100 cm in 4 mm. Optimma format.
- Formats with maximum yield based on a standard slab. Examples:
  - 142 x 106 cm
  - 142 x 142 cm
  - 142 x 71 cm
  - 142 x 79 cm
  - 159 x 142 cm
  - 159 x 71 cm
  - 71 x 71 cm
- Format customization according to the needs of the project

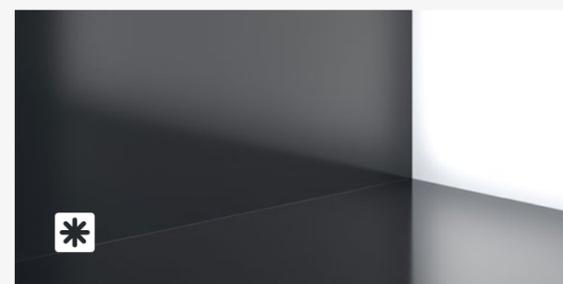
Standard formats (cm)

	142 x 142	144 x 320	143 x 159	143 x 106	143 x 79
71 x 71	71 x 142	71 x 320	71 x 159	71 x 106	

# Textures

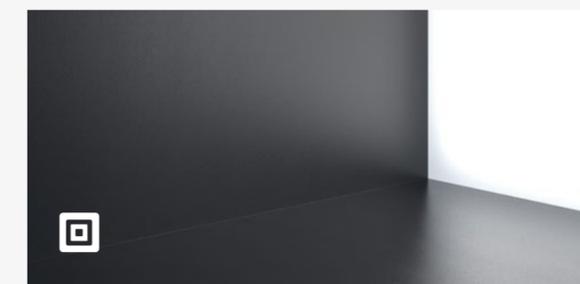
## Different Sensations. Richness of Shades.

Dekton comes in different textures so that the only limit is the architect's or designer's imagination: from the finish ultra-glossy, to matte or velvety textured options.



### X-Gloss

A luminous and dazzling finish achieved by mechanical polishing, without the need for enamels or other materials.



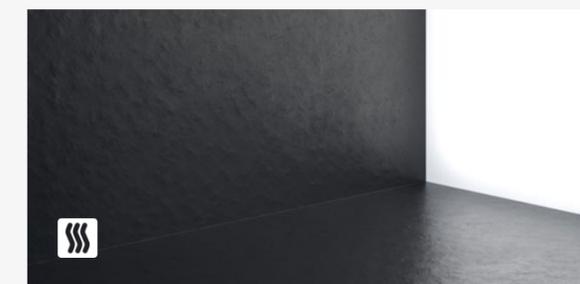
### Matte

The matte texture pursues a natural, shine-free appearance, ideal for achieving a harmonious and timeless finish. Most Dekton products are manufactured with this finish.



### Velvet

Velvet is Dekton's velvety texture. The materials chosen in Velvet create a feeling of warmth and comfort. This texture is perfect in classic colors, with veins.



### Matte or Textured Velvet

Matte or Textured Velvet textures combine the warmth of velvet with the roughness of a textured, imperfect material. It is ideal for emulating a realistic finish, with the advanced features of Dekton.

# Colours and surfaces

## Types of patterns

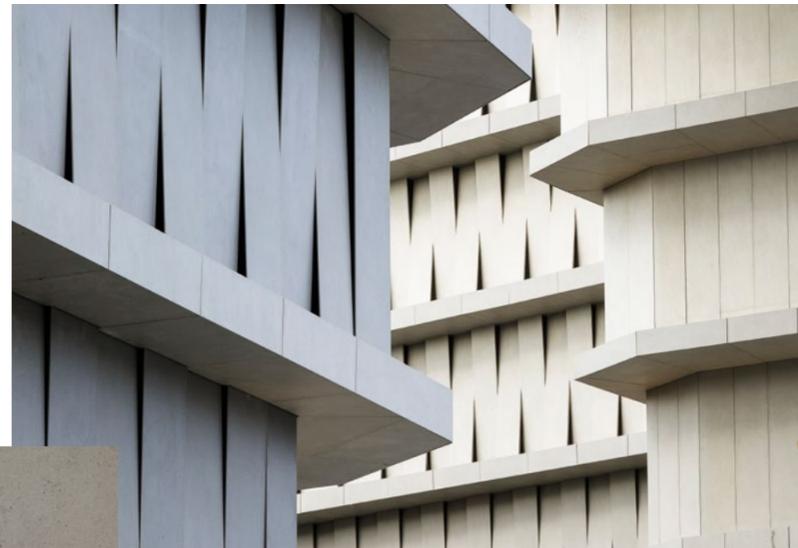
We have classified our range of colours into three different clusters of patterns to facilitate the design process. All our portfolio is labeled as Infinite Pattern, Singular Pattern and Smooth Pattern, depending on the effect desired for large surfaces and the placement of slabs adjacent to one another, taking into account the directionality of the design, shades and variations.

However this classification is merely indicative and we recommend that you go to our Product to obtain an individual assessment that guarantees how you can materialize your project the way you imagined.



## Infinite pattern

Plain colours or designs with a uniform or quasi-uniform composition and structure that, when used for coverings such as floors, walls, or facades, allows for the random placement of boards and cut-outs achieving total visual homogeneity. Recommended for large surfaces.



ToHa by Ron Arad and Avner Yashar. Tel Aviv, Israel



## Singular pattern

Designs with chromatic ranges of greater complexity and very marked directionality, which result in patterns with a lot of character and variation in smaller pieces and adjacent placements. We recommend that you consult our advisors for use on large surface claddings.



Armonk Professional Center. New York City. USA



Dekton Kovik 8mm. Sistema de Fachada DKB

## Smooth pattern

Designs with a directionality in the graphic structure that has to be taken into account when cutting and placing adjacent boards, either if continuity in the holistic design is sought or otherwise. It is a very versatile type of pattern but it requires the placement and cutting of boards accordingly. Recommended for large surfaces.

# Match your style with Dekton

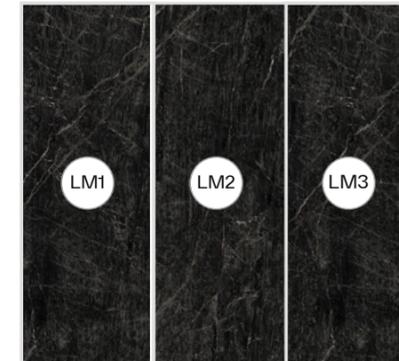
## Dekton Design Match

There are designs that leave their mark. Veins that run along walls and continue on floors and facades with patterns that would be impossible for a natural stone, but not for Dekton.



## Lineal Match

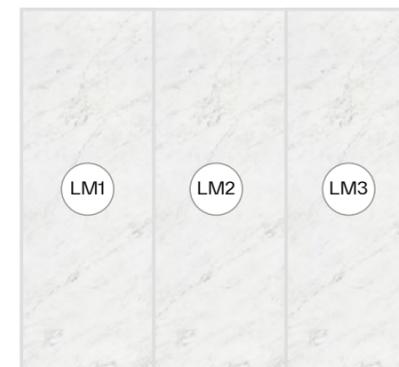
We present a new concept that includes references of the same colour to create a fluid and continuous atmosphere. Focused on large-area flooring and vertical cladding applications. A new design conceived to position the slabs vertically. The slab is rotated 180° in each of its iterations, thus creating a continuous and harmonious design.



**Dekton Somnia**  
Available in 4, 8, 12 mm and  
Optimma format 260 x 100 x 0.4 cm



**Dekton Trance**  
Available in 4, 8 and 12 mm thicknesses



**Dekton Marina** **NEW**  
Available in Optimma format  
260 x 100 x 0,4 cm (LM1, LM2 and LM3)

## Book Match

Based on some of our designs, we have created unique, symmetrical and interchangeable references that allow compositions and designs to be made where the veins have continuity between different pieces. Each piece has a unique combination of numbers and letters to select the patterns that best suit your needs according to colour and available thicknesses. Material on request, check availability.



**Dekton Awake**  
Available in 4, 8 and 12 mm thicknesses.



**Dekton Lucid y Morpheus**  
Available in 8, 12 mm and  
Optimma format 260 x 100 x 0.4 cm

CASE STUDY

# 444N Orleans Building

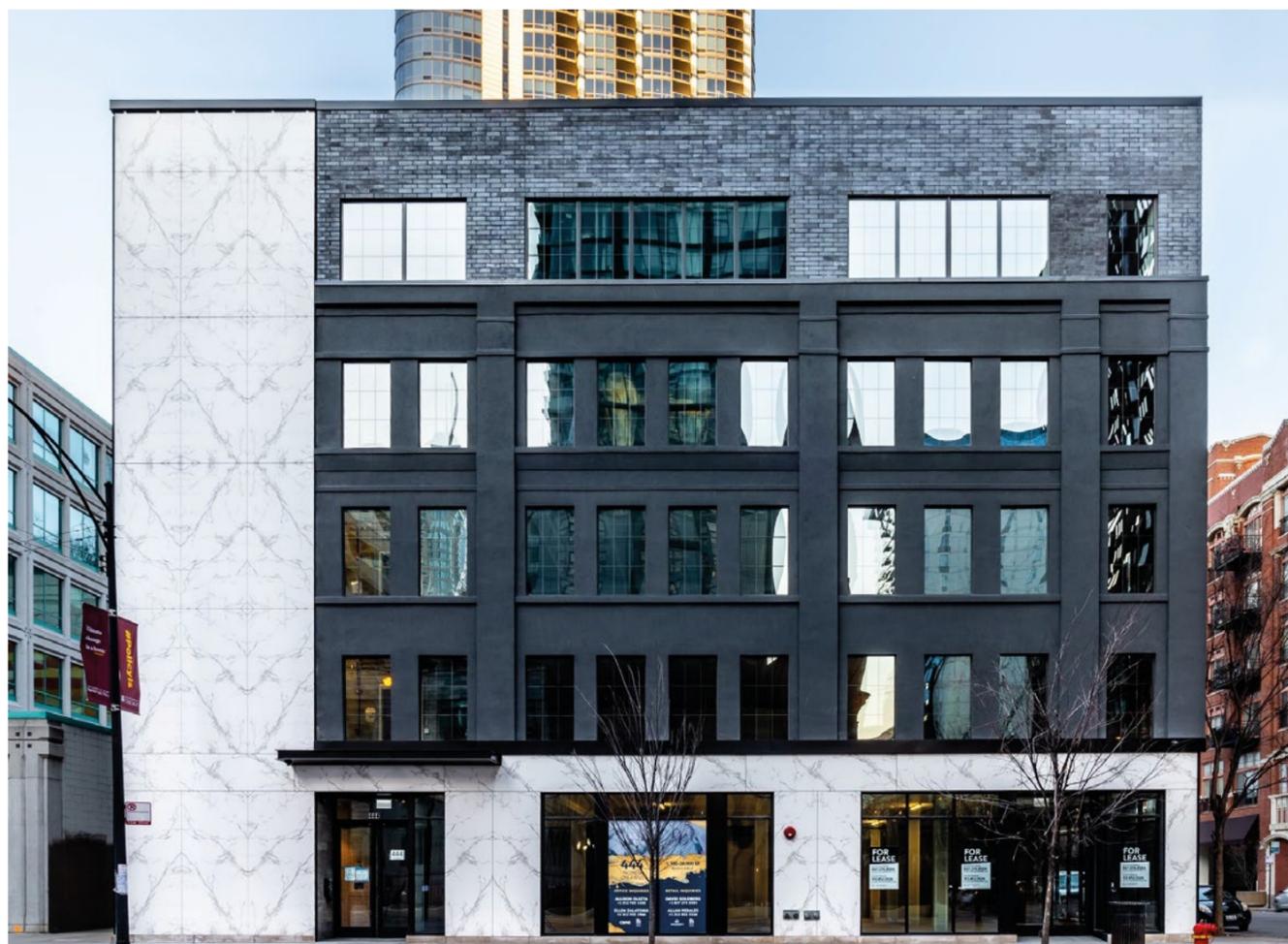
Chicago, USA

**Material**

Dekton Aura Bookmatch

**Thickness**

12 mm



## Design and installation of flooring and cladding

Due to the fact that Dekton designs have been conceived for large format (full slab), it is possible that in smaller formats used for facades, colour jumps, certain contrasts or changes in directionality between pieces can be observed. We recommend taking this aspect into account from the design phase.

In the 142 x 106 cm and 142 x 79 cm formats, the orientation of the graphic cannot be changed by applying the price of the pricelist. See possible quote options.

Differences in the directionality of the vein according to the cut pattern and the desired format:

Option A: Vein parallel to the piece.

Option B: Grain perpendicular to the piece.



Singular Design: Dekton Khalo



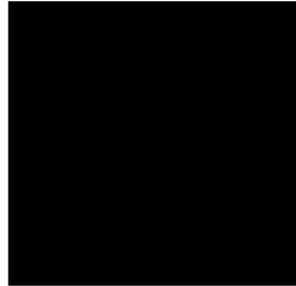
Singular Design: Dekton Trance

The colours susceptible to changes in the directionality of the vein are those belonging to the Singular and Smooth designs.

Singular Design				Smooth Design		Infinite Design		
Arga	Kelya	Neural	Trilium	Bromo	Lunar 22	Kuro <b>NEW</b>	VK04 Grafite	Sirius
Aura 22	Khalo	Opera	Vigil	GK07 Ceppo	TK06 Marmorio	Aeris	VK03 Grigio	Umber
Awake	Laos	Rem		Danae	Nilium 22	Albarium 22	Halo	Uyuni
Bergen	Laurent	Reverie		Fossil	TK05 Sabbia	Argentium	Micron	Zenith
Daze	Lucid	Soke		Keon	Valterra	VK02 Avorio	Mooné	
Entzo 22	Marina	Somnia		Kira		Domoos	Nacre k	
Helena 22	Morpheus	Taga		Kovik		Dunna	VK01 Nebbia	
Kairos 22	Natura 22	Trance		Kreta		Eter	Sasea	

### New launches

#### Dekton Kuro



Kuro 

#### Pietra Kode Collection



VK01 Nebbia     



TK05 Sabbia     



TK06 Marmorio     



VK02 Avorio     



GK07 Ceppo    



VK03 Grigio     



VK04 Grafite   

 Ultra Texture  Ultra Matt  Velvet Texture  XGloss  Quick Cut Technology  Dekton Slim 4mm



Dekton TK06 Marmorio

# Colour chart, patterns and finishes

## Infinite pattern

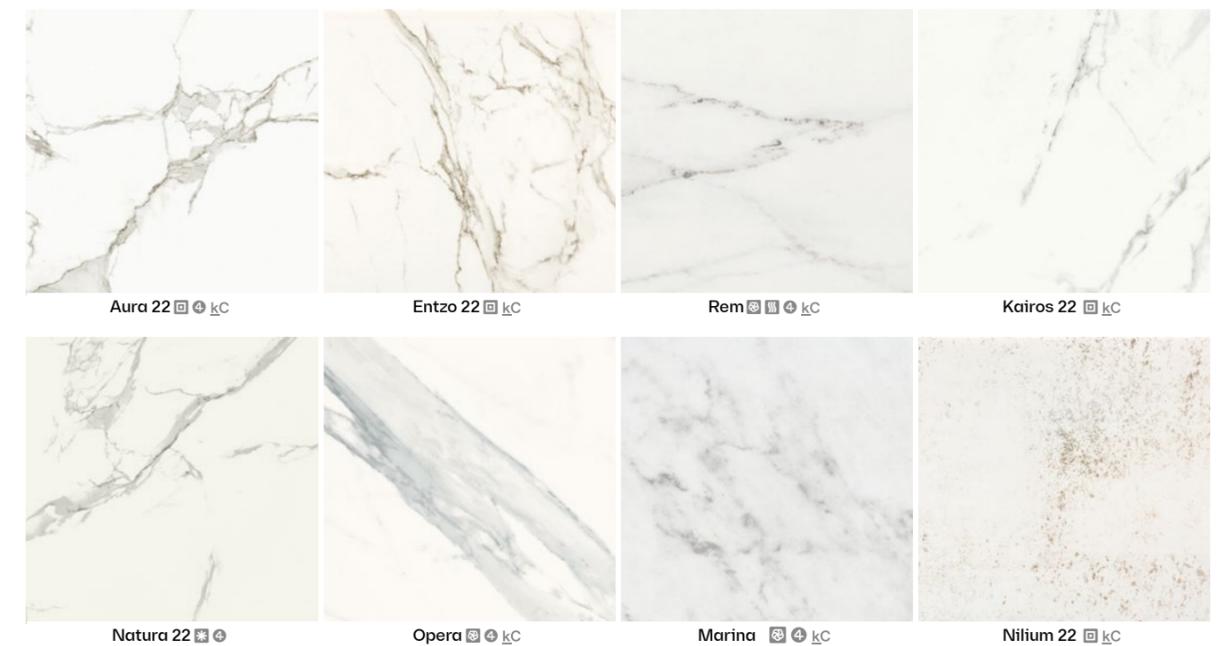


Ultra Texture Ultra Matt Velvet Texture XGloss Quick Cut Technology Dekton Slim 4mm

## Infinite pattern



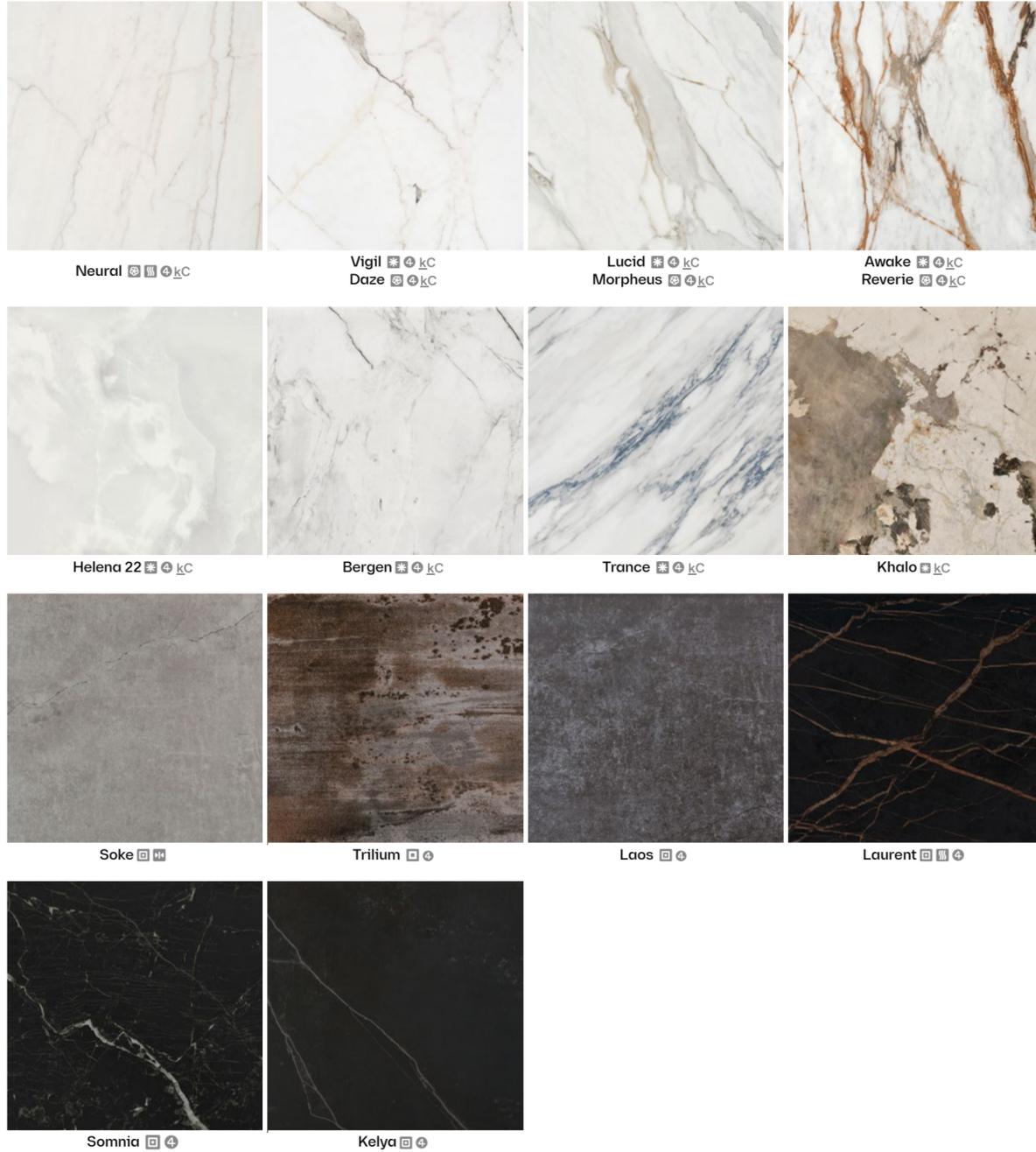
## Singular pattern



# Colour chart, patterns and finishes

Ultra Texture 
 Ultra Matt 
 Velvet Texture 
 XGloss 
 kC Quick Cut Technology 
 Dekton Slim 4mm

## Singular pattern



## Smooth pattern



In the following colours belonging to the category of SINGULAR and SMOOTH patterns, the directionality of the texture, as well as the movement of the background, must be taken into account at the time of cutting. Colours: Arga, Aura 22, Bergen, Bromo, Danae, Kelya, Keon, Khalo, Kira, Natura 22, Nillium 22, Laos, Laurent, Opera, Rem, Soke, Taga, Trilium

# Dekton iD

From printing specific graphics in any colour to changing texture, to creating a completely original design that includes custom colours, textures and finishes, keeping the benefits of Dekton unchanged.

Two different levels of customisation to suit each project

Dekton iD is a breakthrough service by Cosentino that enables the possibility to customise our Dekton products.



# DEKTON iD PRO

From 1000 sqm

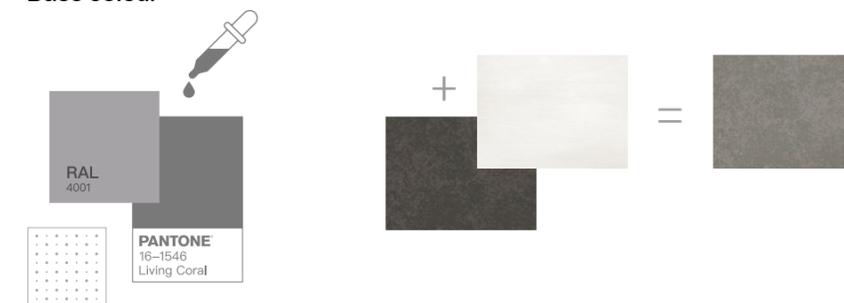
Combine any of our colour bases. Choose one of our textures. Print a design like patterns, graphics or even your brand.

## 1

### Base colour selection

The first step is the selection of the base colour. You can choose any colour available from the wide range of Dekton.

### Base colour



## 2

### Design application onto Dekton surfaces

You can apply countless customised designs to Dekton surfaces, as well as colours and grades that will transform its appearance.

### Design

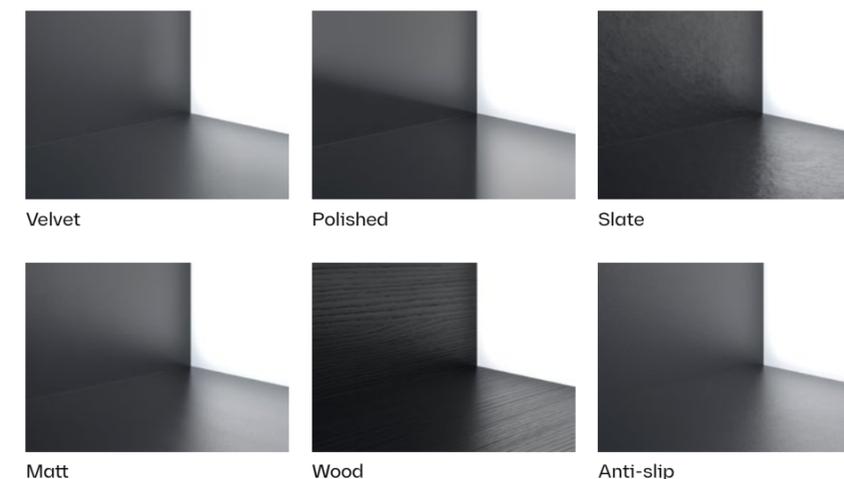


## 3

### Texture selection

The different textures available, such as matt, ultra-gloss, wood and slate, to name a few, will provide the finish with attractive nuances and a unique feel to the touch.

### Textures



## 4

### Thickness selection

While Dekton standard thicknesses are 4, 8, 12, 20 and 30 mm.

## 5

### Cutting

Dekton large format slabs can be cut to size, regardless of the shape.

# DEKTON ID UNLIMITED

From 2500 sqm

Create your fully personalised colour, texture and finish from scratch. Even the colour bases, texture, finishes, formats and much more.

## 1 Base colour

The customer sends the Dekton iD team his/her initial idea: it can be a colour or the image or photo that sparked the customer's inspiration. From that moment, the Dekton iD team will perform a series of tests to achieve the desired colour. Meanwhile, the customer will be receiving samples and can adapt the product to his/her preferences.

## 2 Designs

You can apply countless customised designs to Dekton surfaces, as well as colours and grades that will transform its appearance.

## 3 Textures

The different textures available, such as matt, ultra-gloss, wood and slate, to name a few, will provide the finish with attractive nuances and a unique feel to the touch.

## 4 Effects

Additional finishes that provide, selective gloss, pearlescent effects and unique inks, creating light base-relief, among others.

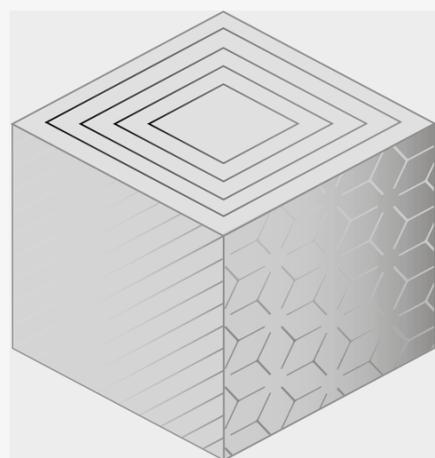
Thanks to the effects, it is possible to create all kinds of visual sensations to enhance a texture or colour, providing a very original final design.

## 5 Thickness

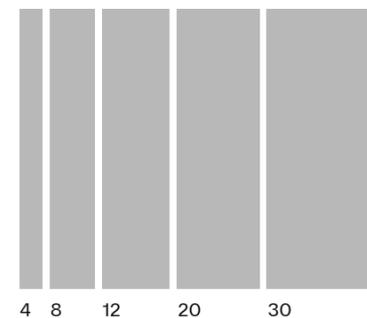
While Dekton standard thicknesses are 4, 8, 12, 20 and 30 mm, Dekton iD Pro allows you to create specific thicknesses to suit the requirements of each project.

## 6 Cutting

Dekton large format slabs can be cut to size, regardless of the shape.



### Thickness



### Cutting



### Efectos



Selective relief



Base relief



Vivid Colours

## Basic workflow



### Send us your idea

Send your idea to [customdk@cosentino.com](mailto:customdk@cosentino.com) and start from scratch customising its colour, texture and format thanks to Dekton ID.

Or release your creativity on Dekton surfaces with the help of Dekton ID Unlimited. You can check the project's development either through the samples that you will receive from Cosentino, or personally, through visiting Cosentino's facilities.



### Personalised advice

Cosentino's R+D team will help you with your project, supporting you at every step of the process:

From the initial idea, to the features and creative possibilities of Dekton.



### We bring your vision to life

Dekton ID's aim is clear: to achieve a perfect, customised result just like you imagined it.

# DEKTON ID

INDIVIDUALLY DESIGNED

CASE STUDY

## Streamlight Tower: Merging form with function, innovative facades from Dekton

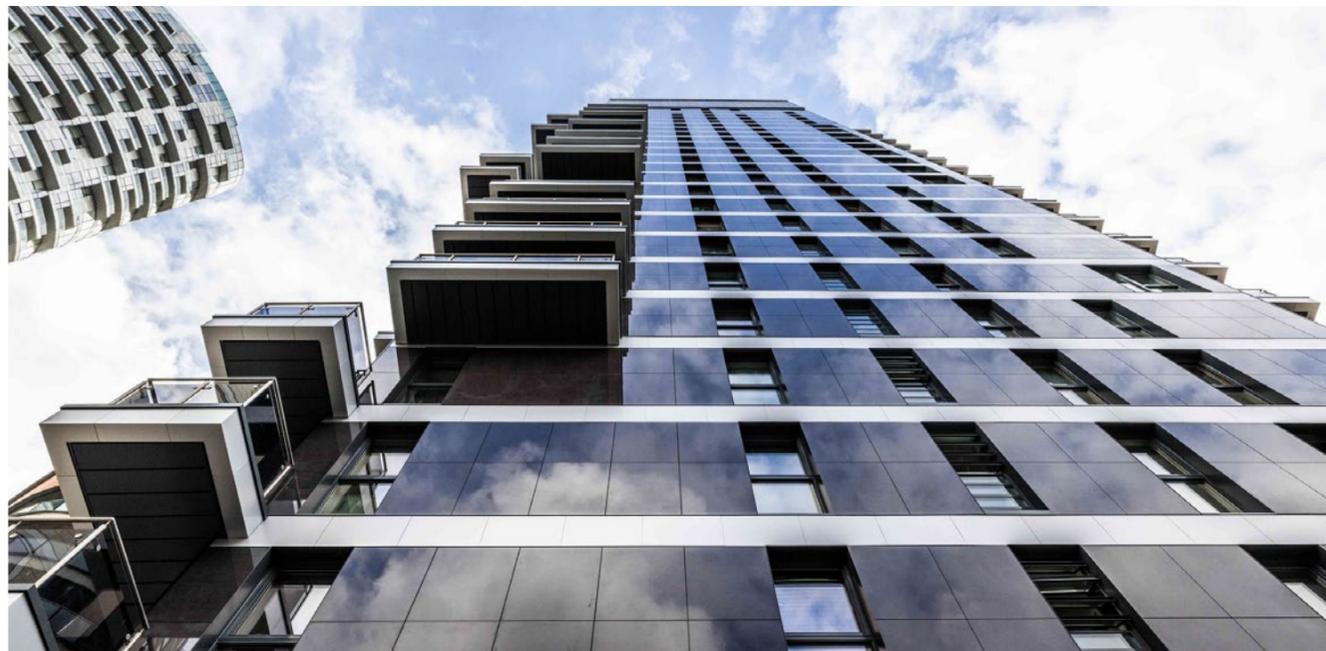
London. United Kingdom

**Thickness**

4,600 slabs  
Dekton iD Eter Alberta and  
Dekton iD Sasea Alberta

**Thickness**

12 mm



# Types of fixing

## Ventilated facade

The ventilated facade is a construction solution that allows for the establishment of a physical separation between the exterior cladding solution and the supporting wall of the building.

This separation creates a ventilated chamber that allows the renewal of air, which allows a series of thermal, acoustic and functional advantages that give it great added value.

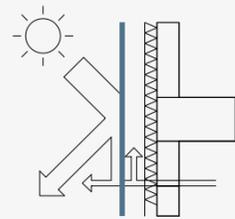
## Glue and ETICS facade system

Dekton can also be used for facade cladding and ETICS facade systems with the recommended adhesives, depending on the type of substrate and panel size.

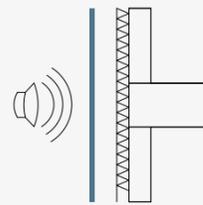
## Curtain wall

Dekton can also be installed in the opaque areas of a curtain wall, always integrated with the fixing systems available from suppliers and manufacturers for this application.

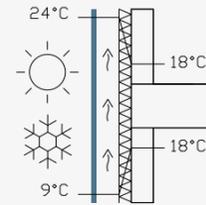
### Ventilated facade advantages



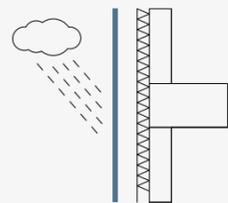
Energy savings



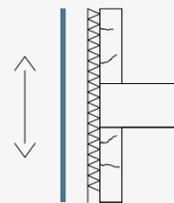
Acoustic insulation



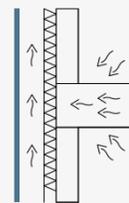
Health: prevents thermal bridges and condensation



Protection against water filtrations



Support wall protection



Thermal insulation

## Structural requirements

In facade projects, Cosentino provides a wide range of certifications available and data sheets for static calculations required on each project.

### Wind loads

The local standards must be considered in order to determine the best solution for the panel and fixing, especially in tall buildings or areas classified with high wind loads.

→ Dekton, with its range of thicknesses and systems, can be adapted to the different wind loads of each project. Cosentino continues to test and validate its cladding solutions through external laboratories.

### Fire classification

Many European countries have adopted the European Reaction to Fire classification system (Euroclasses). Testing is defined in standard UNE-EN 13501-1: Fire classification of construction products and building elements. There are seven Reaction to Fire classification levels, depending on the contribution to fire: A1, A2, B, C, D, E and F, from best (A1 and A2 are non-combustible) to worst. There are three smoke intensity levels: s1, s2 and s3. There are three classes of burning droplets: d0, d1 and d2 (Table A)

### Seismic performance

In the event of an earthquake, lightweight ventilated facades perform better than heavier materials and solid wall solutions.

Lightweight substructures used in ventilated facades function by absorbing and dissipating the tensions generated due to building movements limiting the damage and making it easier to repair.

→ Cosentino has carried out seismic tests, included in some systems and certificates, in external laboratories when required by certain projects or regulations.

Table A

Contribution to fire A-B-C-D-E-F	Smoke production s1, s2, s3	Flaming droplets/particles d0 - d1 - d2
A1 No contribution to fire.	No test needed	No test needed
A2 No contribution to fire.	s1 Quantity/Speed of emission low.	d0 No burning droplets
B Very limited contribution to fire.	s2 Quantity/Speed of emission average.	d1 Slow rate of burning droplets.
C Limited contribution to fire.	s3 Quantity/Speed of emission high.	d2 High degree of burning droplets.
D Acceptable contribution to fire.	Not tested	-
E Acceptable contribution to fire.	Not tested	-
F No performance requirements.		

The fire requirements will usually depend on the height of the building; for 18m and higher, buildings in Spain require a B-S3-d2 classification.

→ Dekton panels A1 class (without mesh) and Dekton Protek 8/12/20mm A2-s1-d0 class (with mesh) are non-combustible and suitable for facade installation in any type of building and at any height, meeting the most stringent fire performance requirements.

# Cladding System

## Fachada ventilada

**DKT1 ●**  
Hidden mechanical fixing using undercut screws on the reverse side of the piece.

Thickness: 8, 12 and 20 mm  
Price: \*\*\*\*\*  
Format: All formats.  
Certificates: ETA, BBA (12 y 20 mm)

**DKT2 ●**  
Hidden mechanical fixing with metallic profile on the continuous grooved edge of the piece.

Thickness: 12 and 20 mm  
Price: \*\*\*  
Format: not suitable for big formats on vertical layout.  
Certificates: ETA, BBA

**DKT3 ●**  
Hidden mechanical fixing with clips at intervals along the groove on the edge of the piece.

Thickness: 12 and 20 mm  
Price: \*\*  
Format: not suitable for big formats on vertical layout.  
Certificates: ETA, BBA

**DKT4**  
Mechanical fixing using visible clips that hold the pieces.

Thickness: 4, 8, (12 and 20 mm)  
Price: \*  
Format: Not suitable for big formats on vertical layout.

**DKBG**  
Mixed fixing (mechanical plus chemical) hidden in the groove on the reverse side of the piece.

Thickness: 8, 12 (and 20 mm)  
Price: \*\*\*\*  
Format: All formats

**DKC ●**  
Chemical structural fixing of pieces onto profiles.

Thickness: 4, 8 (and 12 mm)  
Price: \*  
Format: All formats

**DKR**  
Rivet or screw fixing system with visible spot anchors.

Thickness: 4 and 8 mm.  
Price: \*

## Glue and ETICS facade system

**DKB**  
Pieces are fixed directly to the enclosure using mainly cement based adhesives.

**DKS**  
Fixing of pieces onto an external thermal insulation system (ETICS)

Thickness: 4 and 8 mm  
Price: \*\*

## Curtain wall

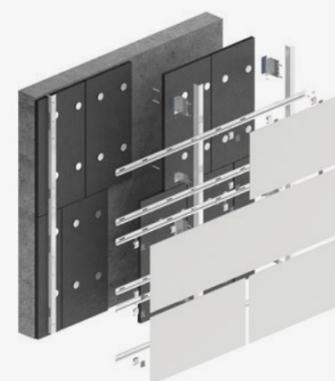
**DKCW**  
Fixing in opaque areas of the curtain wall with perimeter chemical anchors with or without caps and middle reinforcement as required.

Thickness: 4, 8, 12 and 20 mm.  
Price: \*\*\*\*\*

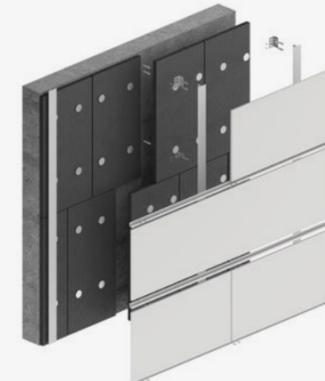
● Systems certified for ventilated facades

\* Indicates an approximate price level compared from the lowest price (\*) to the highest price (\*\*\*\*\*).

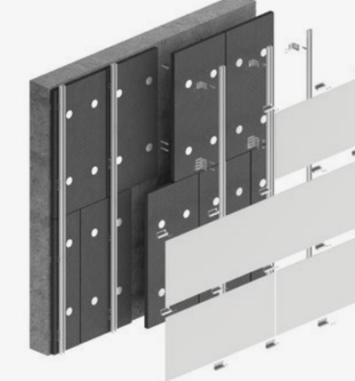
DKT1



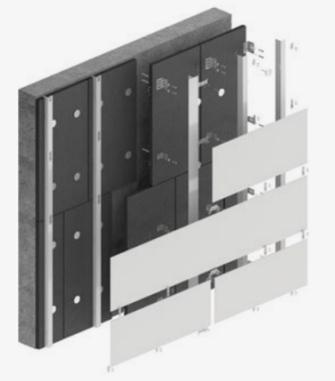
DKT2



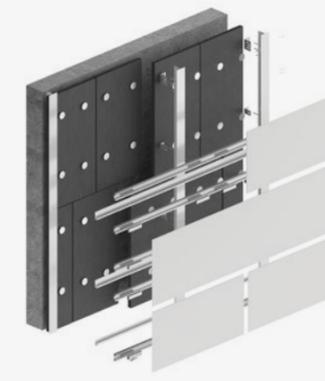
DKT3



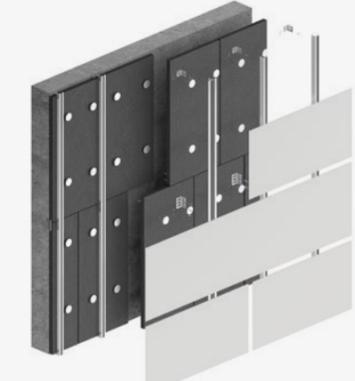
DKT4



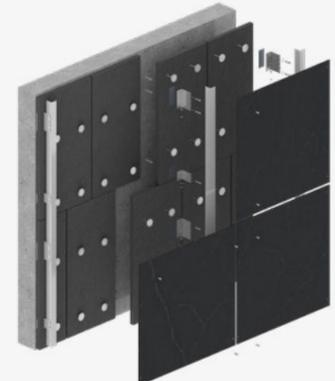
DKBG



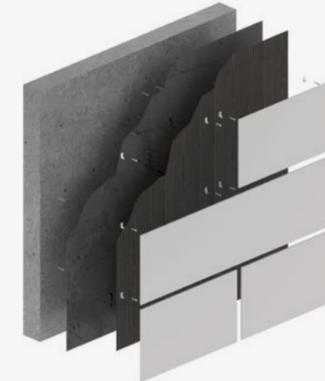
DKC



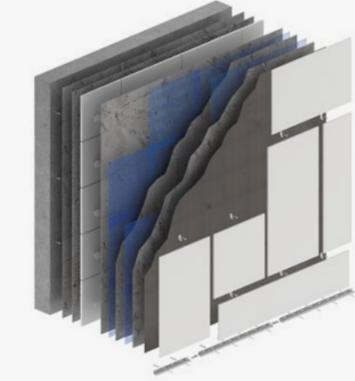
DKR



DKB



DKS



### Table for different thicknesses and facade systems

FACADE SYSTEM	DESCRIPTION	MAX. SIZE	4 mm (with mesh)	8 mm	12 mm	20 mm
DKT1.1	Undercut anchor-Keil	FULL SLAB	●	KH 4 M6/_ KH 5.5 M6/_ ●	KH 8.5 M6/_ ● ●	KH 8.5 M6/_ ●
DKT1.2	Undercut anchor-Fischer	FULL SLAB	●	FZP II 11x5 M6/T/_PA ●	FZP II 11x8 M6/T/_PA ● ●	FZP II 11x10 M6/T/_PA ●
DKT2	Grooved edge and continuous profile	V: 1440 x H: 3200	●	●	● ●	●
DKT3	Grooved edge and spot clips	V: 710 x H: 3200				
DKT4	Visible clips	V: 1200 x H: 3200	System Supplier Documentation			
DKC	Chemical Anchor (Sika, Bostik, Soltec, Innotec, Dow Corning, Dinamic Bond...)	FULL SLAB	Documentación técnica del proveedor de fijaciones			●
DKBG	Groove on the reverse with clips		●	System Supplier Documentation		
DEKCLIP	Groove on the reverse with clips (Only ES and PT)		●	● ●	●	●
DKB	Direct Adhesion	R2 (UNE 12004)*	C2S2 (UNE 12004)*			●
DKS	ETICS		System Supplier Documentation	● ●	●	●
DKR	Rivet or screw fixing	FULL SLAB	●	● ●	●	●
DKCW	Curtain wal	Per CW supplier	●	● ●	●	●

● ETA 14-0413 ● Possible ● Possible, not recommended ● Most common thickness ● Not Possible

**Note:** The author of the project must assess the appropriate thickness based on the planned activity and specific needs that cannot be collected in this guidance sheet. The definition and calculation of each system must be done by a competent technician according to the particular conditions of each project.

Dekton 4 mm is always supplied with mesh for all facade applications. Dekton 8, 12 or 20 mm is supplied with mesh for ventilated facades and without mesh for facade cladding and ETICS direct adherence systems.

\*This is a generic classification. Please consult the specific products and their classification recommended by the different suppliers.

### Parts of a ventilated cladding system

- Supporting wall
- Mechanical or chemical anchoring to the wall
- Substructure
- Substructure consisting of vertical or horizontal profiles
- Insulation and waterproofing
- Fixings
- Dekton

#### Supporting wall

Support material can be either structural (beams, columns, slabs, bearing walls...) or not structural (brick walls, block walls, stud walls...).

The usual engineering of a ventilated facade considers substrate walls to bear directly horizontal loads (such as wind loads), while dead loads are designed to be directly supported by structural elements.

#### Insulation and waterproofing

Insulation should be applied continuously over substrate walls in order to achieve the required thermal and acoustic comfort level inside the building and avoiding thermal breaks when possible -weaknesses in the insulation will be where there is the greatest loss of energy from the building.

There are many materials available on the market, to be chosen considering their different properties such as thermal insulation values, fire resistance, waterproofing, etc.

- Mineral wool
- EPS, XPS
- PUR, PIR
- Other insulation materials (cork, natural fibres...)

#### Air chamber

One of the main features of ventilated facades is the air chamber. It is designed to act as a pillow of pressure to prevent water from reaching the insulation or supporting wall.

By ventilating the chamber, the moisture that could arise from water that may pass through the cladding system, whether from the internal wall's surface or appearing as condensation, will be removed by evaporation or simply slide down the back of the panel and fall from the wall bracket.

#### → Chamber Width

It is generally considered that the minimum width of the chamber should be at least 20mm, behind the rear of the facade panel. However, in some countries such as GB and Scandinavian countries, the regulations indicate a minimum width of 50mm. Therefore, it is important that national regulations and building codes are adopted in each country.

This minimum width is only suitable for low buildings, up to 10m. As the facade increases in height, the chamber needs to increase in width. For example, in Belgium and the Netherlands the following chamber width is recommended:

Building Height (m)	0-10	10-20	20-50
Min. cavity width (mm)	20	25	30

The type of joint used between the panels will also influence the width of the chamber. Open horizontal joints will allow more air movement than closed joints and therefore wider cavities should be considered when using closed profiles in horizontal joints.

#### → Protection of insulation in the chamber

Just as the chambers are ventilated through the upper and lower part of the facade (it is considered that this ventilation is achieved with a cross section of at least 50 cm² for each linear metre), it is also important to allow the air to enter and exit below and above openings like windows.

These openings need to be protected so that birds and small animals cannot enter the chamber. In the absence or failure of protection this could result in damage to the insulation, air chamber, or even on the supporting wall. This protection is usually achieved by fitting a perforated profile. It is important that the perforations are the correct size to allow a flow of air, while keeping creatures out.

## Ventilated facade substructure

### General indications for the main structure

1. Based on the cutting of the facade and the arrangement of the system's profiling, define the anchor points of the brackets in the support elements.
2. Verify the correct level of flatness, deviations and plumb of the substrate wall and correct if necessary, according to the project tolerances.
3. Anchor the supporting brackets to load bearing areas of the building (e.g. Slab edges) and use the vertical profiles to align the retaining brackets.

Fixed point supporting brackets carry the vertical weight of the profiles and cladding, as well as support horizontal wind loads (pressure and suction). This kind of bracket is usually longer than retaining brackets and present several drill holes for fixed points to the vertical profile.

Retaining brackets with sliding point fixing only support horizontal loads (wind loads).

Each vertical profile usually has a single fixed point of attachment to a support bracket, and the rest of the joints are sliding points to allow expansion of the vertical profiles.

Place the necessary brackets according to the load bearing capacity of the support wall and the structural calculation made. To do this, the type of anchorage (mechanical or chemical) must be defined according to the support wall properties, carrying out on-site dowel extension and load tests if necessary, in order to define the load bearing capacity of the supporting wall.

In case of fixing onto a stud wall, brackets should be fixed onto the studs.

The length of the brackets can be adapted to achieve the desired distance between exterior panels and the support wall, so that small differences in vertical alignment can be corrected.

4. Insert the vertical profiles into the brackets, adjust and level so the profiles are not subject to stress before screwing the profiles to them.
5. Use the round holes for screwing vertical profiles to brackets with fix points, and vertical slot holes for sliding points.

6. Leave a gap between the end of one profile and the beginning of the other, typically 20mm or at least 10mm, according to length and expansion of vertical profiles. Facade cladding should never extend over a joint between profiles.

7. The supplier of the substructure should define the cantilever of the profiles depending on static calculations made and system chosen.

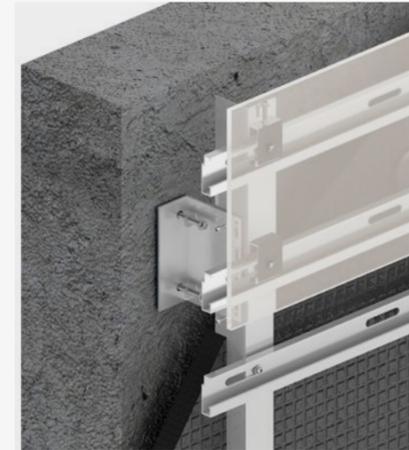
8. It is recommended that the air chamber between cladding and insulation is wide enough to avoid interference between the subframe and inner layers of the wall (insulation and waterproofing).

9. For panel installation, refer to each type of panel fixing system.

### General recommendations for Dekton on ventilated facades

1. The minimum width recommended for pieces in ventilated facades is 200mm;
2. Proportion (width: length) of 1:14 is recommended in order to ease manufacture and manipulation of pieces.
3. Custom cutting tolerances and machining of cut and machined pieces in our factory can be discussed with our Technical Department.

DKT1



DKT2 / DKT3



DKT4



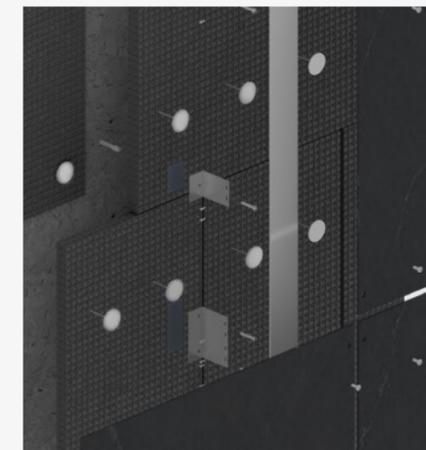
DKBG



DKC



DKR



# Fixing systems

## Ventilated facade - Hidden mechanical systems



**DKT1**  
Hidden mechanical anchoring system with undercut drill hole

P. 56



**DKT2**  
Edge grooving system with continuous profile

P. 86



**DKT3**  
System with clips in the groove on the edge

P. 96



**DKBG**  
Mechanical or mechanical-chemical systems with double back grooving

P. 104

## Glued and ETICS facade system



**DKB**  
Fixing with cement-based adhesive

P. 158



**DKS**  
ETICS system with Dekton cladding

P. 176

## Ventilated facade - Visible mechanical systems



**DKT4**  
Fixing system with visible clips

P. 120



**DKR**  
Rivet or screw fixing system with visible spot anchors

P. 128

## Curtain wall



**DKCW**  
Curtain wall system

P. 180

## Ventilated facade - Chemical systems



**DKC**  
Fixing consisting of chemical anchoring of pieces on profiles

P. 138



## DK T1

### Hidden mechanical anchoring system with undercut drill hole

The panels are fixed to the wall by attaching the metal hangers on the horizontal profiles.

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

DKT1 system lends lots of design freedom and a wide range of combinations, allowing modification of panel sizes both horizontally and vertically. Projects with impossible layouts. There are very complex facades with

different formats in the same design. A flexible system is needed to optimise the points of fixing the material to the substructure and that responds to the principal loads of each project. The screws are anchored to the profile, ensuring the fixing of the entire piece to the substructure.

Dekton has the certifications for ventilated facades according to ETA 14/0413 and BBA 16/5346 in thicknesses 12mm and 20mm, although it can be used in other non-certified thicknesses.

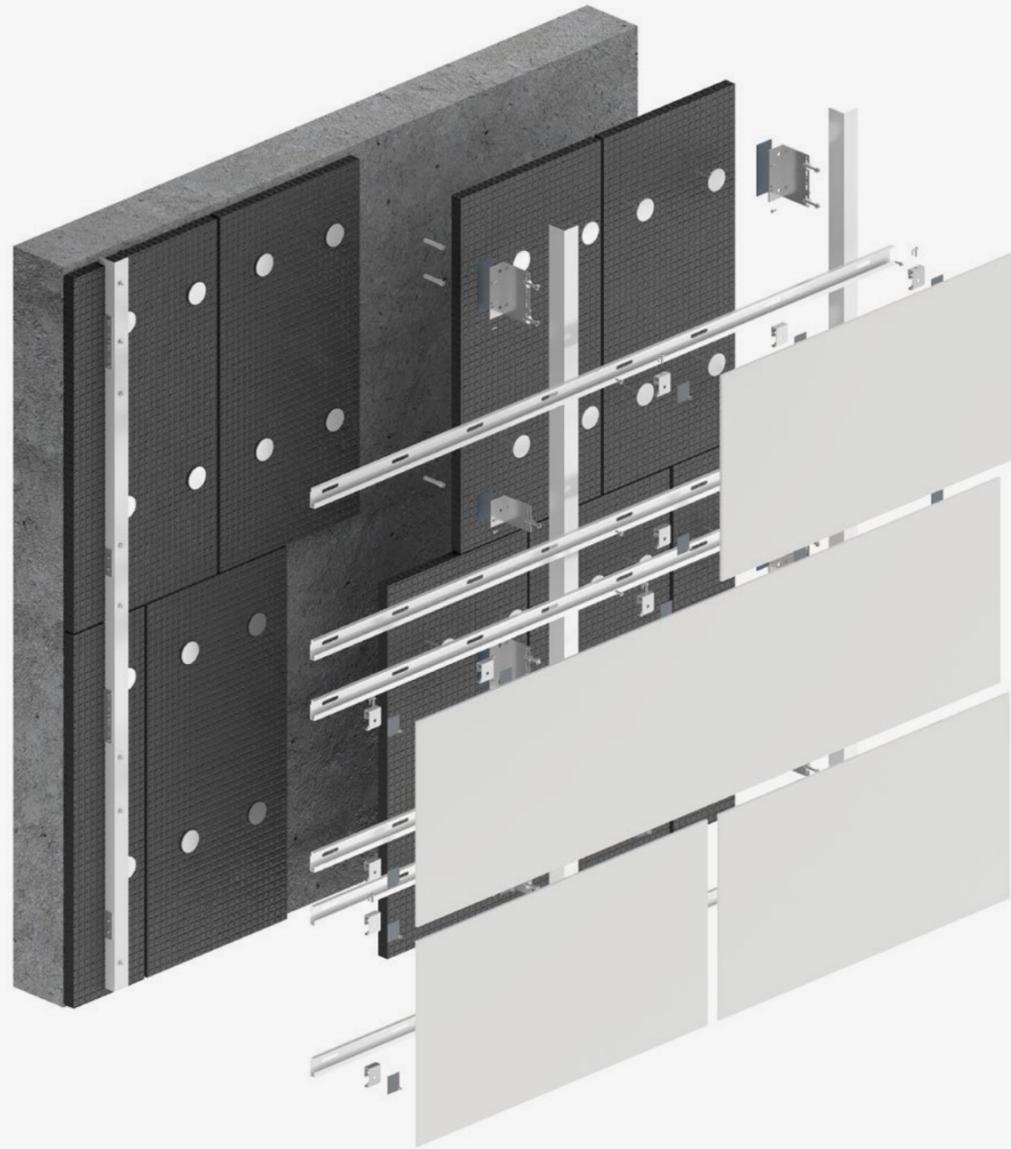


In the DKT1 system, individual stresses that Dekton material and anchors must absorb are calculated depending on the density of fasteners and minimum distances between drill holes.

The cylindrical drilling, as well as the undercut drilling, achieve a clean and precise hole, where the plug and the pan head screw work together under tension and shear on the back of the material.

Concealed fixing system by using metal hangers attached to the panel via undercut anchors to the back of the pieces.

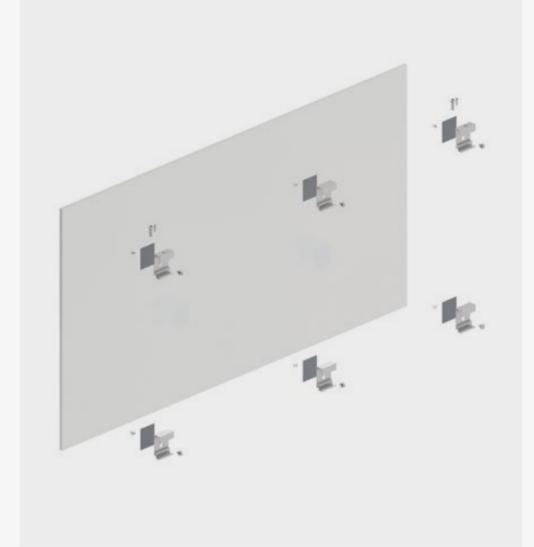




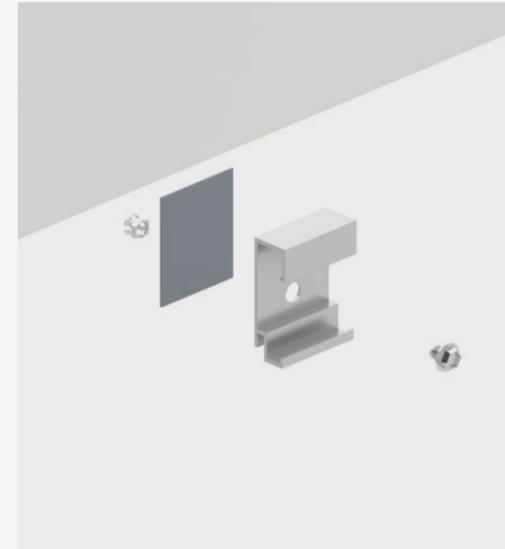
Adjustable hanger



Back view



Fixed hanger



Joints



## CASE STUDY

# Eagle Facade

Brisbane, Australia

**Material**

880 m<sup>2</sup> Dekton Zenith

**Facade system**

DKT1.1 Keil

**Thickness**

12 mm

## The rebirth of One One One Eagle Street office building in Brisbane: a sustainable, stylish renovation.

Located in the vibrant riverside precinct at 111 Eagle Street, One One One Eagle Street is one of the iconic and recognisable elements that define the city of Brisbane. Today we explore the remarkable transformation of its facade. The renovation project was undertaken by Cox Architecture, renowned for bringing expertise and vision to one of the city's most prestigious shopping centres. This building, recognised for its eco-friendly design with a 6-star rating and carbon neutral certification, has written a new chapter.

Brendan Gaffney from Cox Architecture is enthusiastic about the project: "One One One Eagle Street in Brisbane is a world-class commercial tower. And what we like to describe to people when they come to visit the building is the incredible V-shaped column structure. As they go through the podium and reach the ground, they are covered in a white luminescent material which makes them glow and is a real eye-catcher".



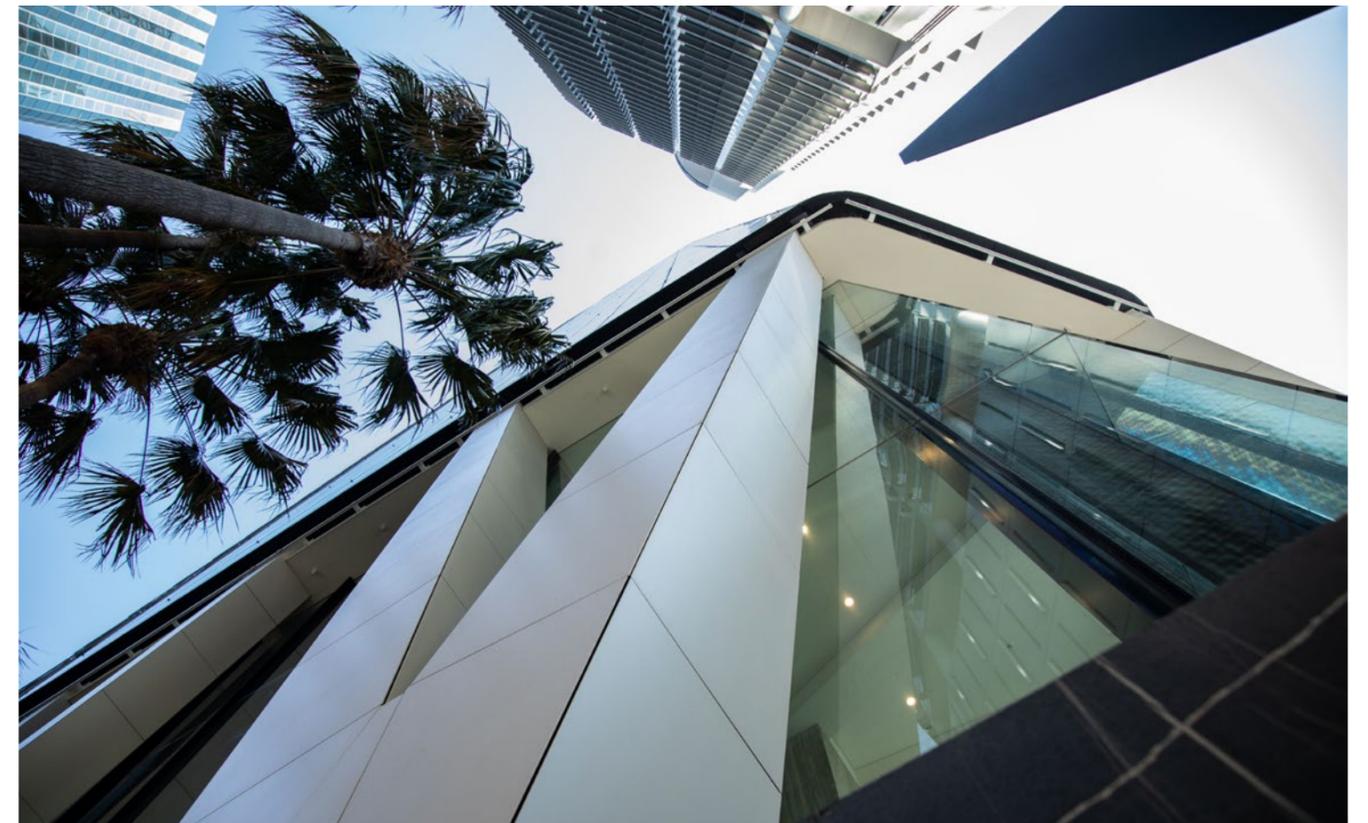
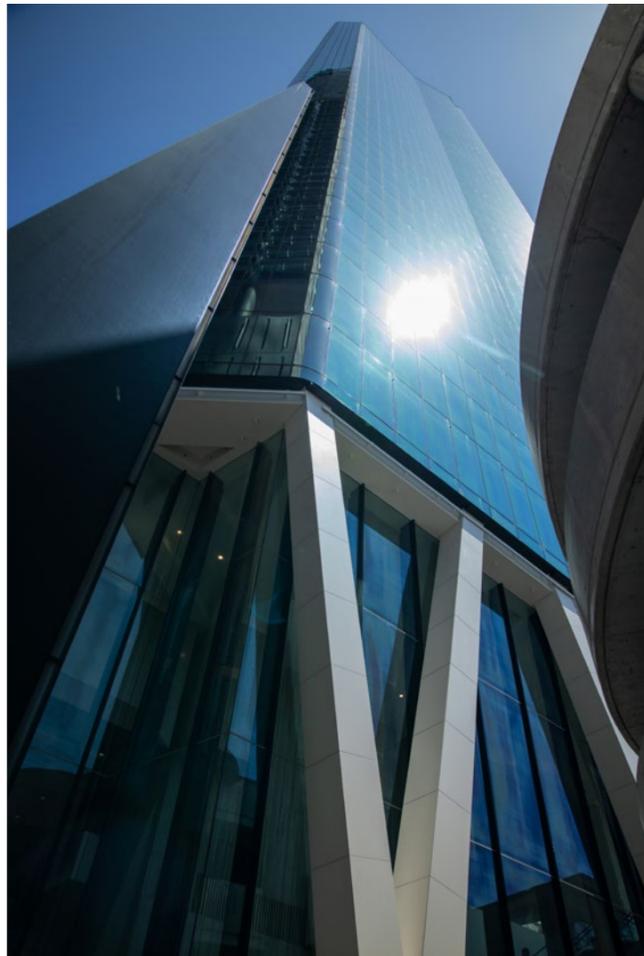
The renovation of its facade focused on the external columns of the building, which required a material that not only met sustainability standards, but also offered fire resistance. Cosentino's Dekton surface proved to be the ideal choice. Specifically, Dekton Zenith, an advanced material renowned for its durability and aesthetics, was selected and cut to size for this application. The installation used a ventilated facade system with mechanically fixed Keil anchors, ensuring a blend of aesthetics, functionality and safety.

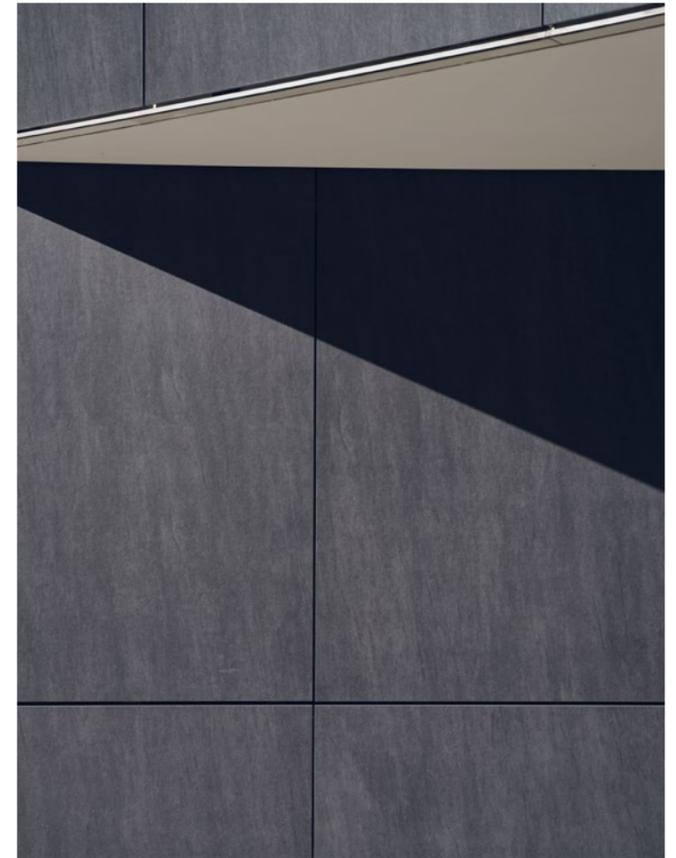


**Dekton Zenith, a strategic choice by Cox Architecture.**

Dekton Zenith was a carefully considered choice by the team at Cox Architecture. Gaffney points out: "Cox chose the Cosentino Dekton Zenith product for a number of reasons. The first is longevity: we know it's going to be here for a long time and that's really what we were looking for. The second is its incredibly consistent colour and texture, so it has a perfect finish that catches the light beautifully. In addition, it can be supplied in very large format pieces, manufactured off-site and precisely milled and cut with concealed fixings - critical elements for the project".

The collaboration between Cox Architecture and Cosentino goes beyond the choice of material; it represents a strategic alliance focused on innovation and sustainability in construction. Gaffney continues: "We would certainly work with Cosentino again on our premium commercial facades, simply because of their ability to deliver an incredibly diverse range of premium products". He also emphasises the importance of prefabrication in contemporary architecture: "The fact that they can deliver them prefabricated, cut and tapered, ready to be fixed on site, is of paramount importance to us. The idea of prefabrication is very important and it is where architecture and the construction industry are going in the future".





CASE STUDY

## Office building in Munich

Munich, Germany

**Materials**

2,500 m<sup>2</sup> Dekton Bromo and Danac

**Facade system**

DKT 1.1 KEIL

**Thickness**

12 mm

CASE STUDY

# Wissenschaftspark Osnabrück

Osnabrück, Germany

## Materials

2,325 m<sup>2</sup>  
Dekton Aeris and Kreta

## Facade system

DKT1.1 KEIL

## Thickness

12 mm





### Open for the future

"We wanted to achieve a maximum effect with minimal means," says architect Gerwin Tornij. "The facade consists of transparent and opaque elements in only two widths, which we arranged differently. The windows are set back. The light-coloured cladding adjoins them at a shallow angle - sometimes on the left, sometimes on the right. The opposite reveal and the horizontally continuous floor plate have a warm bronze tone. Thus the facade appears valuable, varied and slightly different from every viewing direction."



### Sustainable and easy to care for

"The curtain wall is very energy-efficient. The rainwater downpipes are a special feature," says Stefan Bobermin of HOFF und Partner, "They are concealed behind the facade in the open spaces created by the elements arranged at angles." When choosing the cladding, building approvals and short delivery times were a prerequisite, as the building was to be completed quickly. In addition, the client wanted a permanently aesthetic, low-maintenance and sustainable surface, as the property was to remain owner-occupied and easily lettable in the long term. "So our recommendation fell on the large-format Dekton panels from Cosentino."



CASE STUDY

# Holocaust Museum

St. Louis, Missouri. USA

**Materials**

Dekton Sirius and Lunar

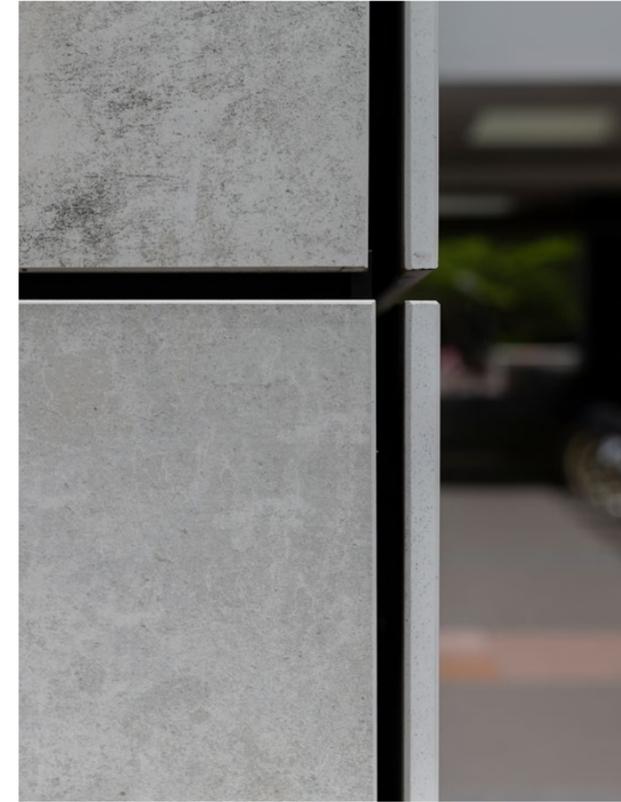
**Facade system**

DKT 1.1 KEIL

**Thicknesses**

4 and 12 mm





CASE STUDY

# The Crowne Plaza

Canberra, Australia

**Material**

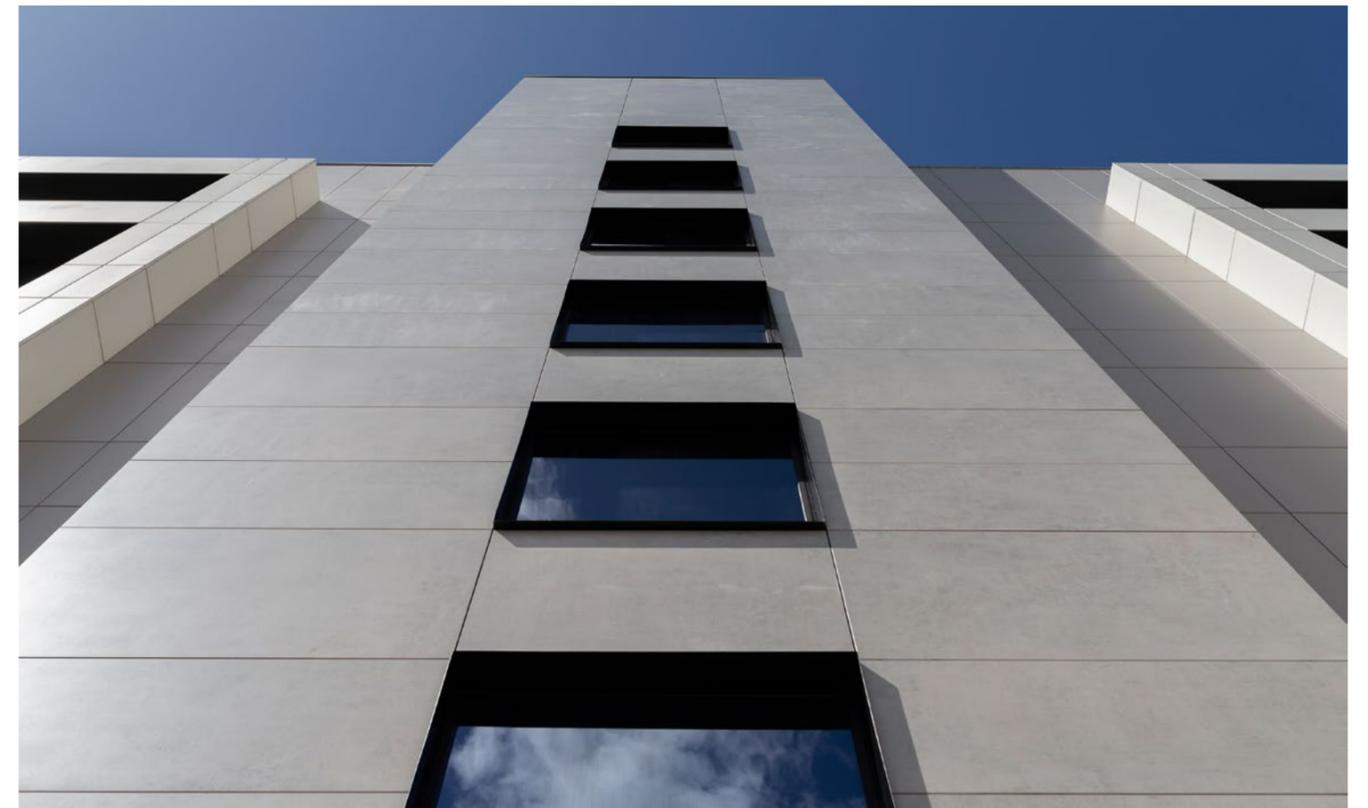
570 m<sup>2</sup> Dekton Lunar

**Facade system**

DKT 1.1 KEIL

**Thickness**

12 mm





CASE STUDY

## Museum in Roquetas de Mar

Roquetas de Mar, Almería, Spain

**Materials**

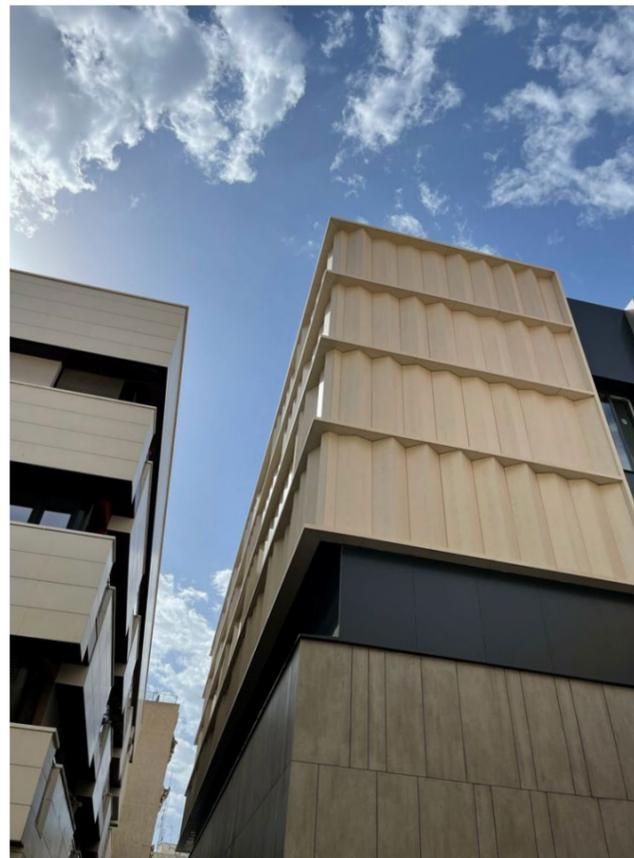
Dekton Danae, Keon, Sterling and Kairos

**Facade system**

DKT 1.1 KEIL and DKB

**Thicknesses**

4, 8 and 12 mm



CASE STUDY

## Marriot Hotel

Reykjavik. Iceland

**Material**

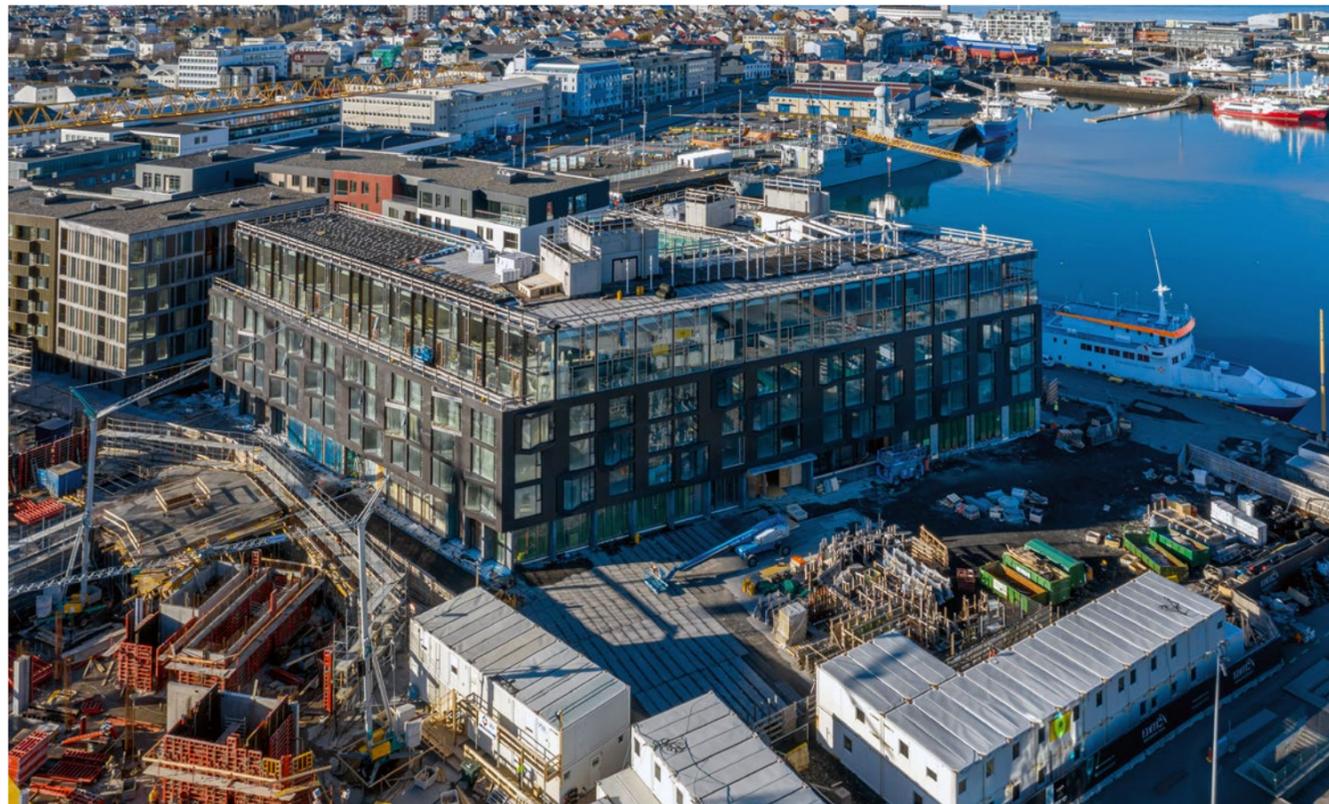
4,000 m<sup>2</sup> Dekton Domoos

**Facade system**

DKT 1

**Thickness**

12 mm



CASE STUDY

## Bundang Gwell Prugio

Seoul. South Korea

**Material**

5,016 m<sup>2</sup> Dekton Zenith

**Facade system**

DKT 1.2 Fischer

**Thickness**

12 mm



CASE STUDY

# Dalvey Haus

Singapore

**Material**

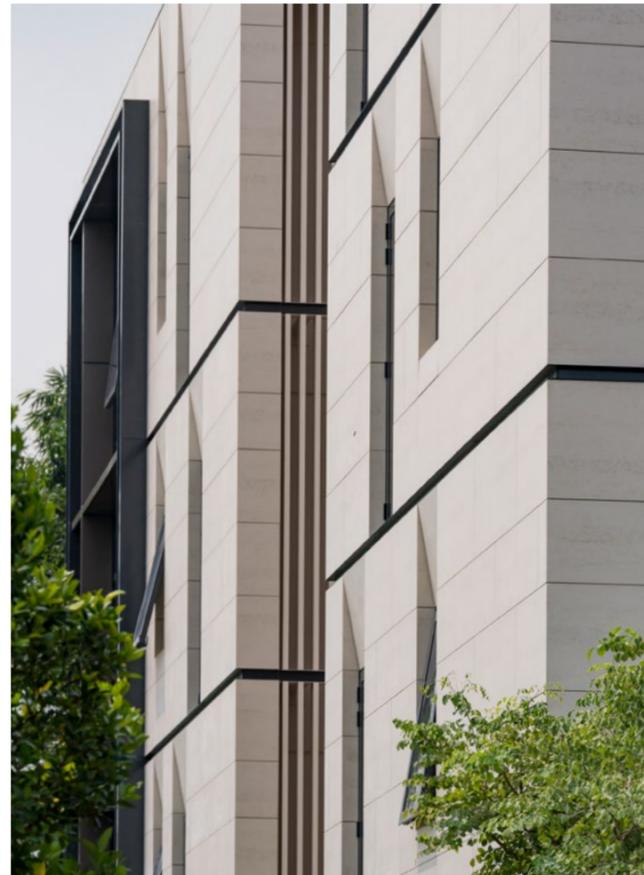
3,500 m<sup>2</sup> Dekton Danacé

**Facade system**

DKT 1.2 Fischer

**Thickness**

12 mm





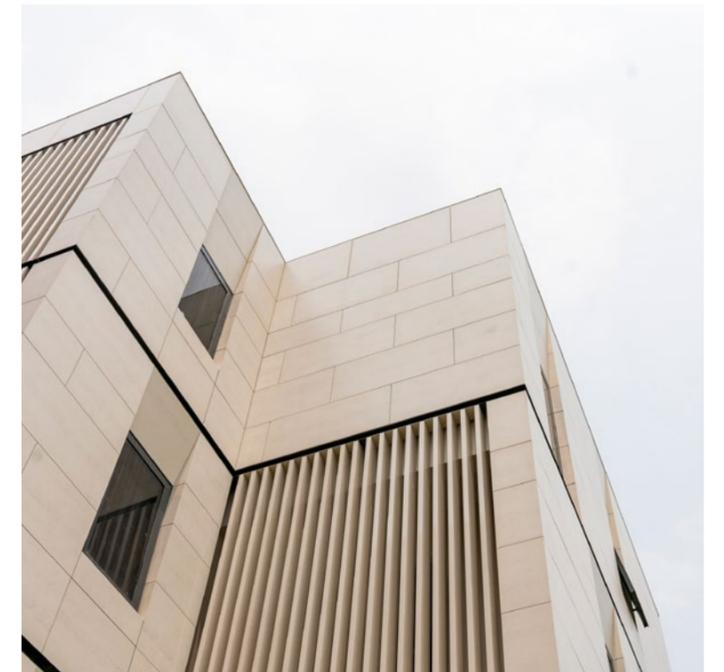
**This high-end residential development partners with Cosentino for a sophisticated and functional cladding, from its facade to its interiors.**

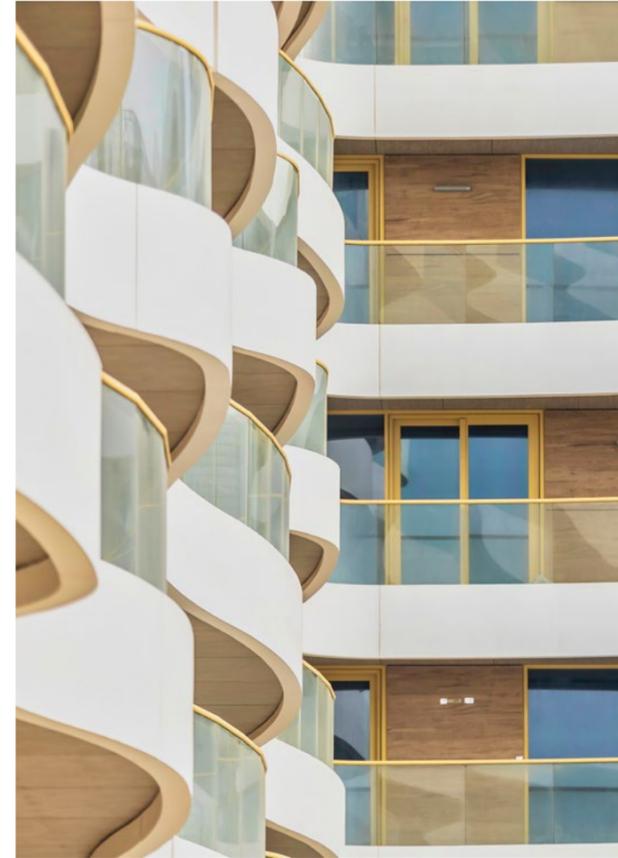
“Our contractor suggested using Dekton instead of marble to achieve a similar look and feel to that of marble on the facade, but allowing for cost savings and ease of maintenance, an idea with which the customer agreed”, says the studio. In fact, Dekton is a comprehensive, customised and sustainable technical solution that allows the creation of facades resistant to the most demanding conditions.



“It required a lot of coordination with the installers of the facade support system (installed using the Fischer ventilated facade system) to achieve the planned design, maintaining the size of the slabs and the orientation of their fibres while sticking to the customer’s budget”, says the studio.

In the end, the result fully met expectations. The studio highlights the clean architectural lines and cube-shaped structure of the development, whose facade features recessed windows strategically placed to create multiple viewpoints framing the green views of the surroundings. According to the professionals, its minimalist look translates into a timeless facade that pays great attention to detail and exudes calm and tropical exuberance.





CASE STUDY

## Qaryat Al Hidd

Saadiyat Island, Abu Dhabi. UAE

### Materials

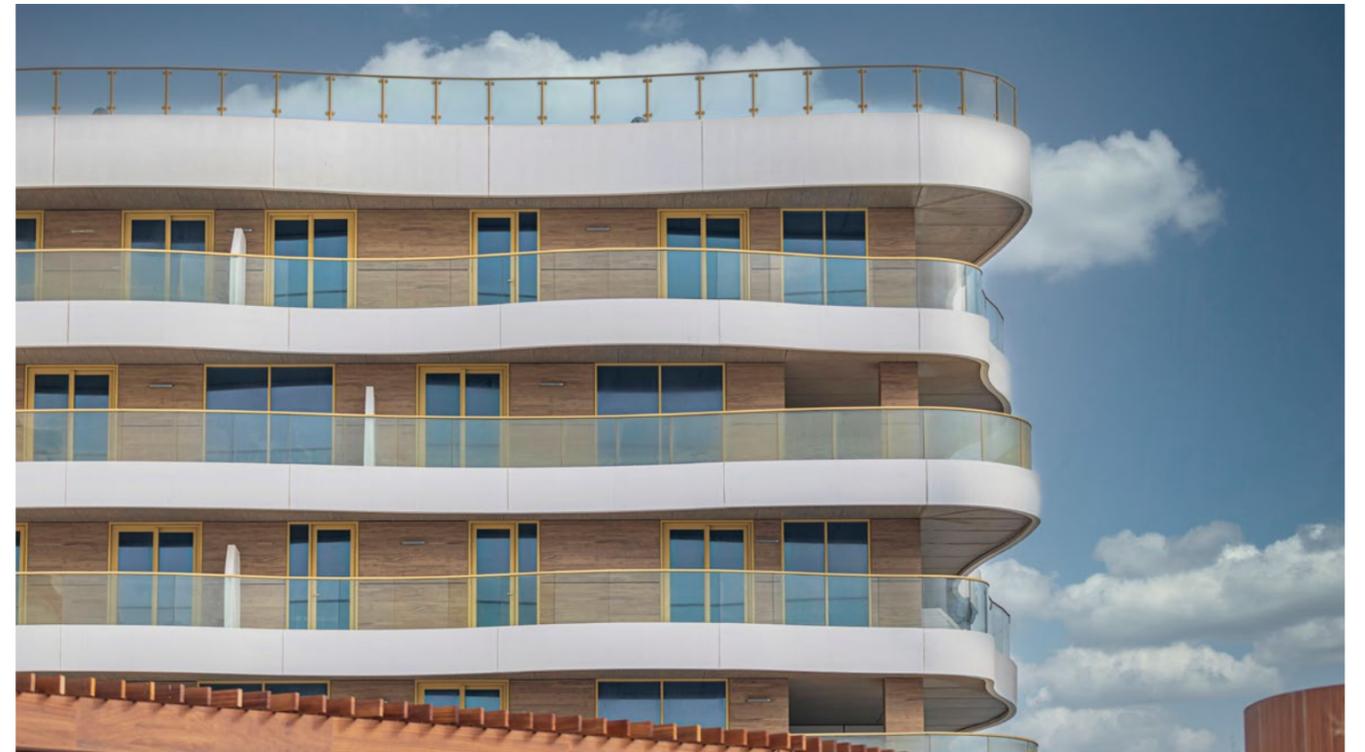
55,000 m<sup>2</sup>  
Dekton Valterra, Sterling, Zenith, Irok and Bento

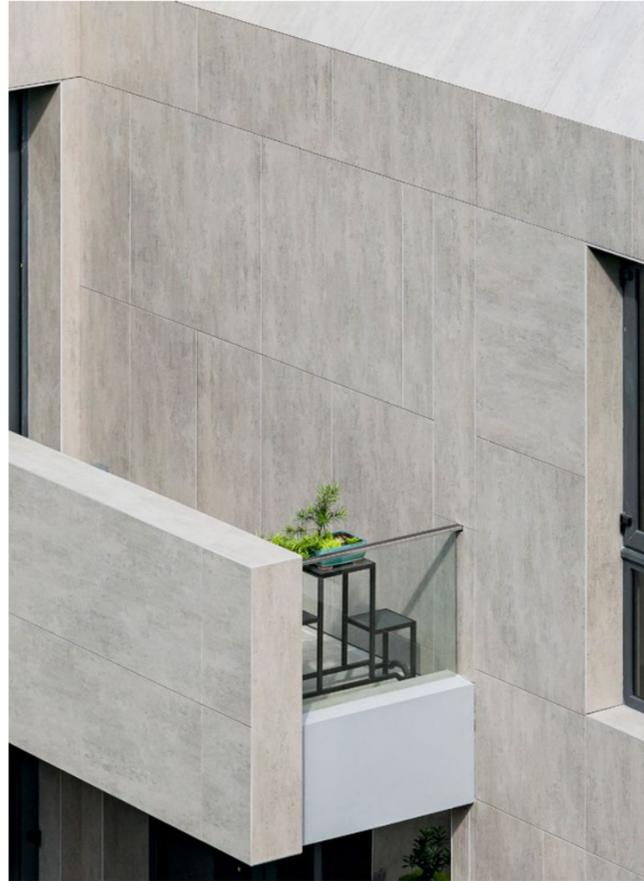
### Facade system

DKT 1.1 KEIL

### Thickness

12 mm





CASE STUDY

## Villa in Singapore

Paya Lebar. Singapore

**Material**

394 m<sup>2</sup> Dekton Keon

**Facade system**

DKT1.2 FISCHER

**Thickness**

12 mm



Valdebebas Building, Madrid, Spain

## DK T2

Edge grooving system  
with continuous profile

Traditional fixing system widely used in natural stone. A continuous groove is made in the edges of the piece to place a continuous profile where it is to be fitted. There is a single starter and end profile and a double middle profile for horizontal joints.

This system is limited to horizontal panel sizes up to a maximum of 1.44 m and a minimum Dekton thickness of 12 mm, which allows for grooving.

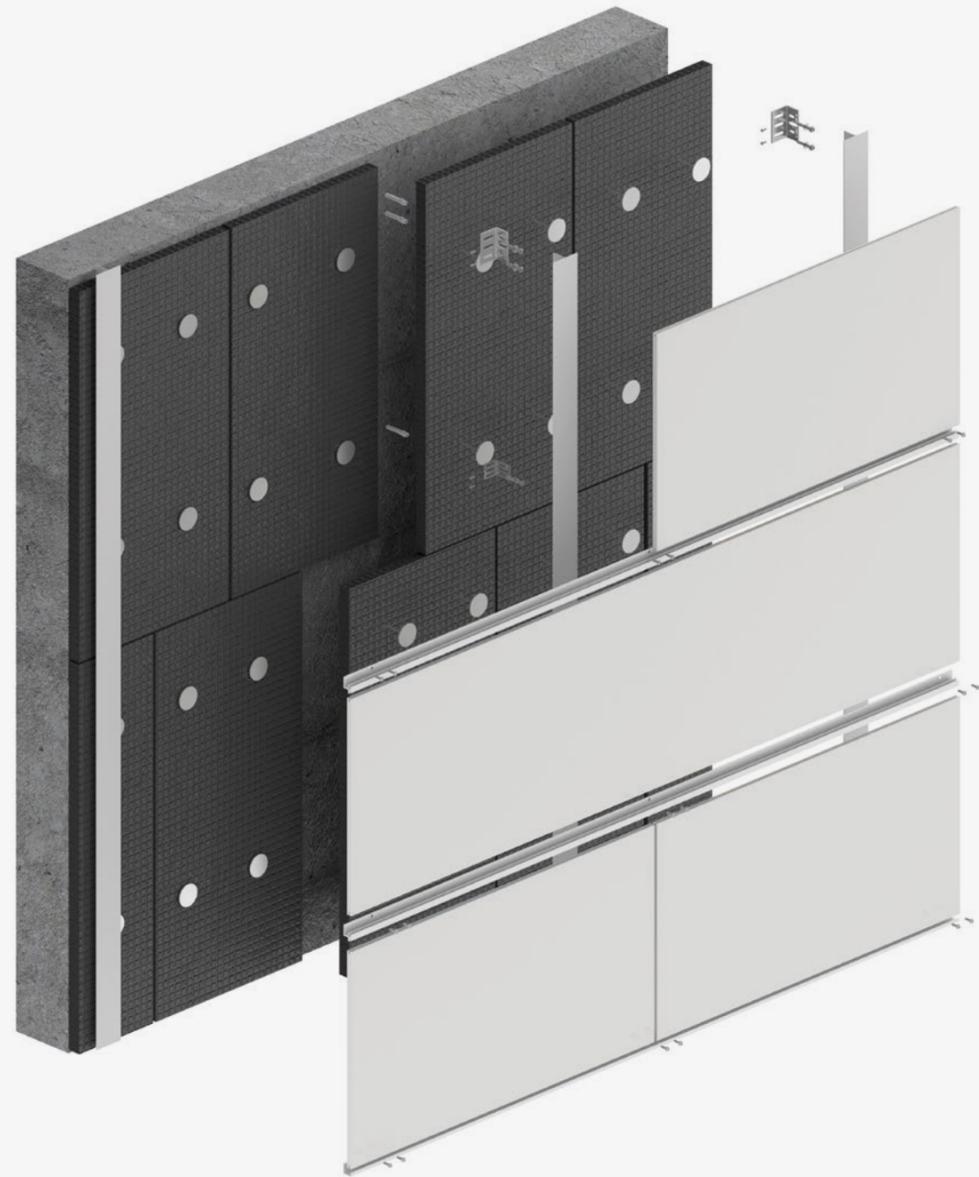


This solution creates an almost hermetic ventilated chamber, due to the continuity of the supporting profile itself. A groove of 3-4 mm minimum and with a depth of up to 10 mm is required to conceal the length-wise profile that is anchored to the uprights of the sub-structure.

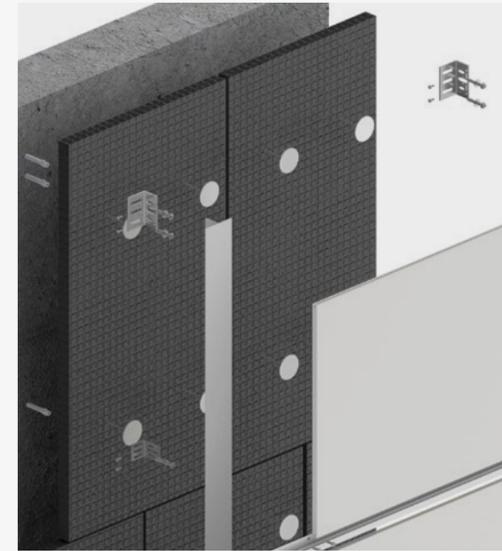
With this system, it is important to ensure correct air entry at the base of the facade, as the horizontal joints are enclosed by the horizontal profile that holds each piece.

Hidden mechanical fixing with metallic profile on the continuous groove of the edge of the piece.





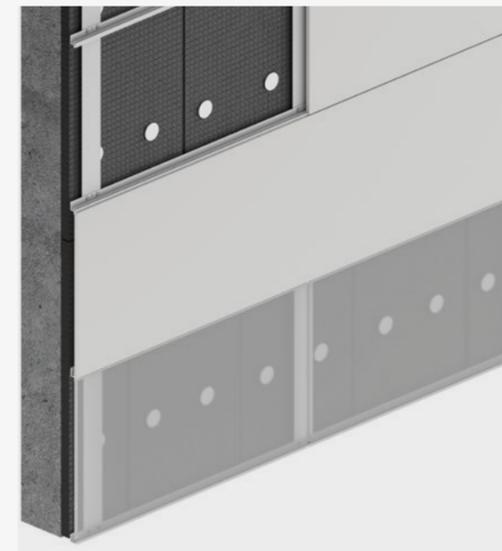
System detail



Middle profile detail



Bottom profile



Bottom profile detail





CASE STUDY

## Valdebebas 127

Madrid, Spain

**Materials**

7,600 m<sup>2</sup>  
Dekton Warm (customised)  
Dekton Korus

**Installation system**

DKT2

**Thickness**

12 mm







CASE STUDY

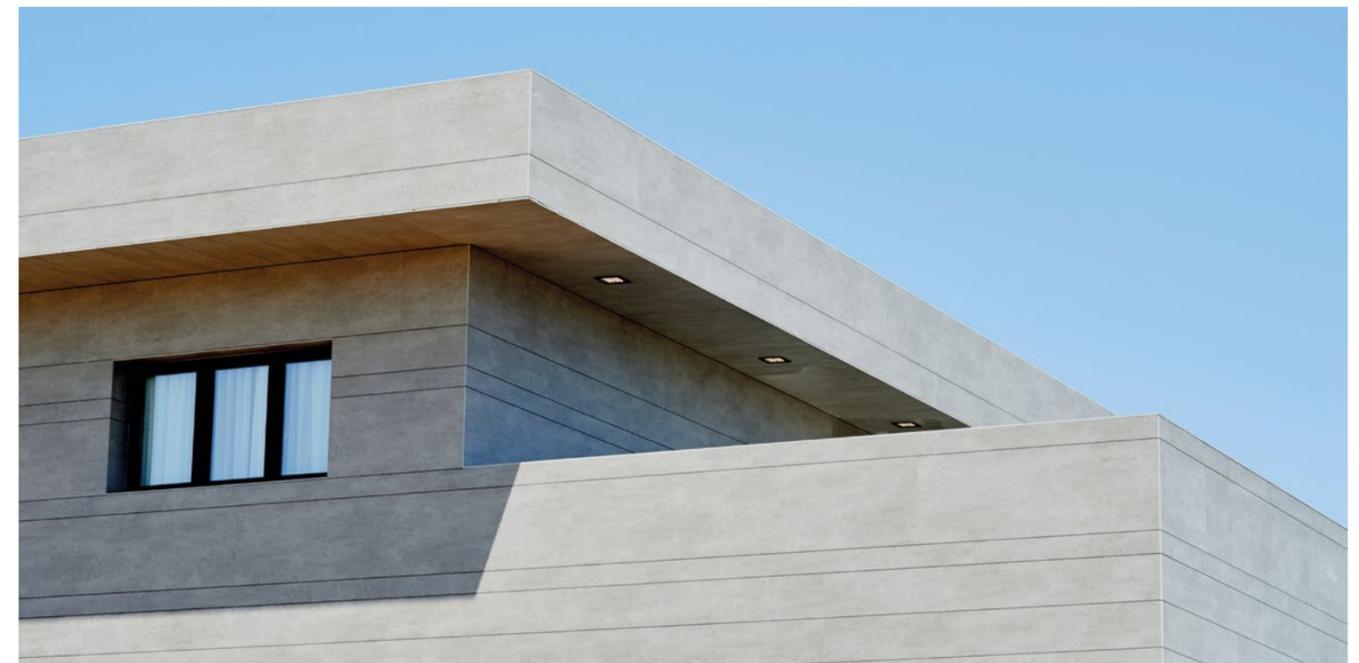
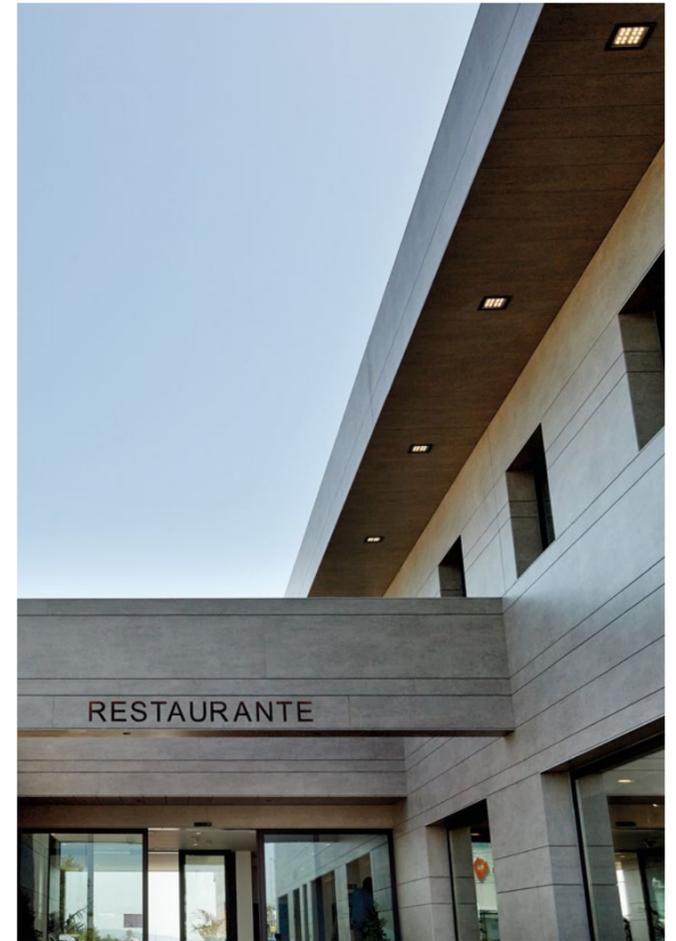
# LD Hotel

Sevilla, Spain

**Material**  
2,500 m<sup>2</sup> Dekton Keon

**Facade system**  
DKT2

**Thickness**  
12 mm





Tabacalera apartment building, A Coruña, Spain

## DK T3

### System with clips in the groove on the edge

This system is suitable for horizontal cutting of Dekton in thicknesses of 12 mm and 20 mm. In the DKT3 system, pieces are fastened to the profile by hidden clips that are inserted at intervals along a continuous groove at the edge of the piece, which can end at 3 cm at each extreme,

thereby improving the aesthetics and functionality of the lateral pieces. This system is fairly flexible, although there are certain dimensional limits, as the maximum a piece can be for 12 mm thickness is 70 cm vertical and 100 cm for 20 mm thickness.

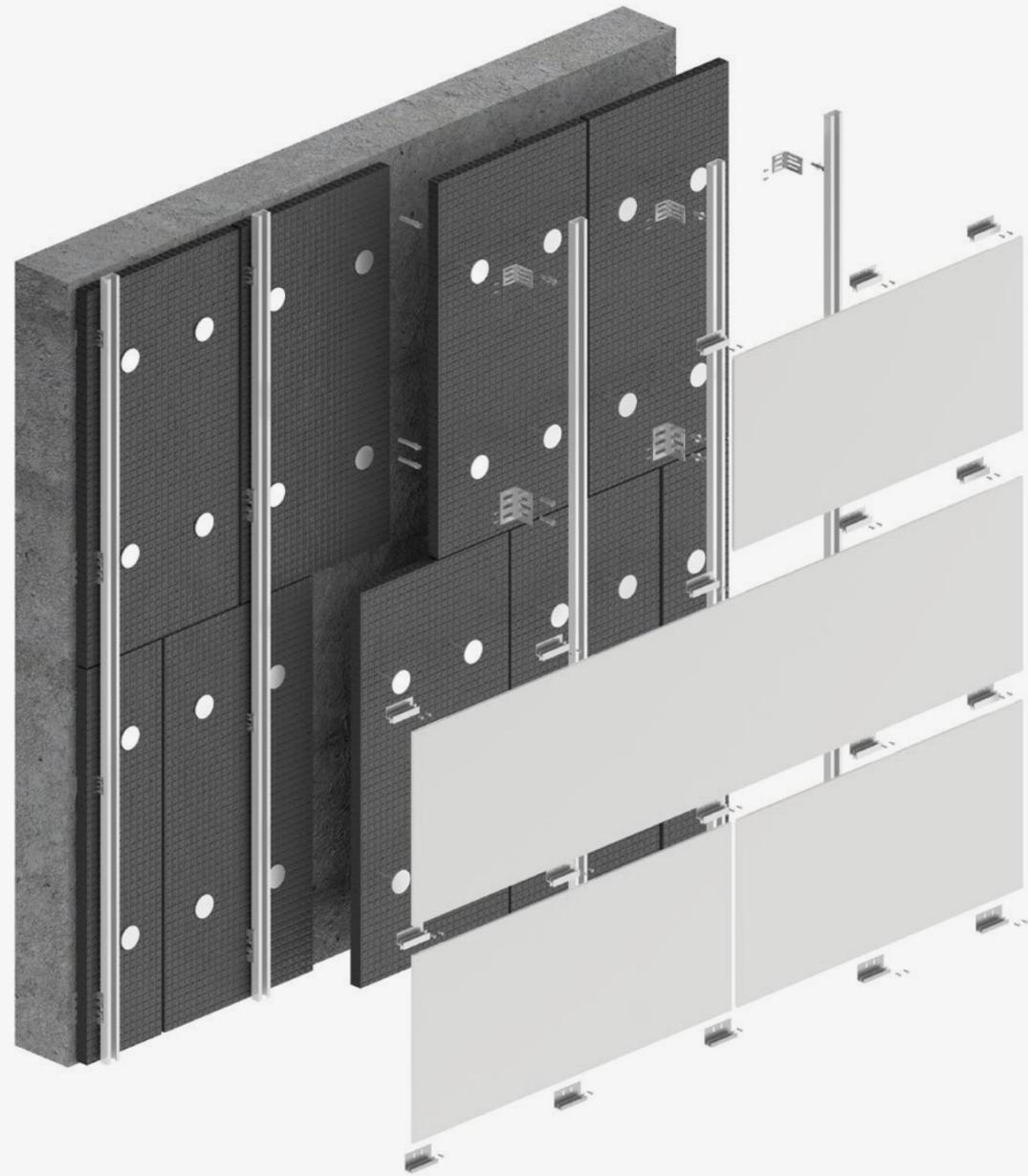


In cases that require a greater dimension on the vertical section, 30 mm thickness should be used to counteract fatigue on the grooved part of the material from the anchoring.

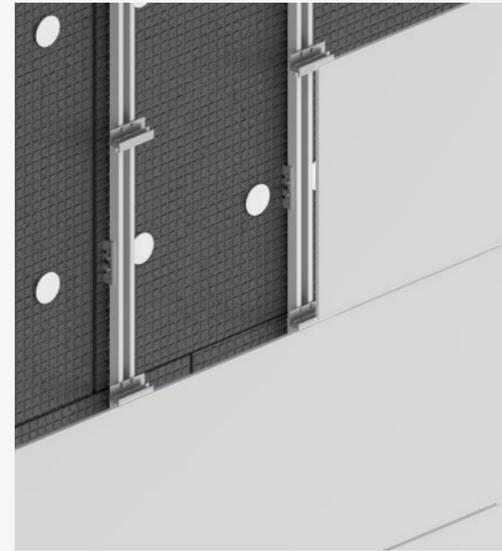
This system usually has two different types of clips: a single starter/end clip and a double middle clip, which are screwed to the vertical profiles.

Hidden mechanical fixing with clips at intervals along the groove on the edge of the piece.





Joints



Middle clips



Bottom clips



Bottom clips detail



CASE STUDY

# Building facade in Bergamo

Bergamo, Italy

**Material**

158 m<sup>2</sup> Dekton Entzo

**Installation system**

DKT3

**Thickness**

12 mm



Dekton provides a solution to the structural problems of this Italian facade

It was necessary to find a material as beautiful as natural stone and with a finish similar to Calacatta. The wide range of Dekton colours made it possible to find the closest finish to the original cladding: Entzo. The result is the same chromatic and 'natural' stone effect required by municipal and provincial authorities for areas of historic interest.



In short, Dekton ventilated facades are perfect both for the refurbishment of existing cladding and for new projects. There are five properties that make Dekton the perfect solution for ventilated facades:

1. Lightweight;
2. Large format slabs (Jumbo format 330 x 163 cm);
3. Quick installation;
4. Natural appearance;
5. High static and architectural performance.



Delfin Tower, Benidorm, Spain

DKBG

## Mechanical or mechanical-chemical systems with double back grooving

DKBG is a mechanical or hybrid fixing system (mechanical with chemical reinforcement).

The type of mechanical anchorage is made up of a series of clips of variable length with two inclined flanges that are fixed to the discontinuous grooves of greater or lesser length made in

the rear face of the piece, and later they are fitted and fixed within a rail horizontal with hook function.

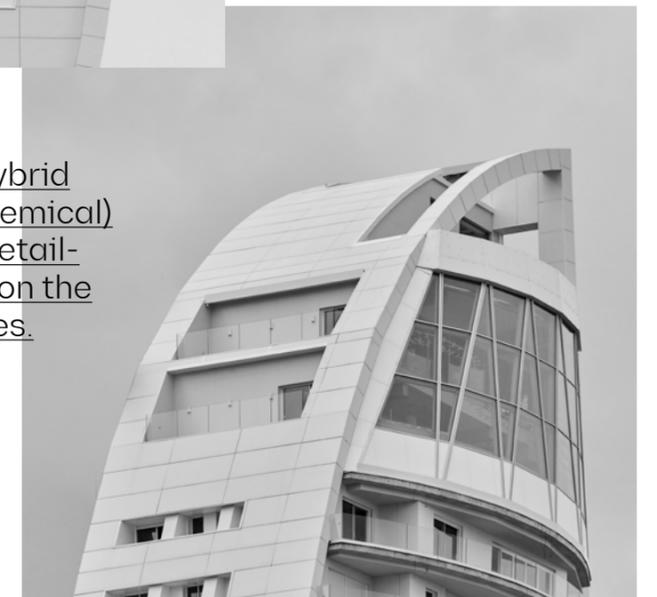
In this type of hybrid system, two hanger profiles (upper and lower) or a clamp-type clip are chemically and mechanically anchored to the material by means of an adhesive and an inclined



or straight grooving with more or less travel on the back of the piece, forming a metal hook.

In both types of systems, the profiles with support rail function that are assembled to the uprights of the substructure ensure the stability of the fixing under heavy loads.

Mechanical or hybrid (mechanical + chemical) fixation with dovetail-shaped grooves on the back of the pieces.



CASE STUDY

## ToHa by Ron Arad and Avner Yashar

Tel Aviv, Israel

### Materials

28,000 m<sup>2</sup> of Strato and 6 Dekton iD colours

### Facade system

DKBG

### Thicknesses

12 and 20 mm

**For the ToHa building project in Tel Aviv, Israel, over 28,000 m<sup>2</sup> of Dekton by Cosentino has been used to clad the facade, flooring, lifts, ceilings and interior partitions.**

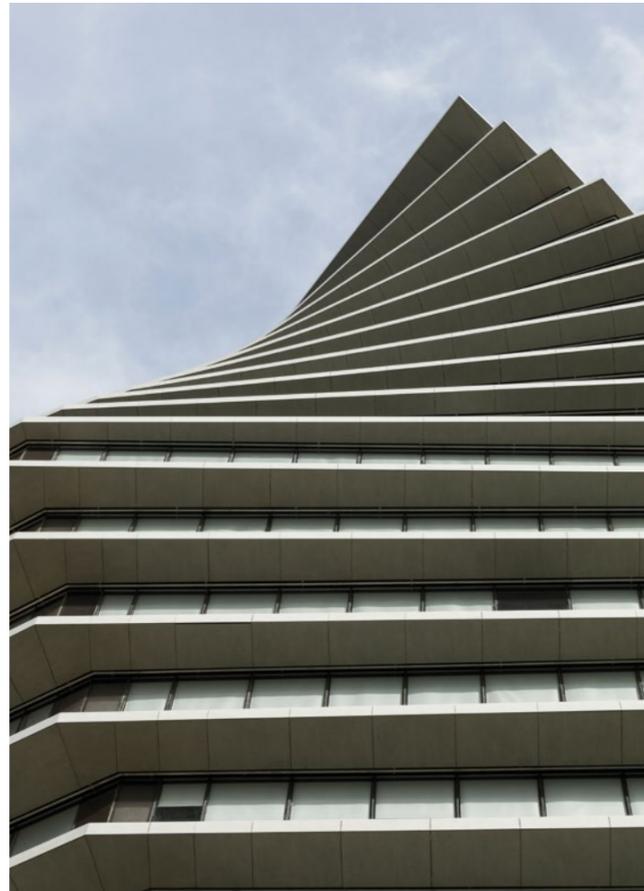
Located in the centre of Tel Aviv at the junction of two shopping streets, the ToHa building reaches 29 storeys high. Its unique, faceted profile, inspired by the geometry of an iceberg, was designed by Ron Arad together with Avner Yashar's local team to house an office complex that includes a public garden, viewing point and restaurant.

Over 28,000 m<sup>2</sup> of Dekton by Cosentino was used to clad the building's facade, flooring, elevators, ceilings and interior partitions. The pieces, formed by more than 10,000 different types, were manufactured and cut at Cosentino's headquarters in Cantoria (Almeria, Spain) and transported by ship to Israel.

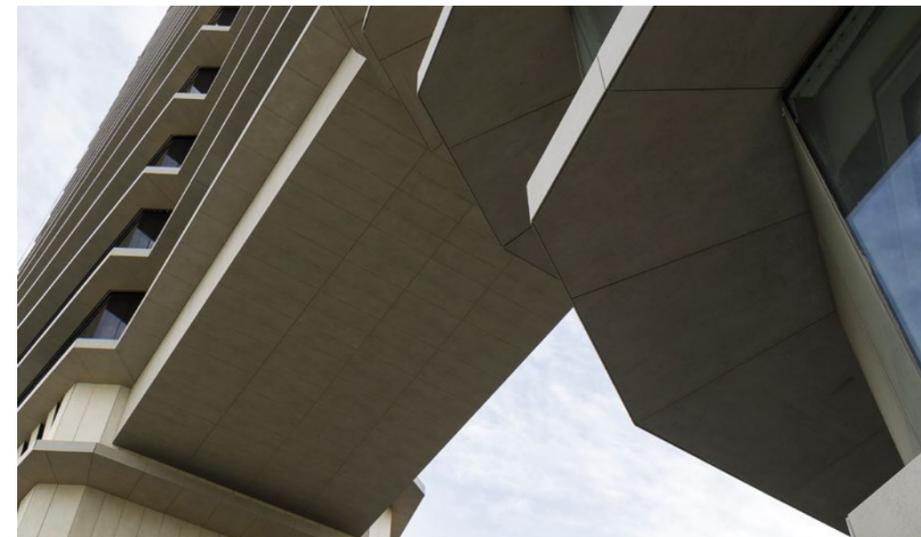
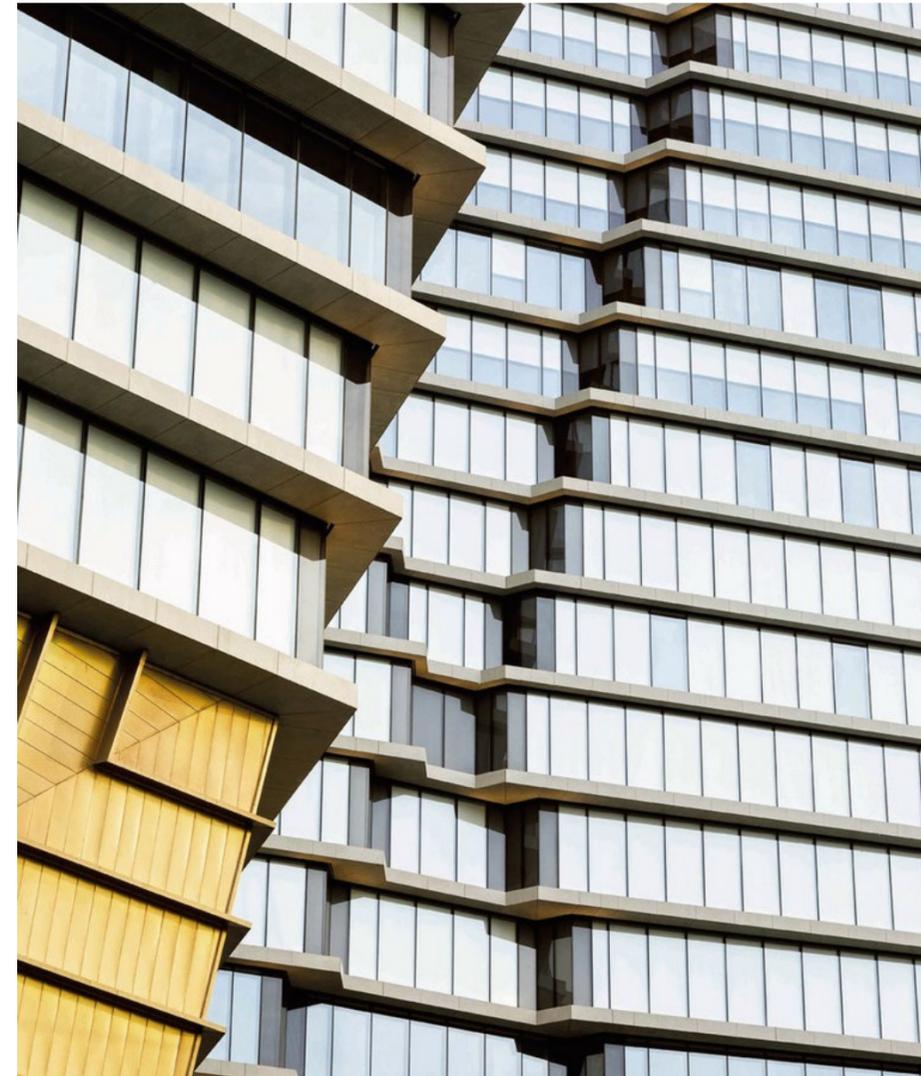


## Architectural and decorative aspect of the project.

A key strategic focus of the project was to reduce the building's surface area at street level to create a large garden area, improving the quality of the surrounding area for the public. As a result, the building rises up on two huge legs that widen progressively, framing a spiralled profile. Geometrically versatile, Dekton adapts with precision to the complexity of the building, thanks to its infinite range of formats, from minimal thickness to maximum surface areas.



On the intermediate floors, the broken perimeter of the concrete slabs is clad with panels 12 millimetres thick and up to two metres wide which, thanks to minutely accurate cutting, define the vertexes and edges exactly to create an image of perfection.



From a functional point of view, this ambitious project turns the traditional layout of an office block on its head, locating facilities on the ground floor to free up space at the top. This way, the upper levels can be dedicated to leisure use and the offices are distributed up from the seventh floor, optimising access to natural light and views.

The technical foundations are clad using a unique ventilated facade system that alternates the orientation of intersecting Dekton panels.

This application allows for the passage of air between the large-format (320 x 70 cm) pieces and creates a uniform frontage that gives texture and depth to the elevation. Cosentino also offers the opportunity to custom-make a personalised palette of six colours, based on the Strato model, that create a progressive colour gradation from the lower part upwards.



Inside, a huge 30-metre atrium acts as a vestibule and meeting point. The offices face outwards, through a glass facade, and inwards towards the central courtyard lit by a large light well.

Finishes have been carefully chosen to create a comfortable workplace and coherent corporate image. The possibility to produce large-format Dekton pieces for floors, walls and ceilings allows the number of joints to be reduced and the sense of continuity to be maximised.



## Project details

**Name:** ToHa  
**Location:** Tel Aviv, Israel  
**End date:** 2019  
**Architecture:** Arad Architects, Yashar Architects  
**Collaborators:** Buro Happold Engineering, Israel David Engineering (Consultant structural engineer)  
**Client:** Gav-Yam Amot Totseret Ha-Aretz

### Cosentino materials

#### Application: Roof

**Material:** Dekton by Cosentino  
**Colour:** Strato  
**Thickness:** 4 mm  
**Quantity:** 1,800 m<sup>2</sup>  
**Format:** 140×30 cm

#### Application: Flooring

**Material:** Dekton by Cosentino  
**Colour:** Soke, Sirius, Strato  
**Thickness:** 8 and 20 mm  
**Quantity:** 3,500 m<sup>2</sup>  
**Format:** Various: 320×144, 140×80, 80×170 cm

#### Application: interior walls/facade

**Material:** Dekton by Cosentino  
**Colour:** Zenith, Sirius, Kadum, Spectra, Strato  
**Thickness:** 8 mm  
**Quantity:** 2,000 m<sup>2</sup>  
**Format:** Various: 80×270, 70×300

#### Application: Ventilated facade

**Material:** Dekton by Cosentino  
**Colour:** Strato, Spectra  
**Customised colours:** Totzeret1, Totzeret2, Totzeret3, Totzeret4, Totzeret5, Totzeret6  
**Thickness:** 12 mm  
**Quantity:** 20,000 m<sup>2</sup>  
**Format:** various

Photography credits: Fernando Alda



CASE STUDY

# Sea Towers

Barcelona, Spain

**Material**

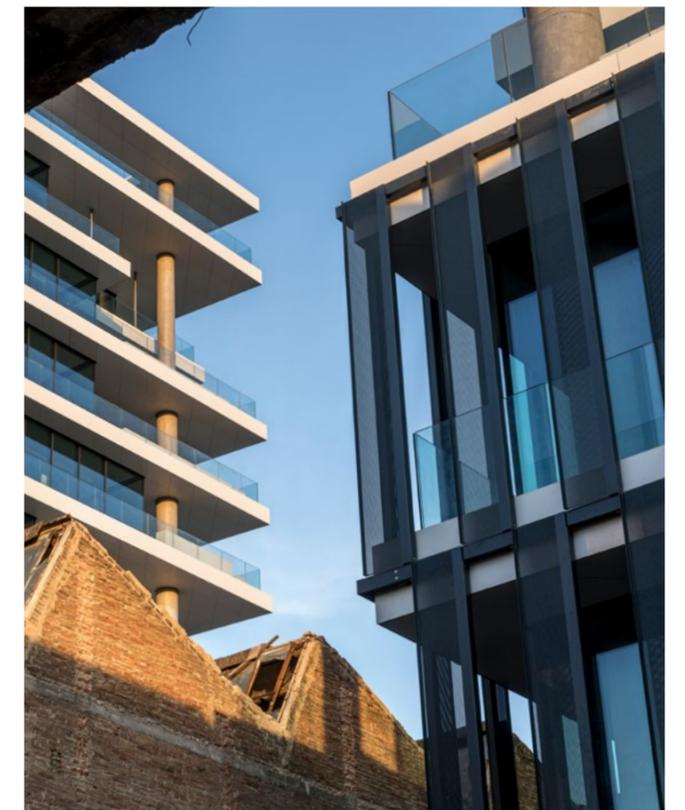
17,000 m<sup>2</sup>  
Dekton Nayla

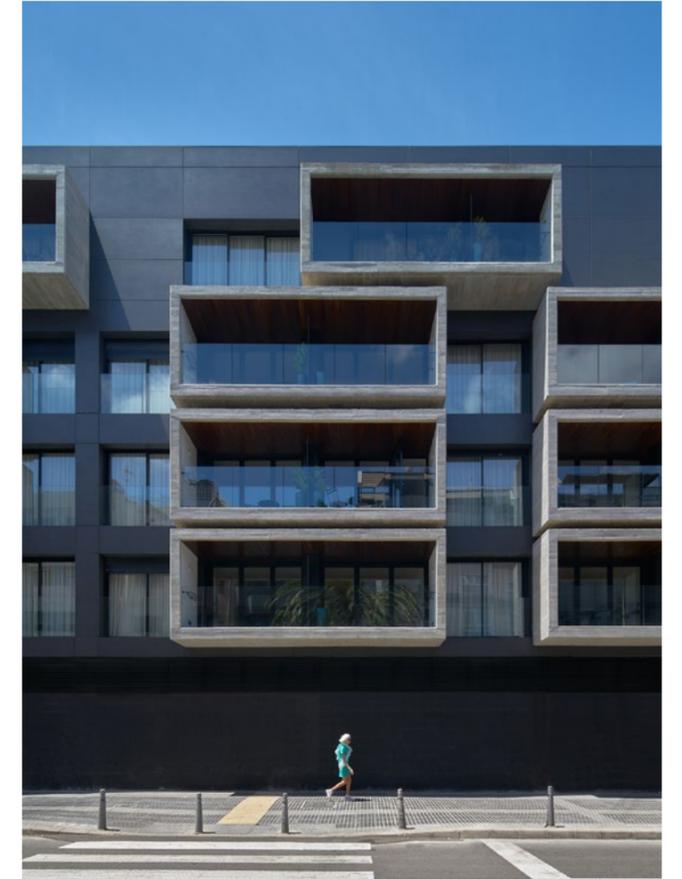
**Facade system**

DKBG

**Thickness**

8 mm





CASE STUDY

## Marina Guanarteme

Las Palmas de Gran Canaria.  
Spain

**Materials**

671 m<sup>2</sup> Dekton Eter, Domoos and Soke

**Facade system**

DKBG-X and DKC

**Thicknesses**

4, 8 and 20 mm

CASE STUDY

# Art Hotel Las Palmas

Las Palmas de Gran Canaria,  
Spain

**Materials**

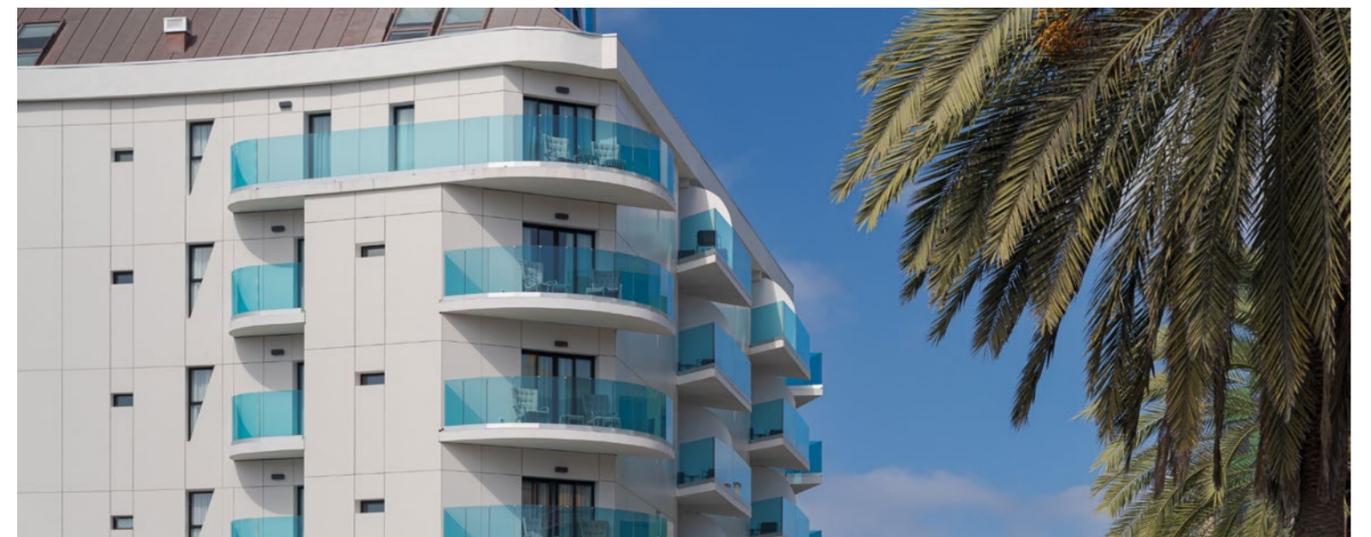
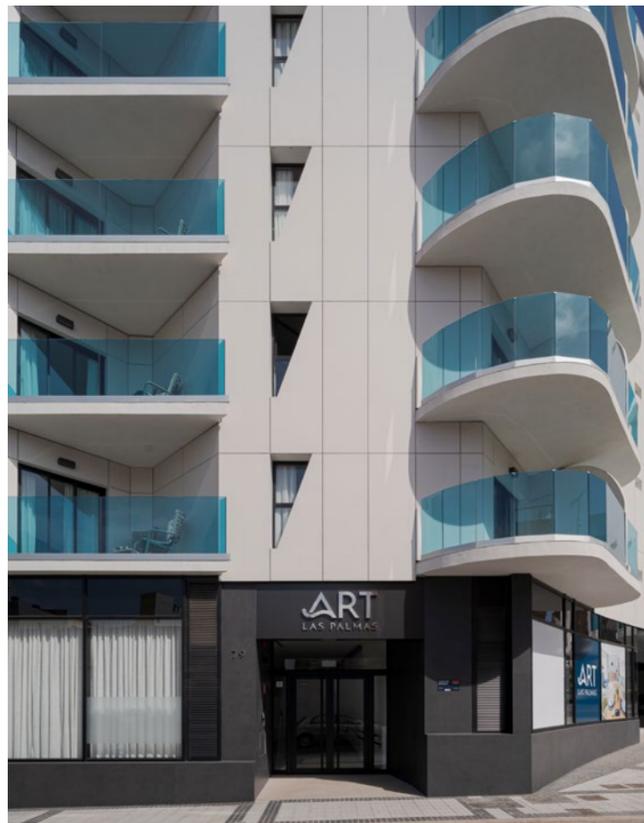
1,200 m<sup>2</sup>  
Dekton Aeris and Dekton Eter

**Facade system**

DKBG

**Thickness**

8 mm





CASE STUDY

## Delfin Tower

Benidorm, Alicante. Spain

**Material**

3,400 m<sup>2</sup> Dekton Zenith

**Facade system**

DKBG

**Thickness**

8 mm

## DK T4

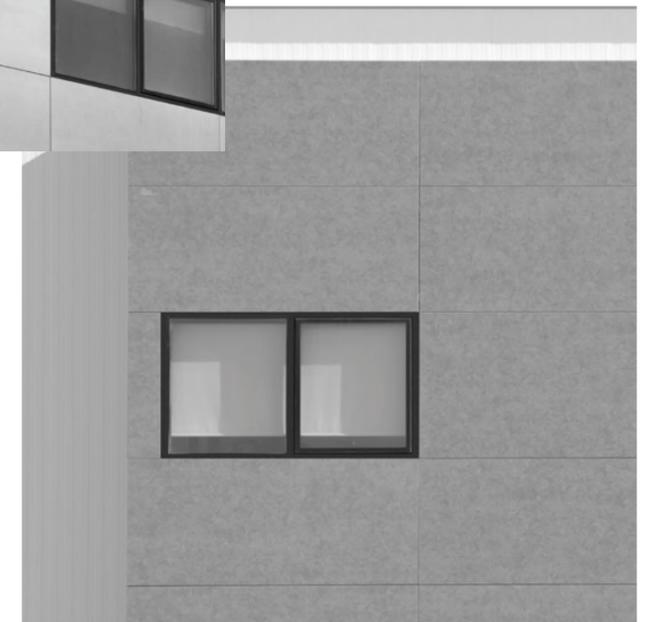
**Visible clip  
fixing system**

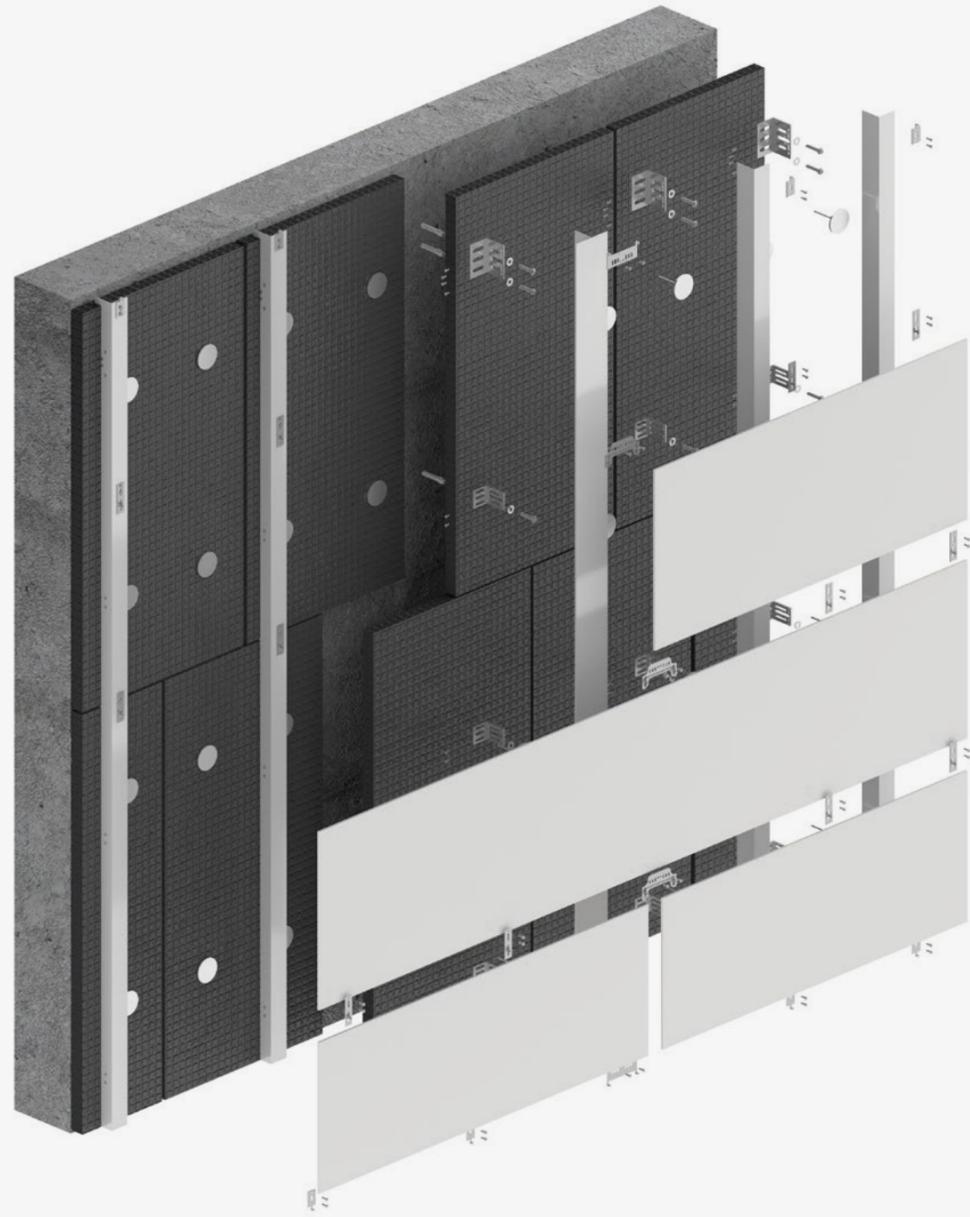
In the DKT4 system of visible fixing, the piece is shown as it is, with the fixing tabs of the upper and lower pieces visible to the eye. The clips hold both pieces and keep them in line with the plane of the facade, as well as maintaining the distances (joints) between consecutive pieces. Although this type of fixing is

fairly flexible in adapting to the thickness of the material, it is ideal for the smaller sizes, lighter weights and smaller thicknesses.

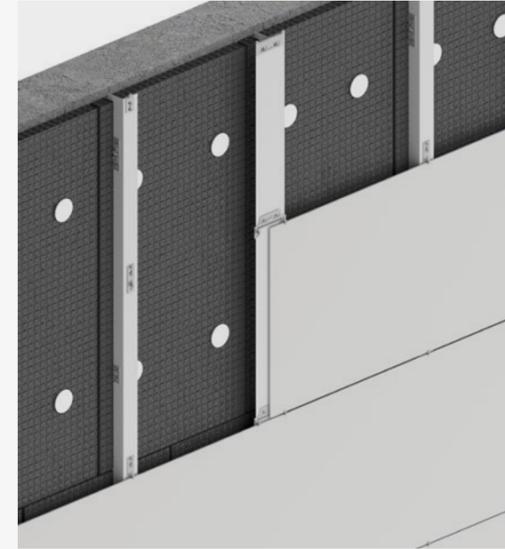


Mechanical fixing  
using visible clips  
that hold the pieces.

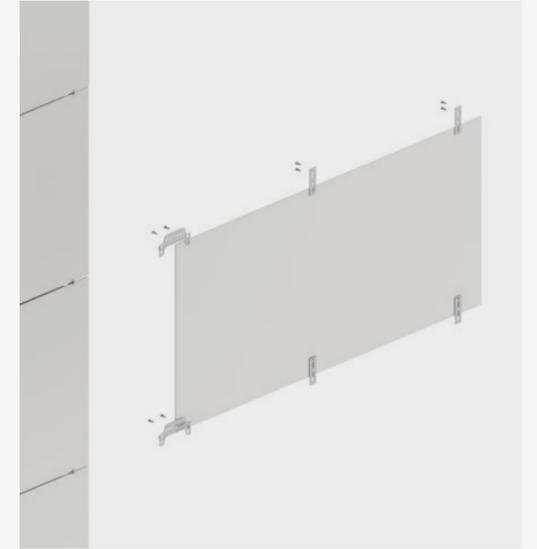




Bottom and middle clips



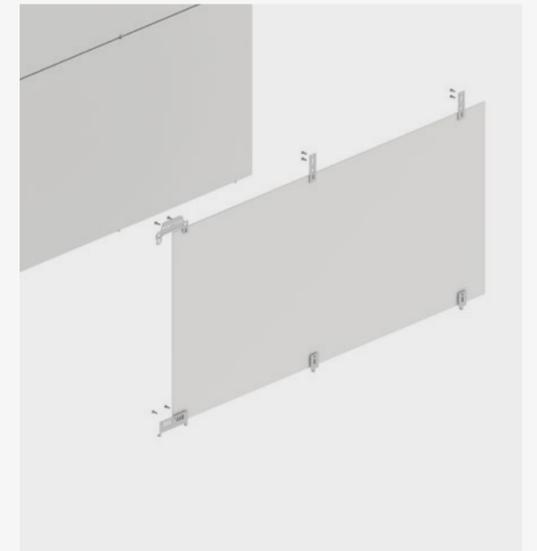
Middle clips



Joints



Bottom clips





CASE STUDY

## Nonantola Building

Nonantola. Italy

**Material**

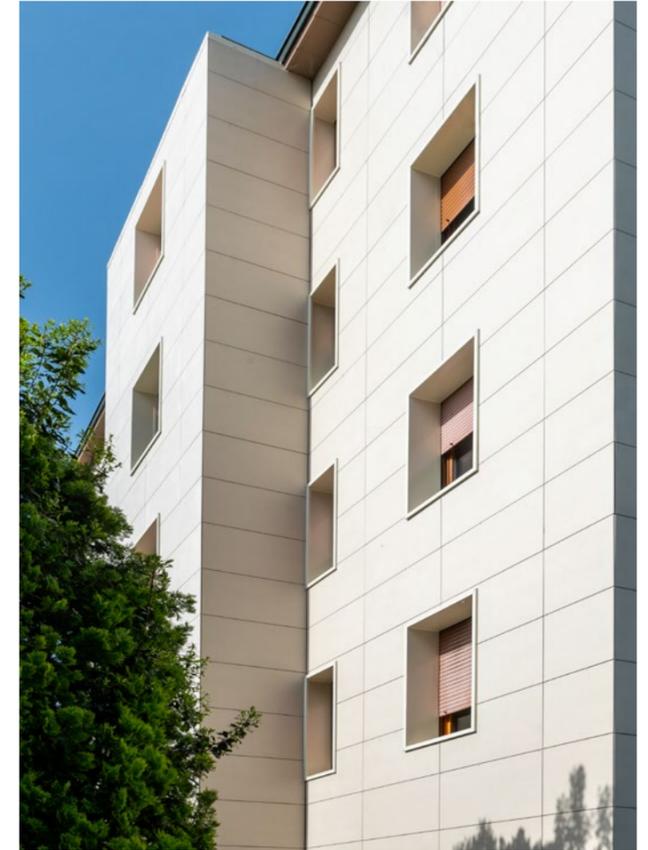
Dekton Sasea  
32,292 m<sup>2</sup>

**Facade system**

DKT4

**Thickness**

8 mm



CASE STUDY

# Yuvalim Ness Ziona

Ness Ziona. Israel

**Material**

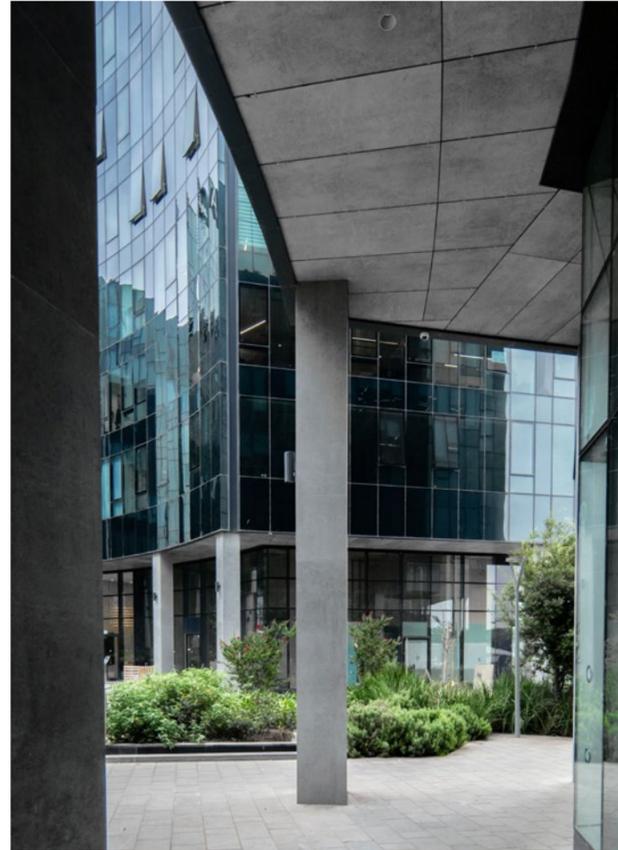
Dekton Lunar and Soke

**Facade system**

DKT4

**Thickness**

12 mm





## DKR

### Rivet fixing system

It is a visible mechanical fixing system using Dekton coloured rivets. Possibility of cutting large slab formats up to full slab formats, both vertically and horizontally, mainly in thicknesses of 4 and 8 mm. To do this, the pieces must be pre-drilled in the workshop or on site with a water supply.

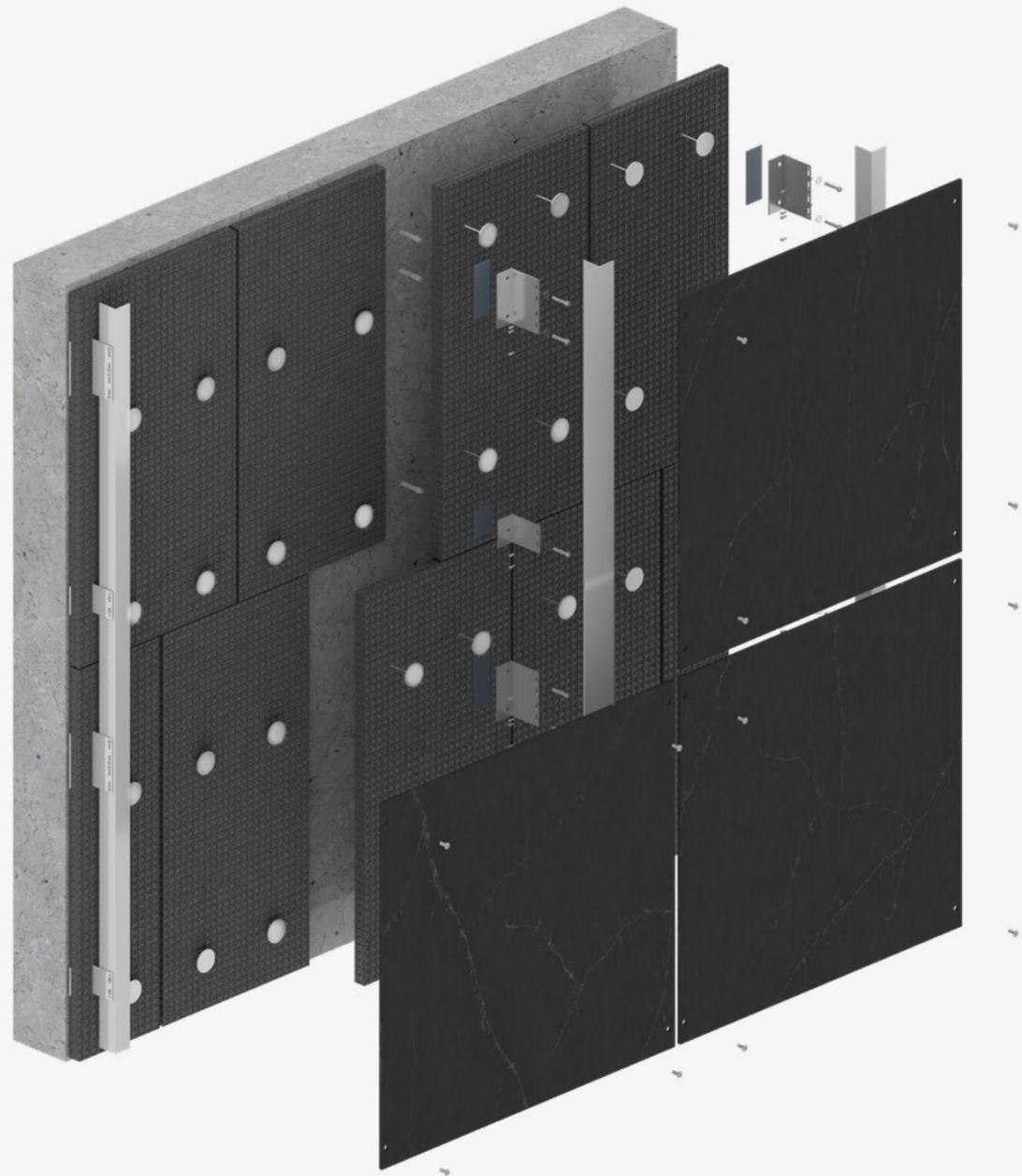
Dry drilling of 4 mm Dekton panels is possible with the right drill bit. Dekton coloured rivets can be supplied by Cosentino so that they blend in better with the overall appearance of the facade and are less noticeable from a distance.



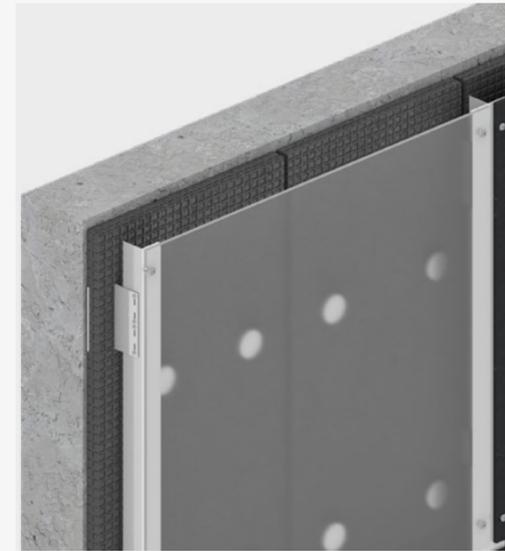
A range of accessories such as fixed point spacers, a self-centering drill bit and a rivet nose piece are required for the correct installation of the panels. All of these can be supplied by Cosentino. The idea of this system is that the rivets do not exert pressure on the piece, but that the piece hangs on the profiles and is always free to move in a way that is compatible with the expansion of the profiles.



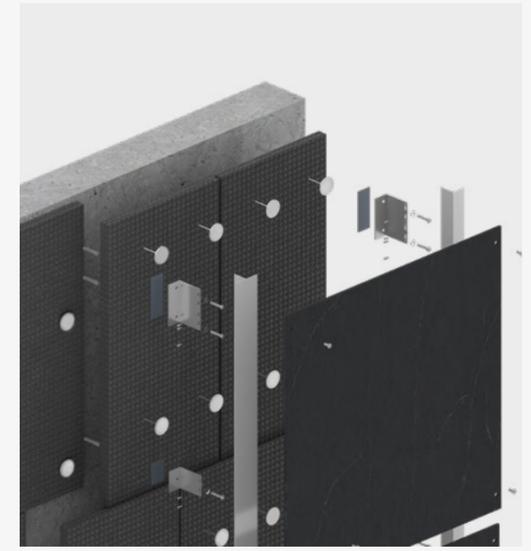
Visible mechanical fixing with rivets.



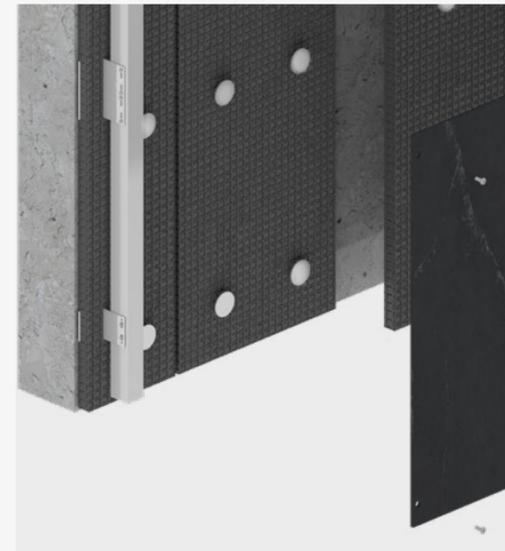
Joint



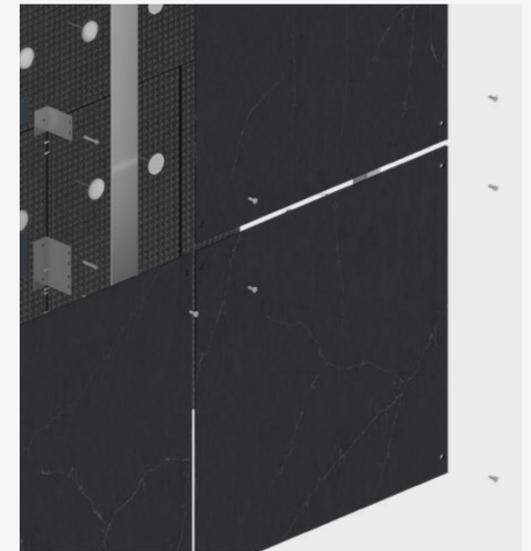
System details



Start detail



System details



CASE STUDY

# Elan Centre

Netanya, Israel

## Materials

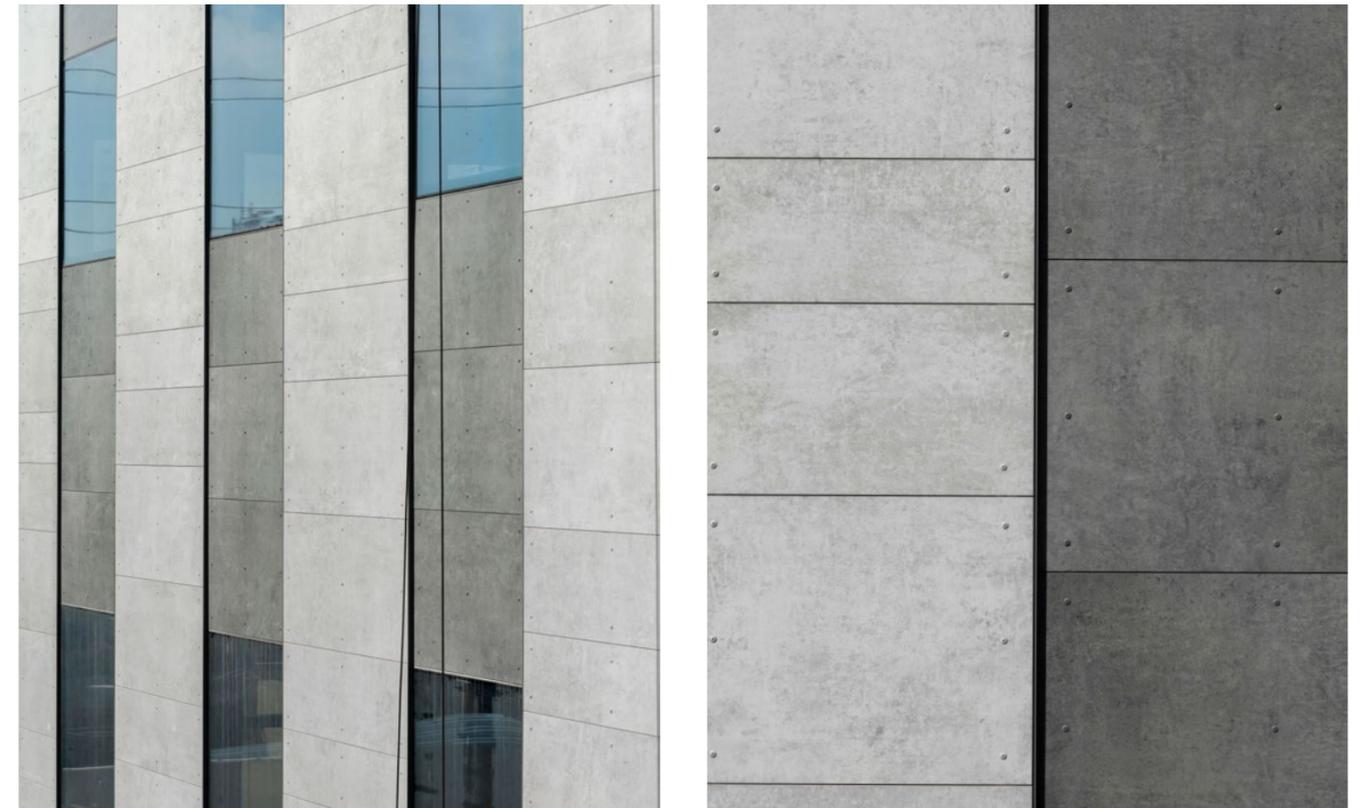
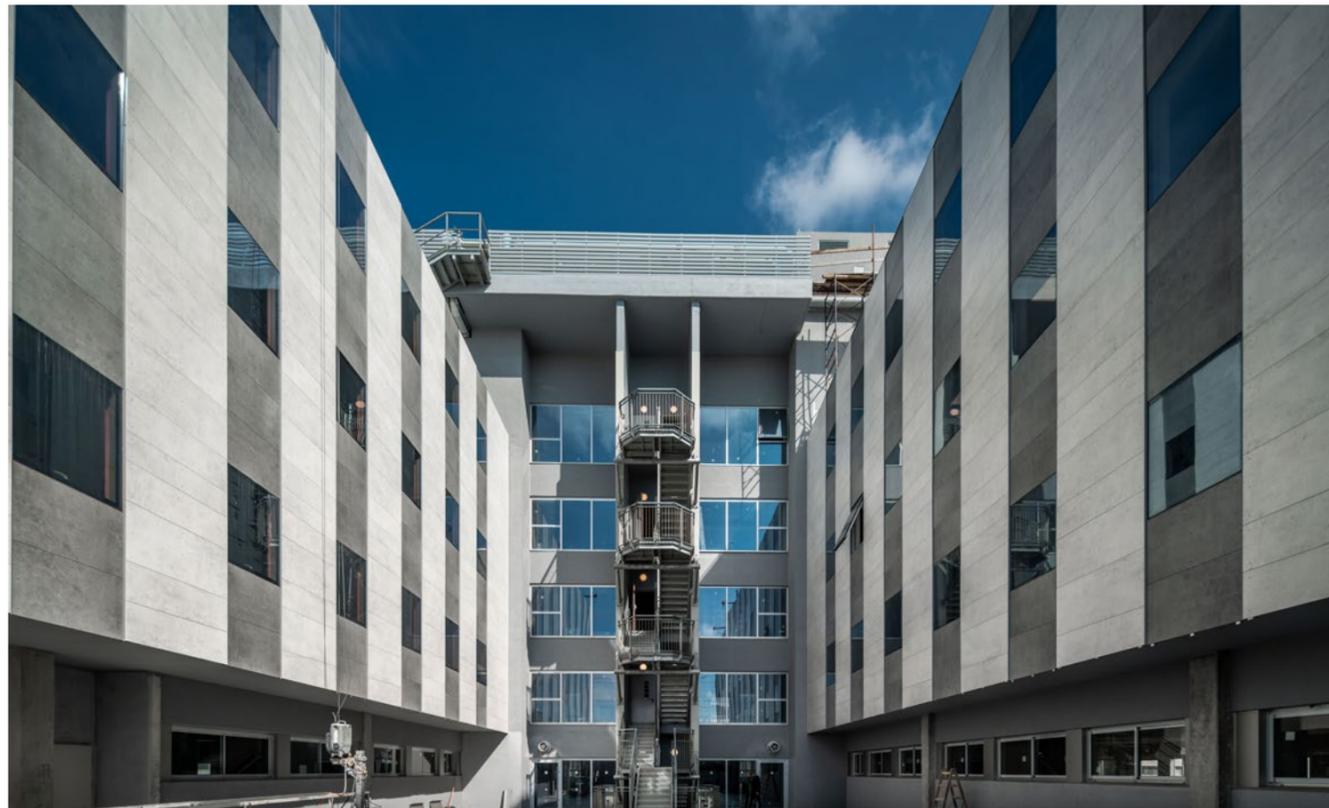
2,200 m<sup>2</sup>  
Dekton Kreta / Dekton Lunar

## Facade system

DKCW and DKR

## Thickness

8 mm





CASE STUDY

# Hadar Project

Tel Aviv, Israel

**Materials**

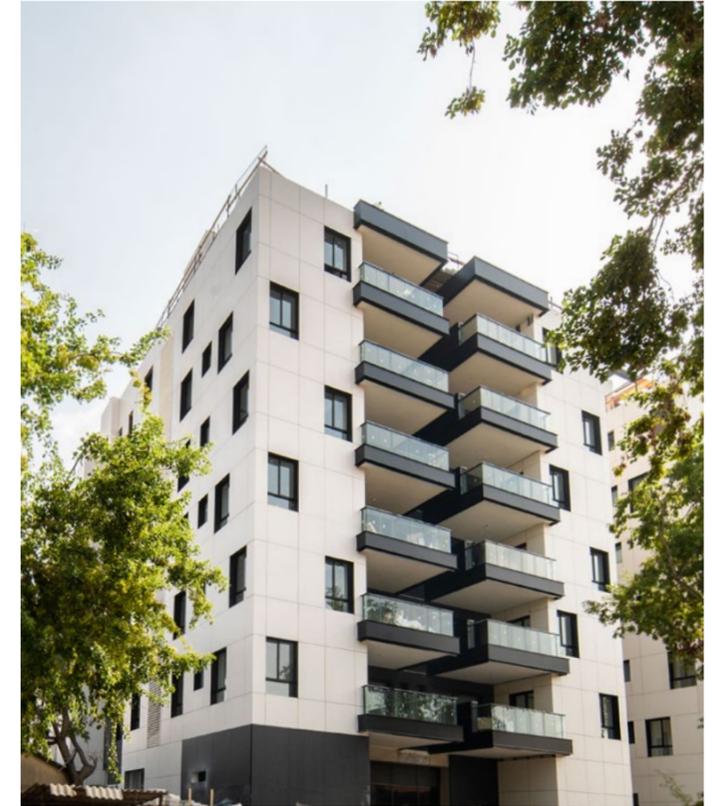
Dekton Moone 4,500 m<sup>2</sup>  
Dekton Strato 1,500 m<sup>2</sup>

**Facade system**

DKR

**Thickness**

8 mm



CASE STUDY

# Pearl Sea

Vila do Conde. Portugal

**Material**

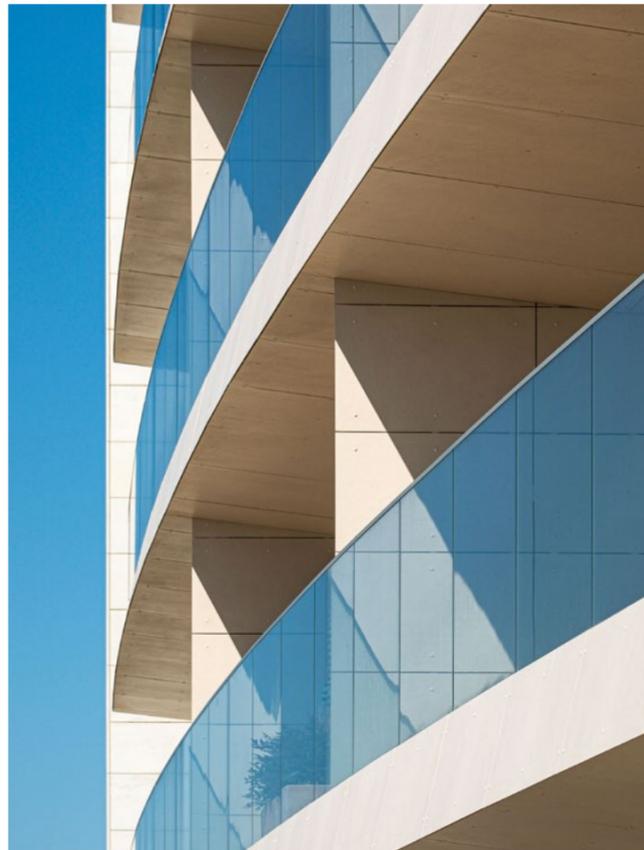
2.000 m<sup>2</sup>  
Dekton Edora

**Facade system**

DKR

**Thickness**

4 mm



DKC 

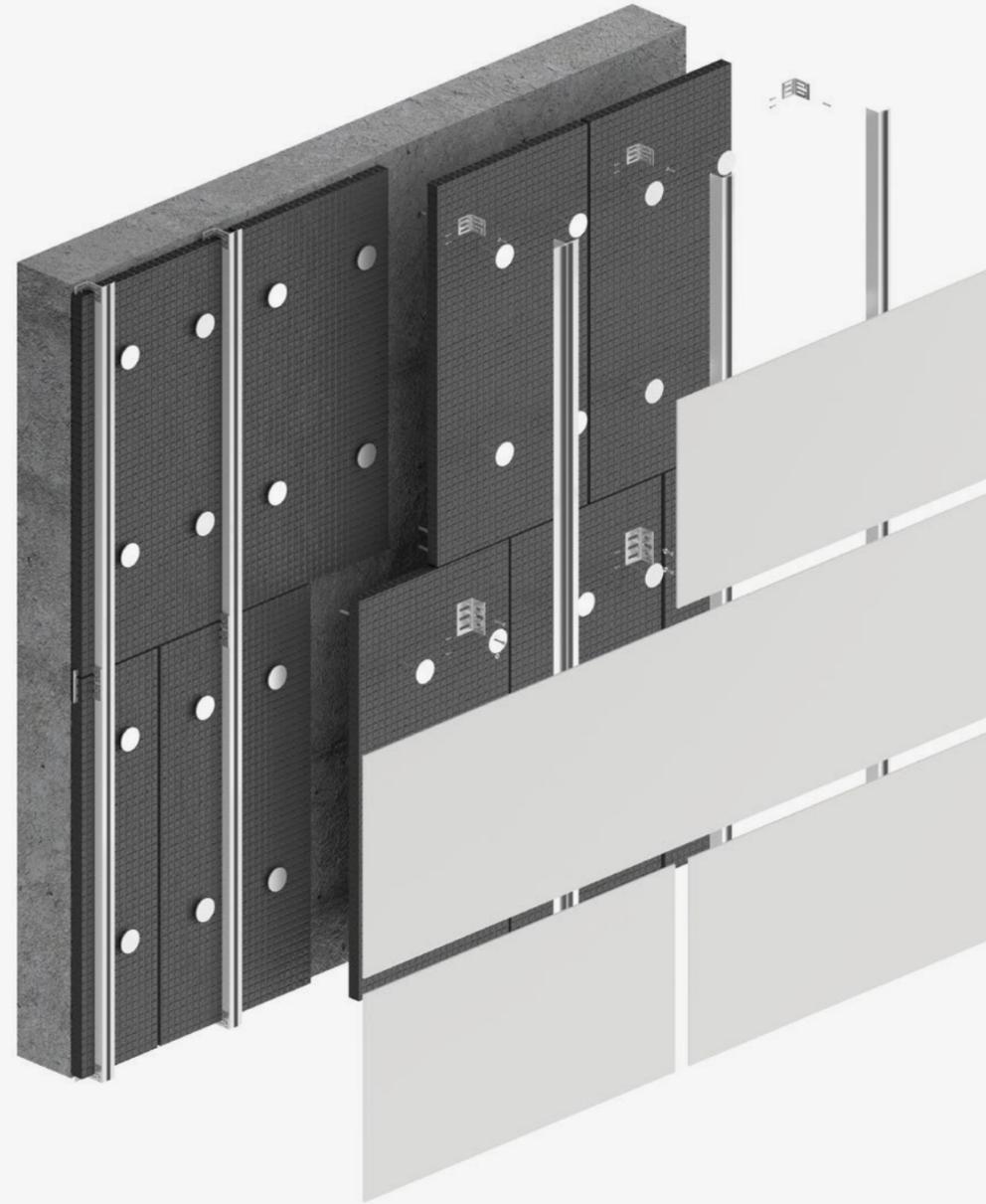
## Chemical anchor system

DKC is a totally chemical fixing system, which allows parts to be glued directly to the supporting substructure with structural adhesives, avoiding any machining of the part. Starting from a profile, two strips of double-sided tape are placed in the center while they are added to the perimeter of said profile.

During fixing, the double-sided tape secures the piece while the adhesive is curing. You can work with a wide range of formats and even design pre-assembled elements in the factory. This system allows a wide range of thicknesses, with 8mm pieces being the most demanded in renovation works and for changes of image.



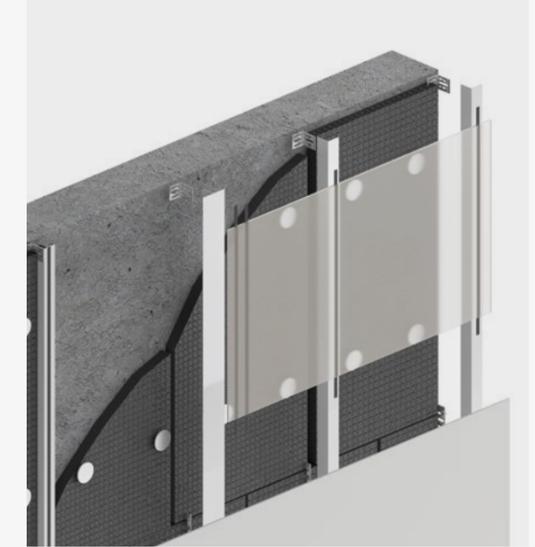
Fixing with chemical anchoring on profiles.



Substructure



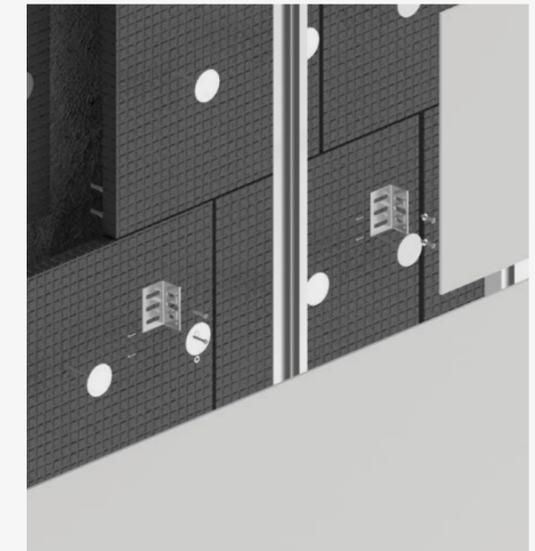
Chemical anchor system



Joint



System detail



CASE STUDY

# Villa in Sanxenso

Sanxenxo, Pontevedra.  
Spain

**Material**

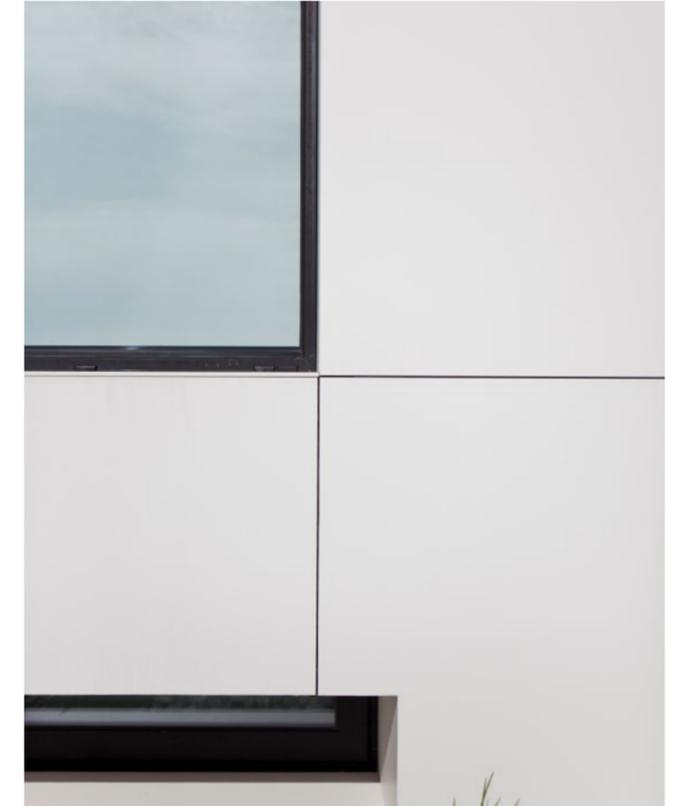
308 m<sup>2</sup>  
Dekton Zenith and Sirocco

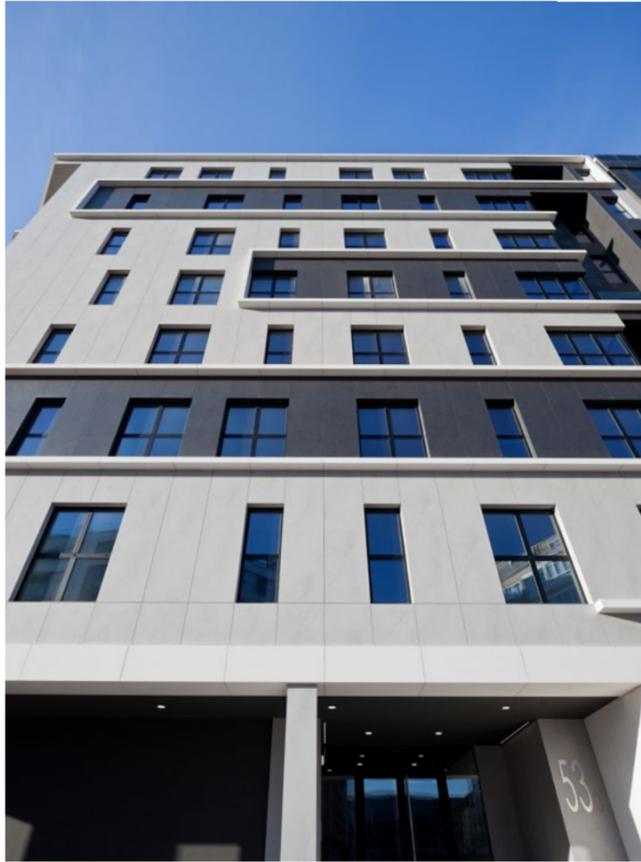
**Facade system**

DKC

**Thickness**

8 mm





#### CASE STUDY

## Nautical School Urbher

La Coruña, Galicia. Spain

#### Materials

1,590 m<sup>2</sup> Dekton Kovik, Eter and Mooné

#### Facade system

DKC and DKT4

#### Thickness

8 mm





#### CASE STUDY

## Copenhagen Building in Balneário Camboriú

Balneário Camboriú/SC. Brazil

#### Material

700 m<sup>2</sup> Dekton Uyuni

#### Facade system

DKC

#### Thickness

4 mm

Considered one of the slenderest buildings in Brazil, the Copenhagen Building in Balneário Camboriú conveys elegance and modernity with its 173 meters high on the seafront.

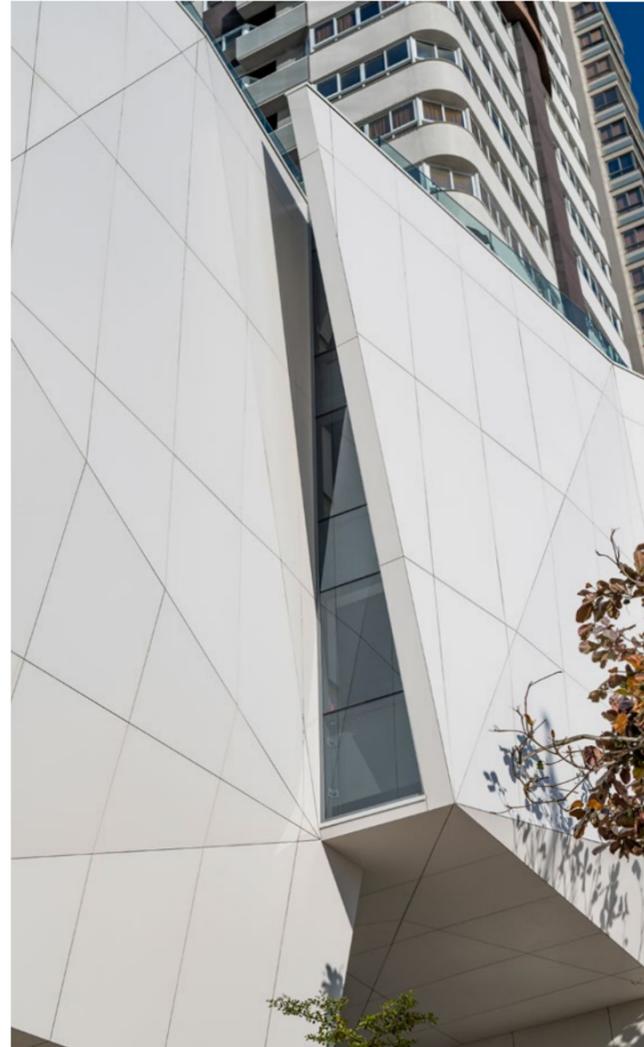
Combining sophistication and technology, it is the ideal place for you to share the best moments. With a contemporary design, it stands out from the entrance, with a work in the form of a monolith, paying homage to two astronomers who made history in 1970.

Cechinel's Copenhagen Building offers spacious apartments with high-quality details. The apartments have more than 236m<sup>2</sup> of private space with a high standard of finishing, including 4 suites, integrated living room, kitchen, balcony and 4 parking spaces and beautiful views of the sea.

## Dekton Uyuni: versatility and durability

The building is completely covered with ready-made facade systems with glass and ACM, ventilated using ACM (copper) and Dekton Uyuni (front basement).

The choice of Dekton as the facade material was defined due to the versatility of the material,



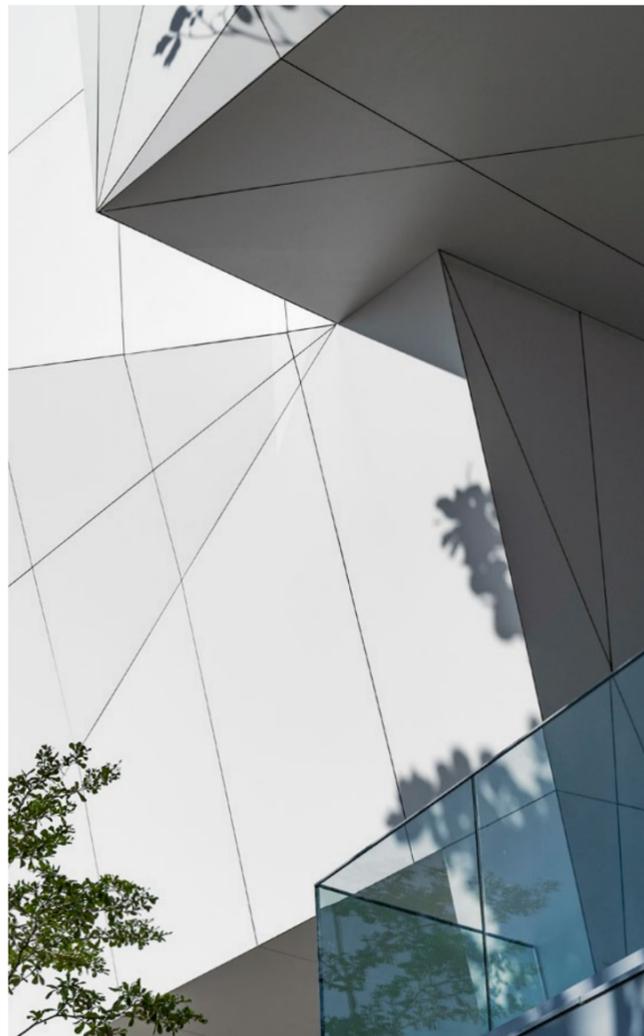
which allowed the execution of large plans, needs that the architectural project required to enhance the polished shape of the base. The durability and easy maintenance of the product also influenced the choice, not just thinking about creating something beautiful, but because it is functional and lasts for a long time.

The color was also due to the shape and the application by the sea. Bringing beauty, lightness and durability. Dekton® is resistant to salt spray, sun, rain and wind, it is easy to apply due to its light weight, in addition to the size of the sheets, which made it easy to fit onto the sides of the facade, achieving a "cut" appearance.

## Volumetric facade

The facade is very interesting from a constructive point of view, highlighting both its cutting and volumetrics. To achieve the fascinating interplay of broken planes and angles, a chemical anchoring system (DKC) was used on a framework of metal profiles.

This gluing system includes a range of cleaning and priming products to ensure proper adhesion of the double-sided tape and adhesive line to both the Dekton panel and the supporting profile. It is imperative that the system is comprehensive, validated by the supplier and applied by qualified fitters in strict accordance with the product application guide.



CASE STUDY

# Rebouças

Pinheiros, São Paulo, Brazil

**Material**

3,000 m<sup>2</sup> Dekton Kovik

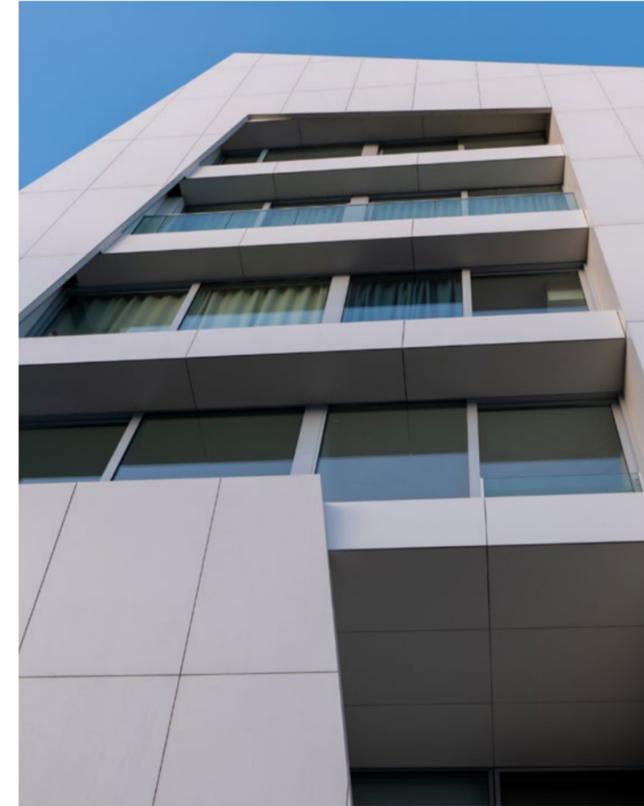
**Facade system**

DKC

**Thickness**

8 mm





CASO PRÁCTICO

## MeuseView in Visé

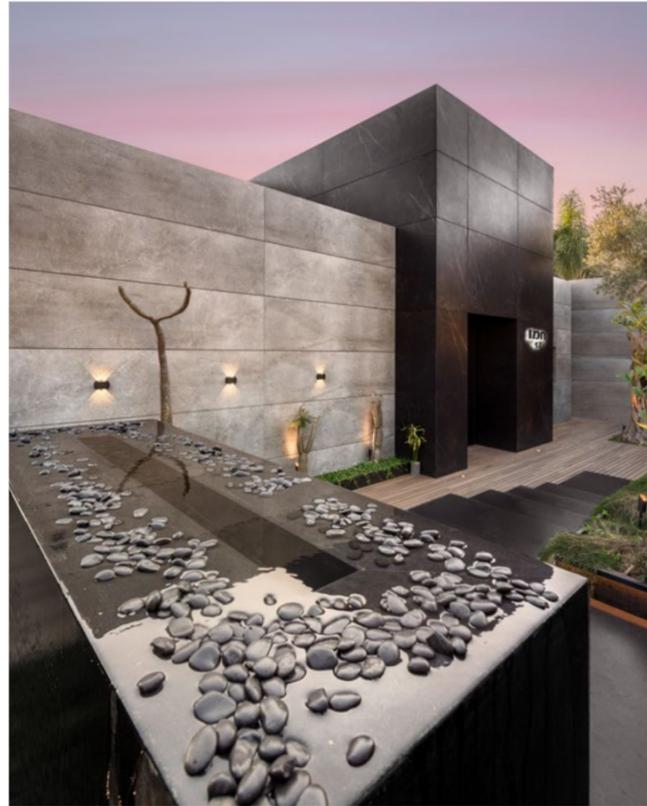
Hermalle-sous-Argenteau.  
Belgium

**Material**  
8,800 m<sup>2</sup> Dekton Nayla

**Facade system**  
DKC

**Thickness**  
8 mm





CASE STUDY

## Rosh Hanikra

Rosh Hanikra, Israel

### Materials

400 m<sup>2</sup>  
Dekton Kelya  
Dekton Soke

### Facade system

DKC

### Thickness

8 mm





Villa in Yio Chu Kang, Singapore

DK B**Direct adhesion**

The DKB system is a glued facade system, without format limitations and where 8mm thickness is commonly used. Each piece is applied directly to the cladding, thanks to a layer of improved cement based adhesive applied according to the technique

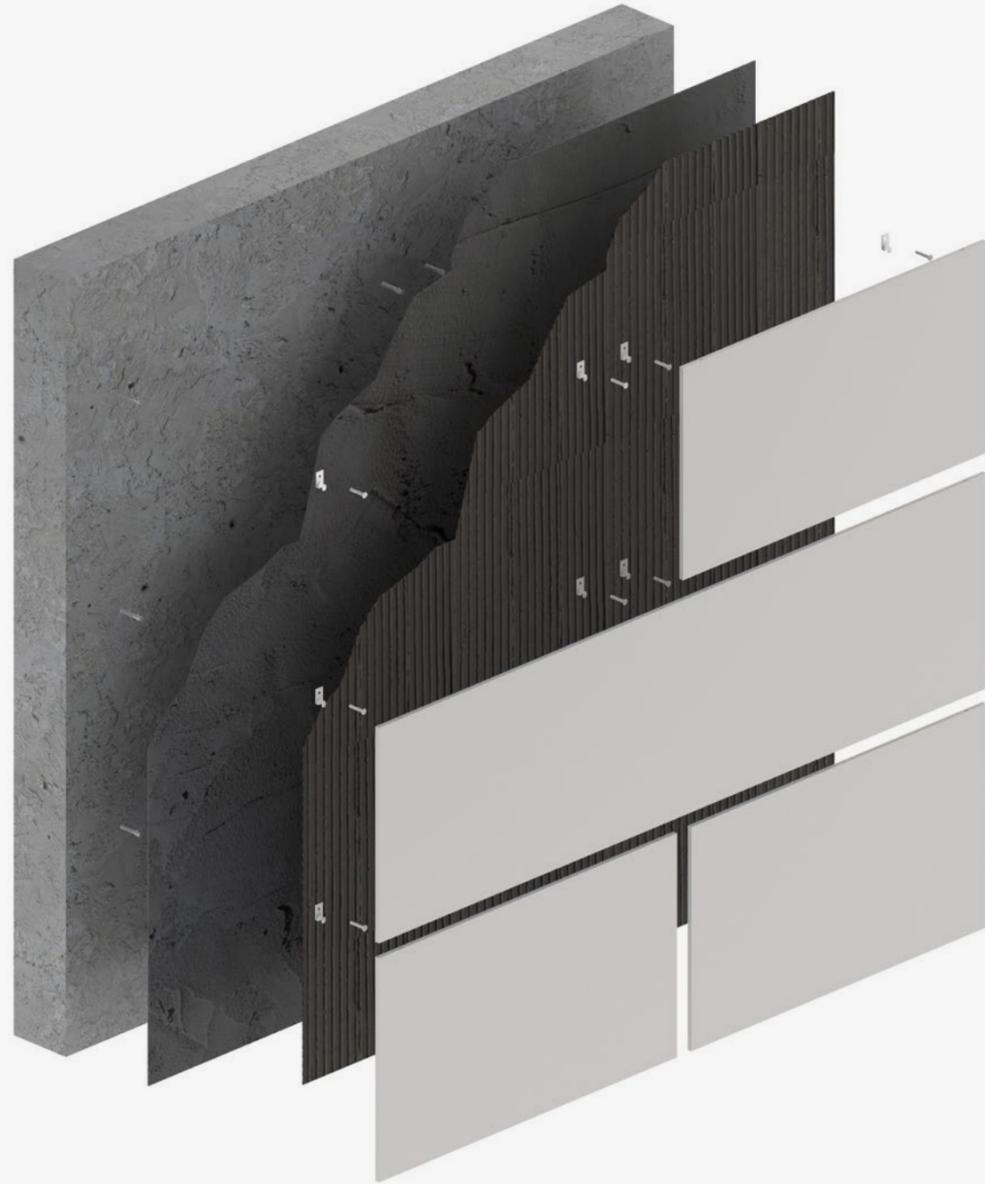
of double gluing on the support and back of the piece, leaving horizontal and vertical joints of at least 3 mm. Generally, the use of hidden security clips is always recommended (and is compulsory in some places according to local standards), slotting the edge



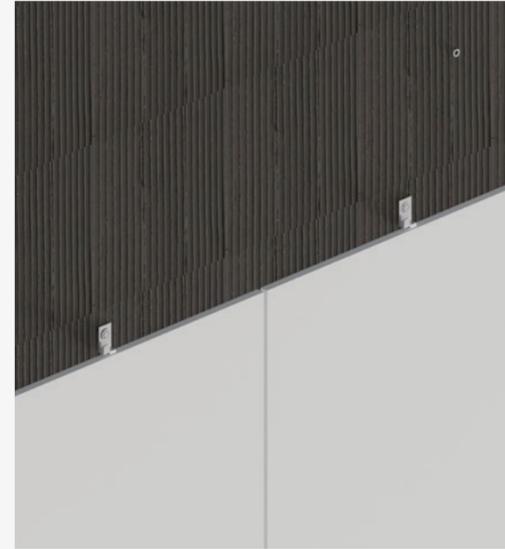
of the piece or making a regular groove on the back, and always following the local regulations applicable to each project.

Fixing with cement-based adhesive.





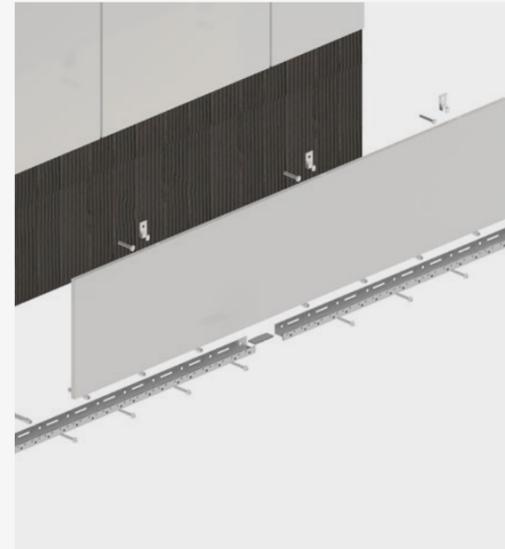
Joint



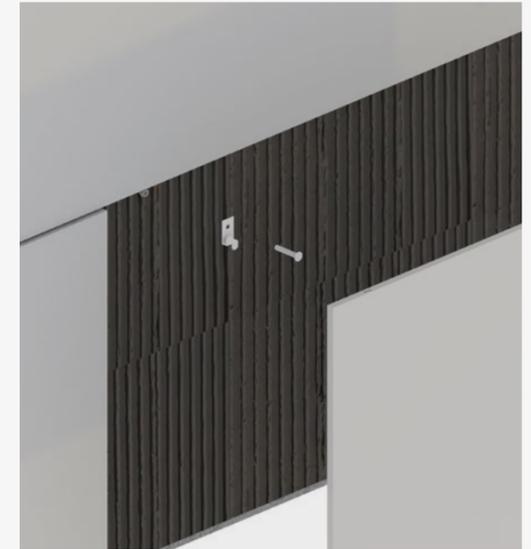
Detail of system layers



Bottom



System detail



CASE STUDY

# Ferrara Stone Headquarter

Piana degli Albanesi, Palermo.  
Italy

## Materials

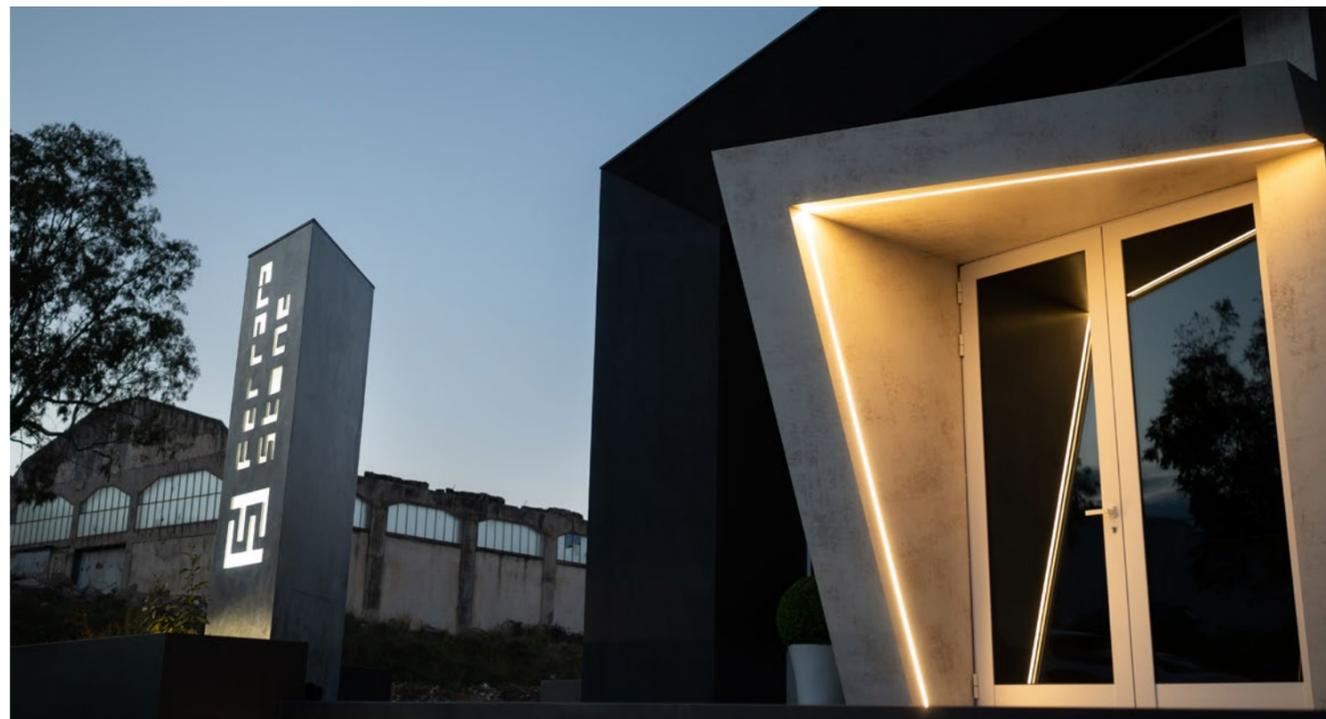
264 m<sup>2</sup>  
Dekton Nilium, Bromo and Orix

## Facade system

DKB

## Thickness

8 mm



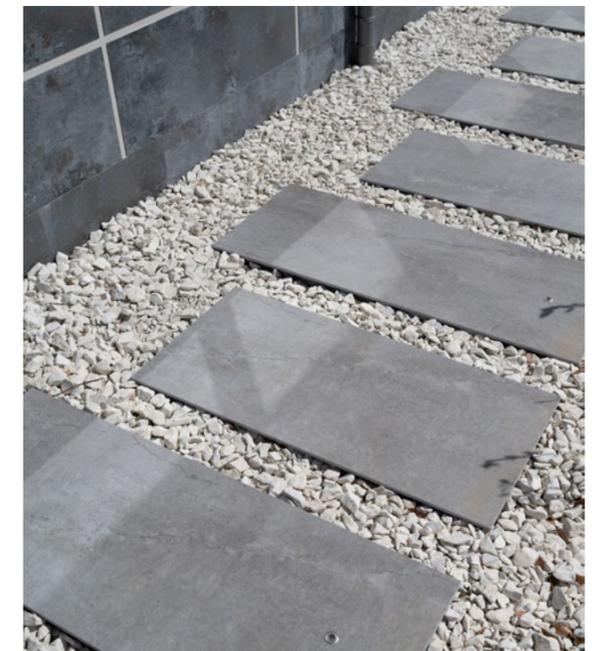


The company's new offices were inaugurated in 2023, an expansion and strengthening in line with constant commitment and attention towards technological innovation; a 150 kW photovoltaic system has been created which allows the company to be 60% self-sufficient in terms of energy and at a technological level it has inserted new machinery for production.



### A facade in Dekton Nilium and Dekton Bromo

Both for the interior and exterior of its new headquarters, Ferrara Stone has chosen Cosentino materials. Starting from the outside, the facade in Dekton Nilium and Bromo immediately stands out, as do the cladding of the side facades in Dekton Orix and the flooring in Bromo. Furthermore, Dekton Orix was used to cover a pillar where the company logo has been placed.





CASE STUDY

# Costa Rica's Legislative Assembly

San José. Costa Rica

**Material**

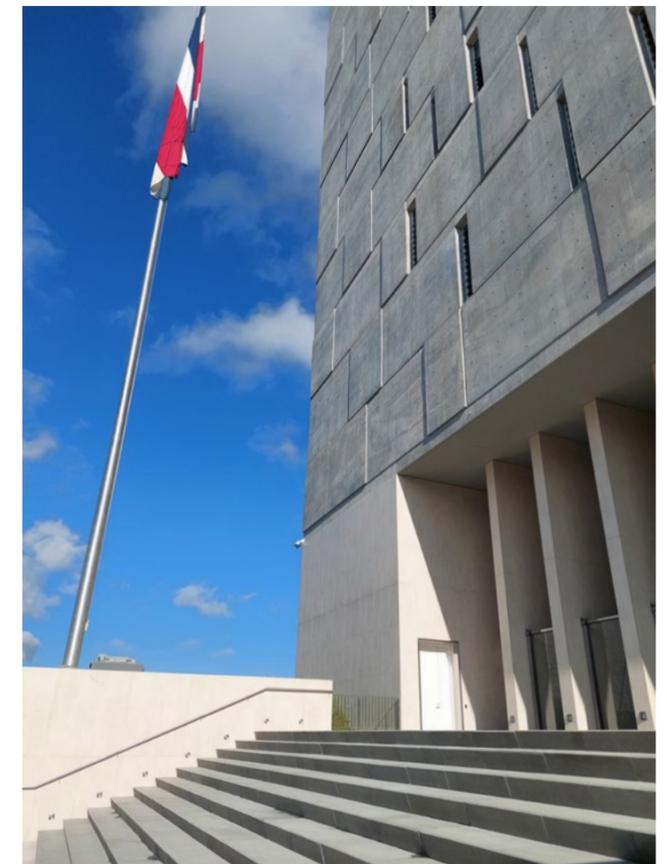
3,500 m<sup>2</sup> Dekton Blanc Concrete

**Facade system**

DKB

**Thickness**

8 mm



CASE STUDY

# Verdizela Villa

Corroios. Portugal

**Materials**

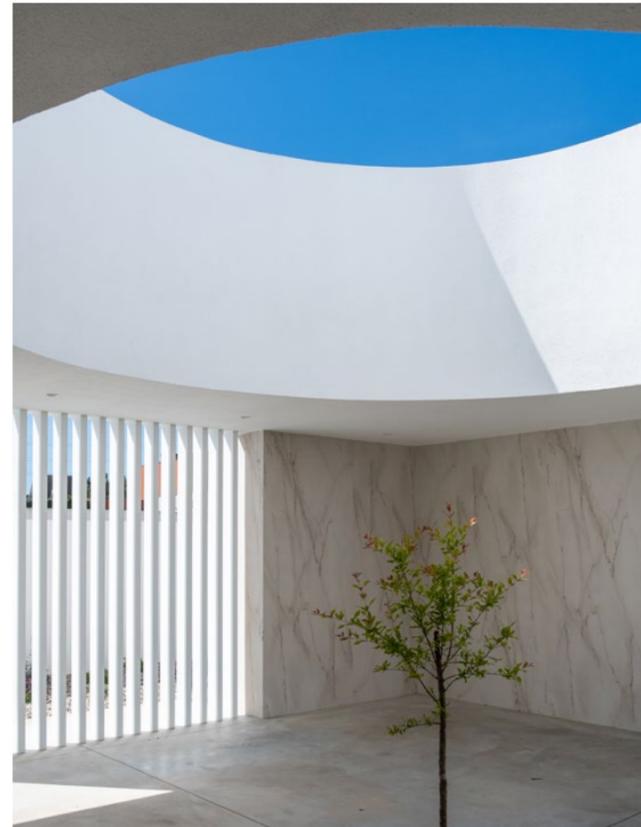
327 m<sup>2</sup> Dekton Rem and Aeris

**Facade system**

DKB

**Thickness**

4 mm





CASE STUDY

# La Gramoia

Girona, Spain

**Materials**

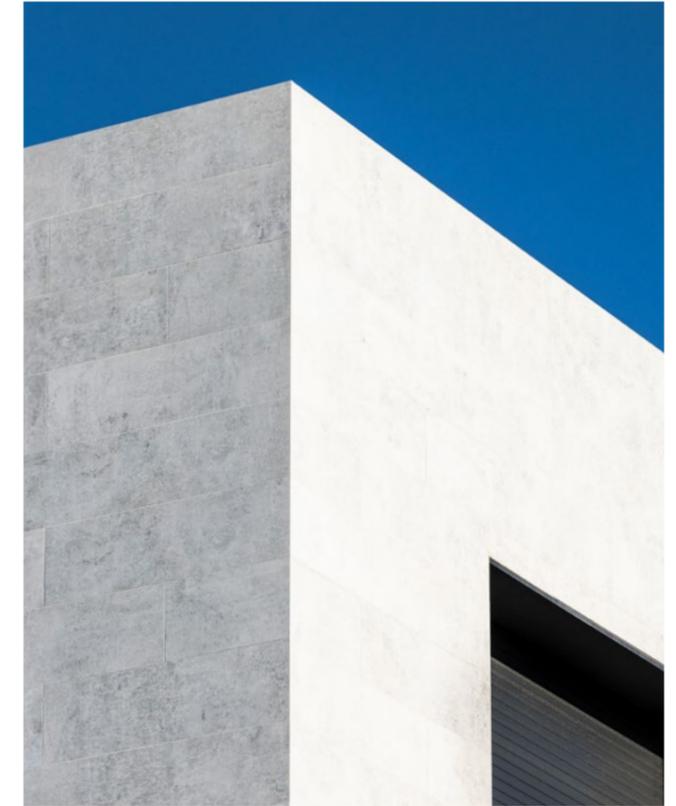
700 m<sup>2</sup> Dekton Lunar and Bromo

**Facade system**

DKB

**Thickness**

8 mm





CASE STUDY

# Zen Leaf

Lombard, IL. USA

**Material**

111 m<sup>2</sup> Dekton Domoos

**Facade system**

DKB

**Thickness**

8 mm



CASE STUDY

## Villa in Singapur

Singapore

**Material**

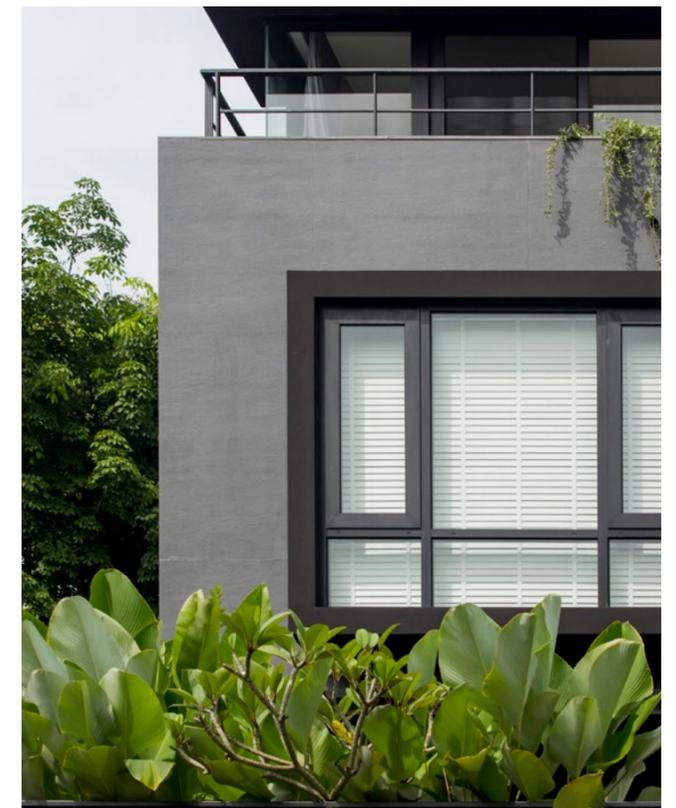
350 m<sup>2</sup> Dekton Bromo and Soke

**Facade system**

DKB

**Thickness**

12 and 20 mm





Project with DKS system: Poland

DK S

## ETICS/EIFS system

In our fast-moving world, homes undergo multiple refurbishments for aesthetic and decorative reasons as well as to create warmer indoor environments. The DKS system is an External Thermal Insulation Composite System (ETICS) clad on the outside with Dekton.

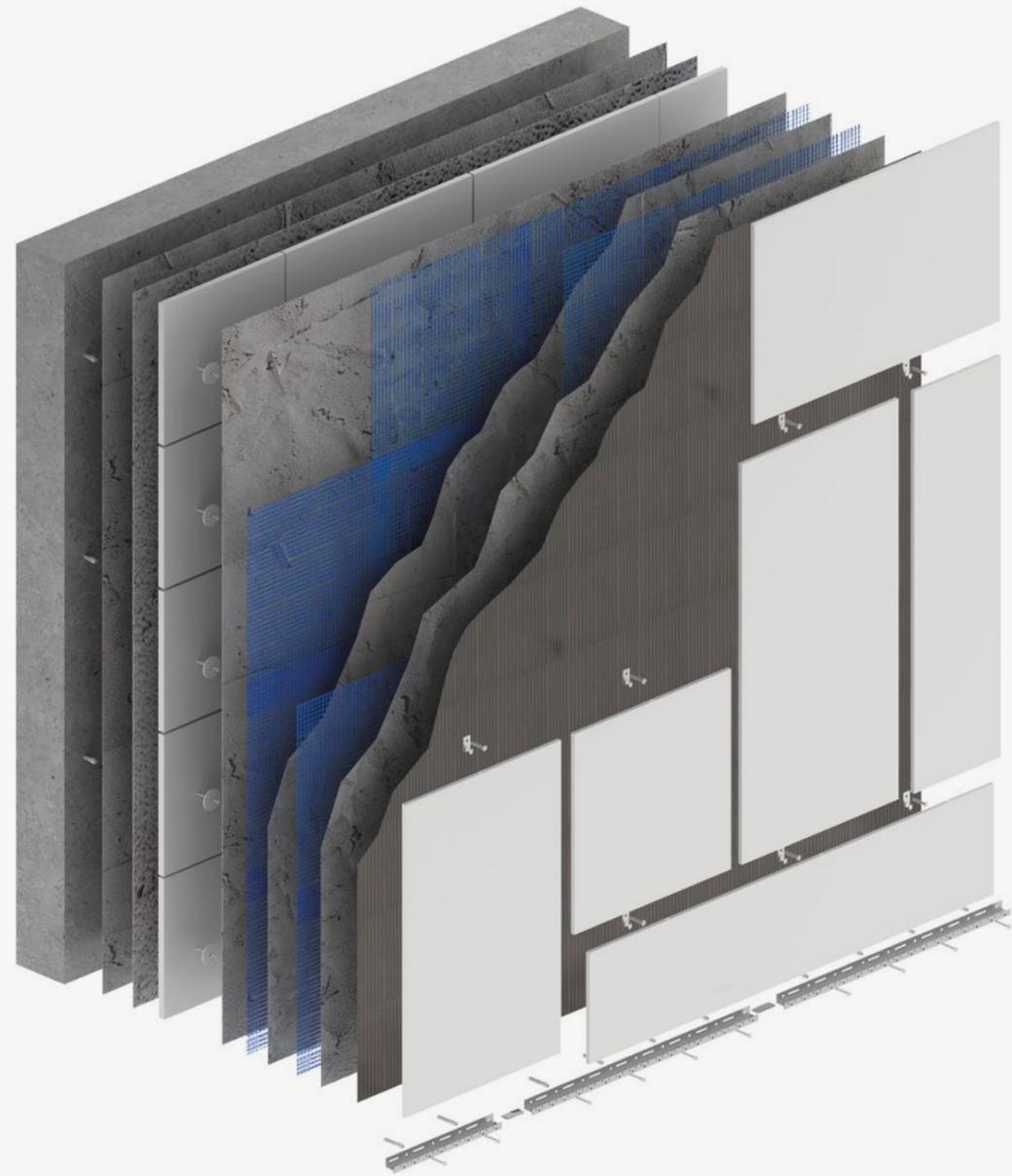
On an ETICS that is ready to be finished with cladding, Dekton is applied using a suitable cement based adhesive.



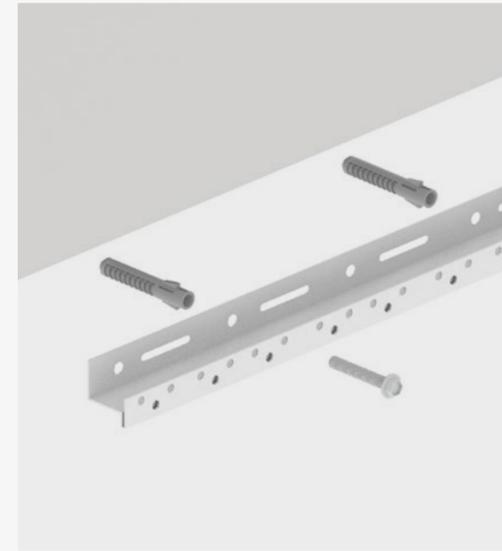
Because the pieces are adhered to the finished reinforced layer of the insulation system, there is a limit to the weight and format, which must be indicated by the ETICS supplier. The product and application instructions of the ETICS supplier must be followed to fully guarantee the application.

Fixing pieces of an external thermal insulation (ETICS) project of high energy-efficiency.

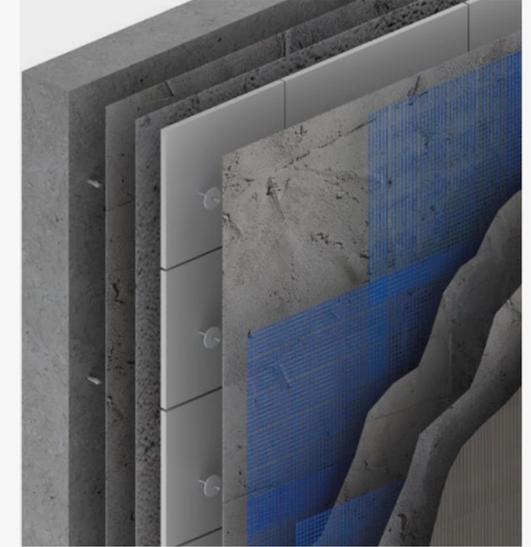




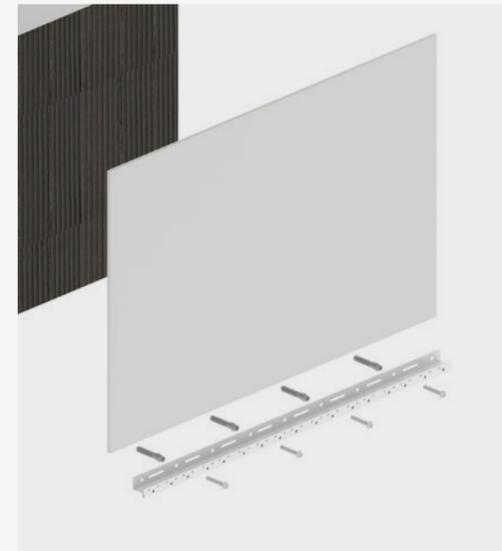
Starting profile



System detail



Bottom slab



System detail





DK CW

## Wall curtain system

A curtain wall is a non-loadbearing exterior wall cladding system consisting of linear elements that are connected to each other and anchored to the main structure of the building.

It can be divided into structural and infill elements (fixed or movable). The structural elements usually

follow a grid pattern with vertical elements or mullions fixed to the building structure to support their own weight, the forces transmitted to them by the horizontal elements or transoms, and the loads acting on the facade such as wind (suction and pressure), seismic and impact loads. The infill elements are divided into

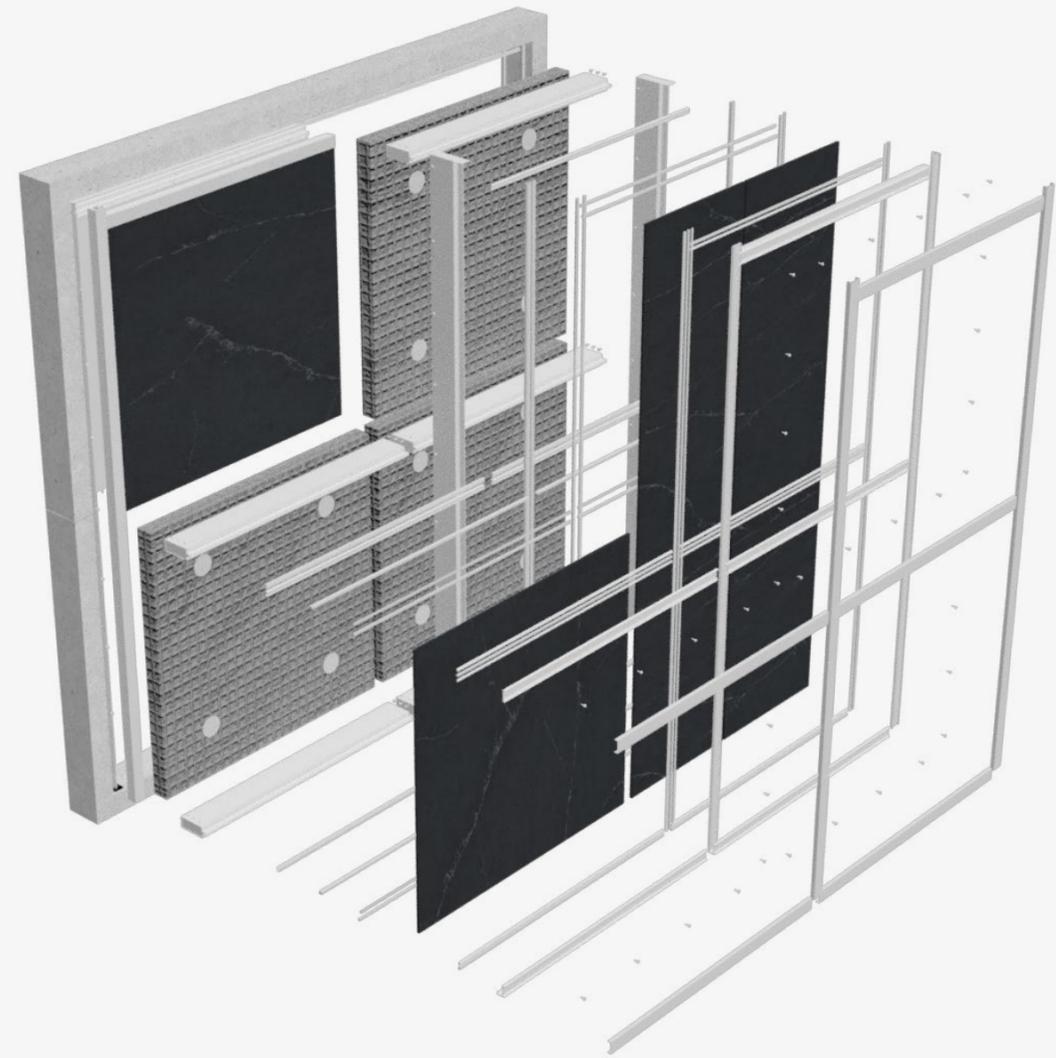


transparent or translucent and opaque, including Dekton, which can be fixed to mullions and transoms using different systems depending on the type of structure and project requirements.

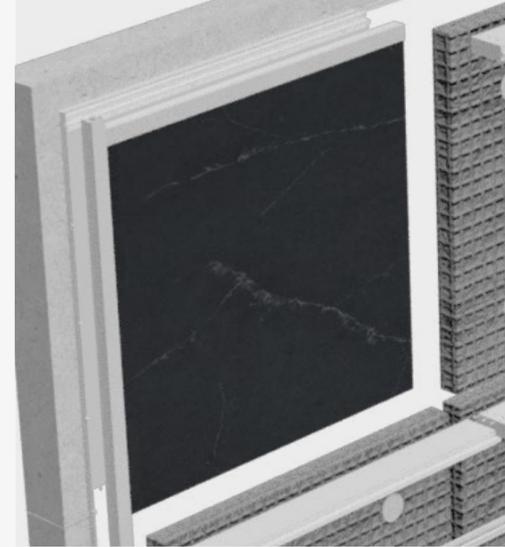
The curtain walling systems can be divided into two main types: the STICK type, with a framework of profiles with opaque and transparent areas that are transported, assembled and installed individually on site, and the UNITISED type, where all the elements are pre-assembled in the workshop and then transported and installed on site.

Depending on how they are fixed, there are two types of infill elements: those fixed with structural silicone for glazing (SSG) and those fixed with a press and cap system.

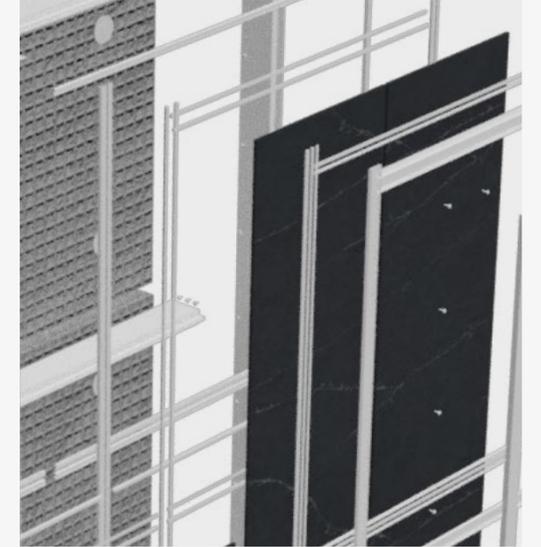




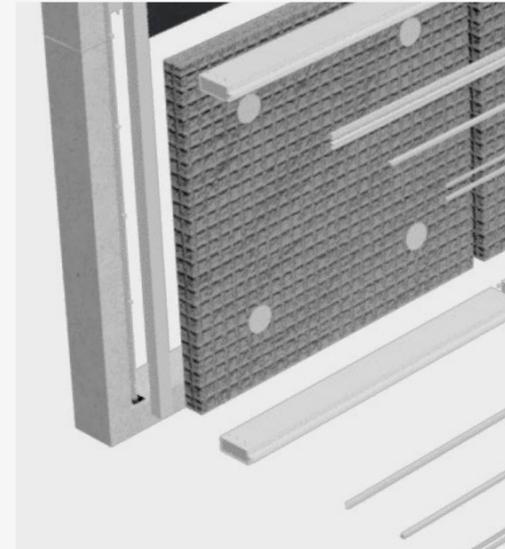
Detailed view of the system



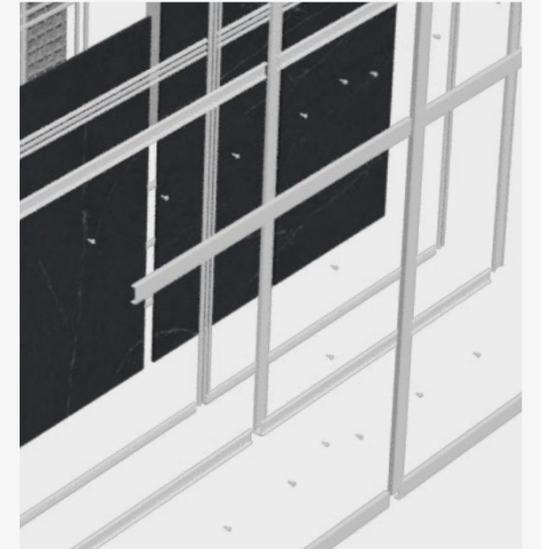
Detailed view of system layers



Start



Detailed view of system layers



CASE STUDY

# Elan Centre

Netanya, Israel

## Materials

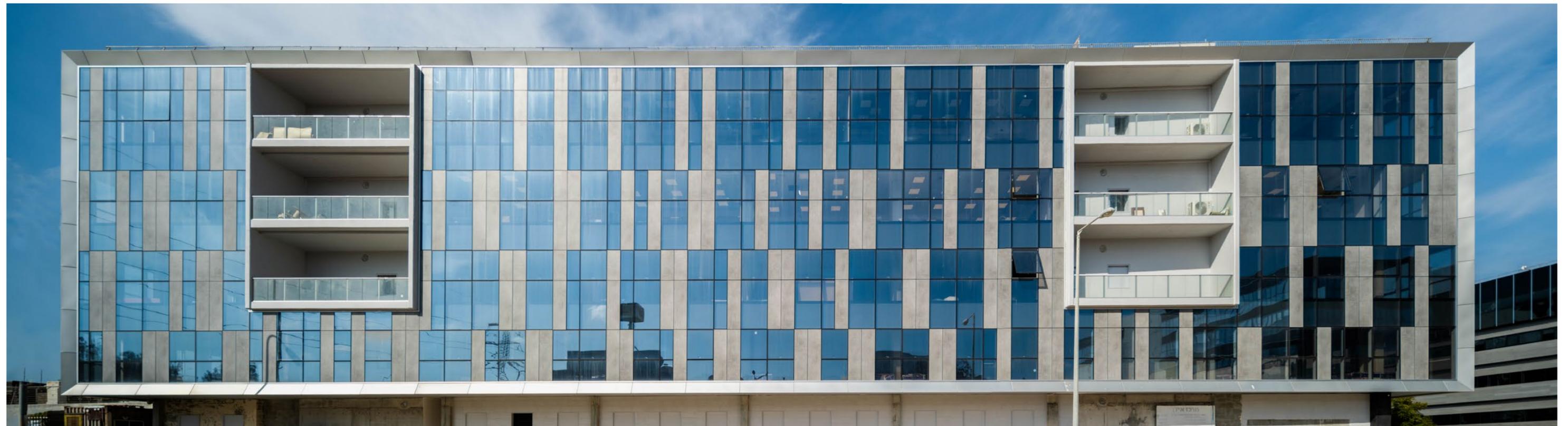
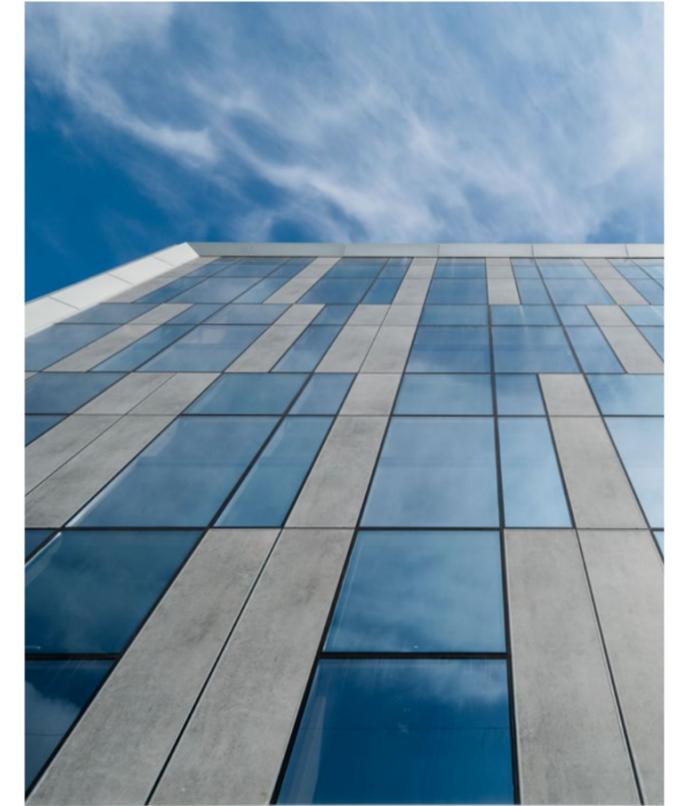
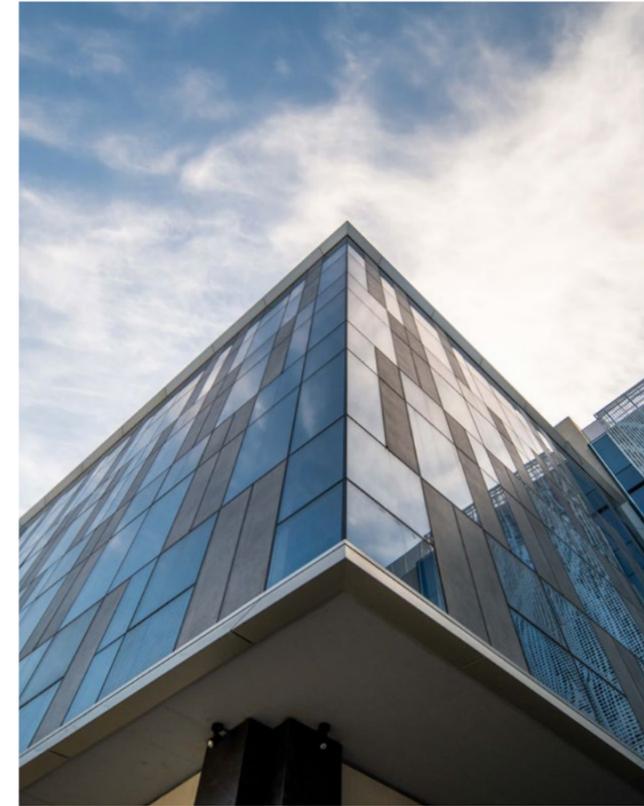
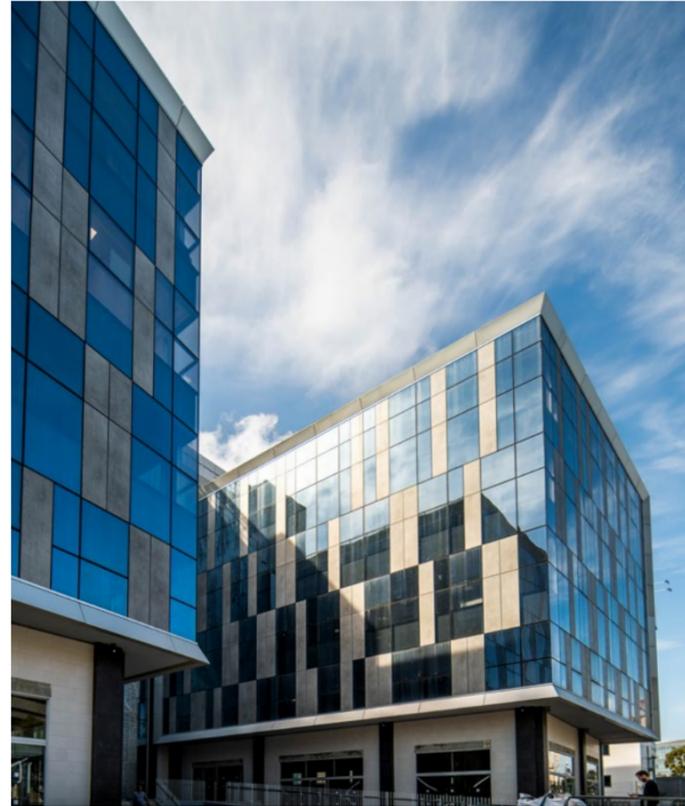
2,200 m<sup>2</sup>  
Dekton Kreta  
Dekton Lunar

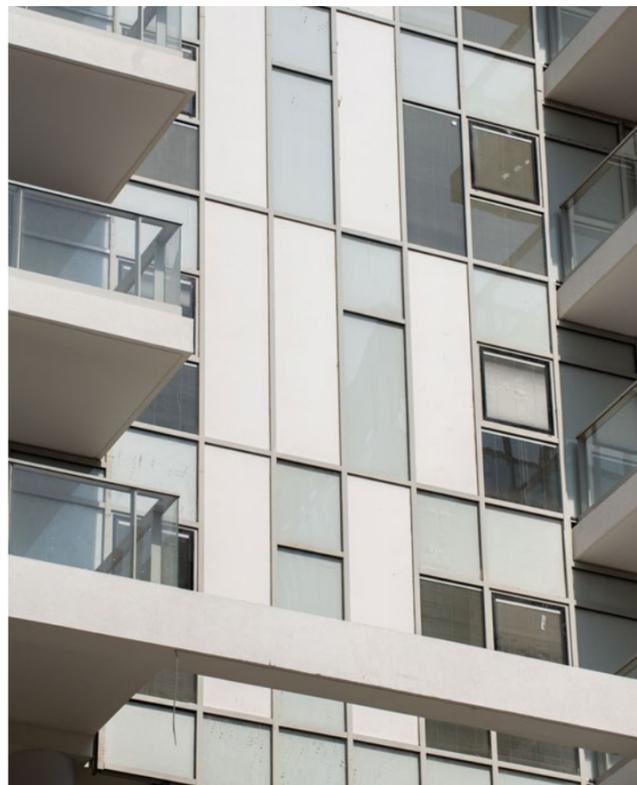
## Facade system

DKCW and DKR

## Thickness

8 mm





CASE STUDY

## Golf Project

Tel Aviv, Israel

**Material**

4,500 m<sup>2</sup> Dekton Aeris

**Facade system**

DKCW

**Thickness**

8 mm

# General conditions of Sale Cosentino Group (“Cosentino”)

## 1. Scope and validity

The present General Conditions of Sale shall be applicable provided that the parties have not agreed upon other specific conditions expressly and in writing. The same shall be of priority application, where appropriate, on the general conditions of the purchaser.

The Client acknowledges that the General Conditions of Sale have been made available to them prior to the business relations to which they may apply. The undertaking by COSENTINO of the sale of a product to the Client implies the acceptance for this, fully and without reservation, of its terms that are considered automatically and duly incorporated into the business relations between the parties.

Signing the delivery note or delivery document implies the acceptance of the present General Conditions of Sale, as well as the quality, quantity and state of the goods.

When the sale refers to Dekton panels for facades, the client acknowledges that the Conditions of Service Provision and the Technical Conditions for Facades form an indissoluble part of these General Conditions of Sale.

COSENTINO offers are not binding until a written confirmation of the order has been issued.

Orders sent by the client are binding. They may be accepted by COSENTINO within two weeks of receipt, either in writing or by delivery of the material to Client. If the order is submitted electronically and a confirmation of receipt is issued, such confirmation of receipt does not constitute a binding acceptance of the order.

## 2. Pricing

The sales prices of the products shall be those that are set in COSENTINO's offers and rates, disclosed to the Client, or alternatively the specific terms and conditions agreed upon between COSENTINO and the Client. The corresponding taxes shall be added to said prices.

COSENTINO may change the sales prices of products at any time. The increase in the sales price shall not affect those already-underway orders that have been expressly accepted by COSENTINO.

COSENTINO reserves the right to set a credit limit for each Client and subordinate deliveries on the basis of this limit and/or the presentation of an adequate payment guarantee. In the event of any delay in payment, COSENTINO may proceed to recover the goods pending payment and/or initiate appropriate legal action.

## 3. Product guarantee and delivery

COSENTINO guarantees that the products are marketed under the terms of the specific product guarantee that is made available to the Client, which the latter declares to know and accept.

The order represents an acquisition commitment for the Client,

COSENTINO reserving the right to suspend or cancel them, in cases where the provided guarantees of solvency are deemed insufficient.

The product delivery dates agreed upon with Clients shall always be merely indicative, with any delivery subject to

the availability of stock. COSENTINO shall not be liable for any non-delivery of products or delays of the same.

The Client must review the goods at the time of reception, informing COSENTINO in writing as soon as possible and, in any event, no later than seven (7) days as from the delivery date of the goods, of any external and apparent defects that they may see. The delivery of materials shall be understood as delivered by simply making them available to the purchaser, in the COSENTINO facilities.

Any exchange or return of goods consisting of full slabs that the Client may request within thirty (30) days following the receipt of the goods shall be verified and approved by COSENTINO.

Furthermore, any exchange or return of goods consisting of full slabs requested by the Client after thirty-one (31) until ninety (90) days from the date of receipt of the products must be verified and authorised by Cosentino and a refund fee equal to 25% of the price of the goods will be applied.

Returns of full slabs will not be accepted after ninety (90) days from the receipt of the products.

As a general principle, materials produced or purchased especially for the Client will not be returned.

If COSENTINO produces tools or orders them for Customer's orders and charges the incurred costs proportionately to the Customer, ownership of such tools and their accessories does not pass to the Customer, nor does the Customer have a right to their delivery. In particular, the tools will not be delivered to the Customer.

COSENTINO reserves the right to make partial deliveries. The Goods may present reasonable deviations in weights and quantities, attributable to the production processes. A deviation of up to 10% in weights and quantities is allowed.

Any costs for inspections and acceptance procedures will be borne by the Client.

## 4. Packaging and transportation

The packaging, if any, is not included in the given prices and shall be borne by the Client. The delivery, unless otherwise agreed, will be ex-works (EXW according to Incoterms 2020), with transport and unloading at Customer's expense and risk. If the transport is carried out by means, commission or management of Cosentino, it will be understood that the transport agreed upon with Cosentino is as Client's agent.

## 5. Quality and measurement

No claim will be accepted if the material has been used or subjected to any transformation, treatment, or modification process by the Client.

The measures to be recorded shall be obtained by proportionally deducting those incoming, chamfers and commercial trade in simply sawn blocks or tables and they will be true if their edges are cut to a fixed size.

In the case of natural stone, the samples provided do not mean that the supply will be absolutely identical in tone and aspect, as they are natural products, which, although carefully selected and prepared, may be subject to variations in hue, grain and composition. The variations introduced by nature in the same shall not be considered defects: no claims for this reason will be addressed. The Client may examine the product in our facilities. Any claims for differences or

defects in the material must be made by the purchaser upon delivery of the goods, or within a maximum period of eight (8) days following receipt of the same.

## 6. Terms of payment

Payments shall be made in the way and timeline established in the corresponding invoice. Notwithstanding the foregoing, and unless COSENTINO and the Client have expressly agreed otherwise, payments shall be made through a charge to the account the Client has designated for said purpose. Each time the Client places a new order, and it is accepted by COSENTINO, the customer expressly authorises COSENTINO to submit the corresponding invoice to the bank account that has been provided to COSENTINO and that is reflected in the corresponding invoice. Therefore, the Client expressly recognises that they will not have the right to request the return of the invoices from their bank corresponding to the purchases that COSENTINO draws on said current account, for breach of the conditions of article 48 of Royal Decree-Law 19/2018, of 23 November, on payment services and other urgent financial measures (“RD 19/2018”) or any other regulation that may be applicable.

In any case, and in order to avoid any doubt, the Client expressly waives the right to request the return of the charges made as a result of the invoices drawn by COSENTINO, in accordance with the provisions of Article 34 of RD 19/2018 or any other regulation that may be applicable.

The Client authorises COSENTINO to report the declarations contained in the present clause to the financial institution in which the payments are directly debited.

Notwithstanding the foregoing, COSENTINO reserves the right to claim, where it considers appropriate, the payment by other means (cheque, transfer, promissory note, etc.).

In the event of total or partial breach of the payment obligations assumed by the Client, COSENTINO shall have the right to settle the outstanding sales as well as to compensation for damages and payment of the corresponding interest. Furthermore, the Client must bear the financial and banking expenses caused by the delay in payment.

## 7. Retention of title

The Products shall remain the property of COSENTINO until any and all claims of COSENTINO arising from its business relationship with CLIENT have been paid in full.

In the case of current accounts, this retention of title shall serve as security for the claim for the balance to which COSENTINO is entitled.

Prescription, engineering, consulting and construction support services are ancillary services provided free of charge and without any obligation or responsibility on the part of COSENTINO, unless a separate additional order is made for such services and the corresponding amount is paid.

## 8. Liability

Apart from those cases derived from non-conformity of the products, any claim for damages brought by the Client when there is no gross negligence or fraud is expressly excluded. The contractual liability of COSENTINO is limited to the purchase value of the products. Under no circumstance shall COSENTINO be financially liable to the Client for loss of profit, income lost, costs of downtime or, in general, for losses of any kind that the Purchaser may suffer due to non-delivery or faulty delivery of the products.

The Client shall be solely liable, exempting COSENTINO where applicable, for damages stemming from the improper use, storage, preservation, processing or handling of products.

For this purpose, COSENTINO has provided the Client with all the necessary documentation and instructions for the safe and proper use of products.

Likewise, COSENTINO is exempt, with regard to third parties, of any legal, contractual or extra-contractual liability that may arise from the handling, treatment and installation of products made by companies other than COSENTINO.

The Client is responsible for complying with the existing legal provisions on the environment, and especially for the managing waste produced in the handling and processing of acquired materials or their packaging.

Therefore, COSENTINO shall have the right to modify the delivery times of the goods agreed with the corresponding client and/or these General Conditions of Sale due to circumstances beyond its scope or control, including, among others, regulatory changes, natural or social or legal conditions (restrictive regulations on foreign trade operations, changing market conditions that may restrict or substantially affect the product supply or prices, as well as unforeseen tariffs or taxes) or force majeure that are beyond its control.

## 9. Health and safety requirements

The Client will comply, at all times, with all regulations that may apply to the implementation, handling, storage, manufacturing and disposal of products marketed by COSENTINO.

Products purchased from COSENTINO may contain crystalline silica (please see the corresponding label and Safety Data Sheet). Incorrect processing of the products, or without appropriate measures for protection, may cause serious illness, such as silicosis or lung cancer.

Consult a competent health and safety professional in order to implement the required occupational measures for containing the source of dust, such as tools with a water supply and ventilation systems that ensure air renewal.

Employers of the professionals who ultimately process the products are responsible for informing employees and ensuring that the workplace complies with the applicable local regulations for limiting occupational respirable crystalline silica exposure.

To be exact, the Client must carry out, regarding each position, periodic risk assessments in accordance with applicable sector regulations, and implement the appropriate risk control measures.

All boards are accompanied by a safety label with the identified hazards. The Safety Data Sheets, labels and the Guide to Good Practices are available in your language at [osh.cosentino.com](http://osh.cosentino.com), accessible by scanning the following QR code, at [www.cosentino.com](http://www.cosentino.com), or upon request to the manufacturer at [info@cosentino.com](mailto:info@cosentino.com).



## 10. Personal data protection

In compliance with the current legal framework in matters of data protection, we inform you that the underlying personal data of these conditions will be included in a file under the liability of COSENTINO, with registered address Ctra. Baza a Huércal – Overa, Km. 59 – 04860 Cantoria (Almería), for purposes of managing business relations. Likewise, the Parties ensure compliance with the duty of information regarding their employees whose personal data is communicated between the Parties in order to maintain and fulfil the contractual relationship. The legal basis that legitimises the processing of the data of the interested Parties is the need for the entering into and execution of this contract, as well as the lawful interest of the Controller.

The retention period of their data will be 15 years in order to comply with the legal obligations of the company. However, they may exercise their rights of access, rectification, abolition, objection, limitation and portability by means of written communication to the address provided or to the Data Protection Officer [gdpr@cosentino.com](mailto:gdpr@cosentino.com) providing a photocopy of their

Spanish National ID card or equivalent document, and indicating the right that is requested. Likewise, if they consider their personal data protection rights to be violated, they may file a claim with the Spanish Data Protection Agency ([www.aepd.es](http://www.aepd.es)) or any other entity that is competent in this matter.

The Client accepts that COSENTINO has the right to provide the Client's data in a commercial relationship to a credit insurance agency in order to contract credit insurance.

## 11. Cosentino industrial property rights

The Client acknowledges that the trademarks and trade names that identify COSENTINO and its products are and will solely and exclusively belong to COSENTINO, and that they may not claim anything or have any rights with respect to the same. Trademarks and trade names shall only be used by the Client for product marketing, clearly stating the Client's relationship with COSENTINO, that COSENTINO is the owner of the trademarks and trade names, and complying with the guidelines and requirements established by COSENTINO in all circumstances.

In that regard, the Client undertakes to not register or request the registration of any name, trademark, trade name, internet domain, social media profile, or any other form of industrial or intellectual property that contains or

resembles the trademarks or trade names that identify COSENTINO and its products in a misleading way about the origin of the products or about the Client's relationship with COSENTINO.

In the event that the Client is interested in the design, implementation or use of a web page for the promotion and marketing of COSENTINO products, prior written authorisation by COSENTINO shall be required to

agree upon the characteristics, design and contents of the same, as well as the domain name that will be used for this purpose, in detail. To the contrary, COSENTINO shall be empowered to demand that the Client cease using said web page at any time.

Furthermore, COSENTINO may require that the Client use any of COSENTINO's web pages instead of alternative web pages.

If, for any reason, the Client registers any name, domain, trademark, social media profile or trade name that contains, is equal to or similar to the trademarks and trade names registered or used by COSENTINO, the Client will be obliged to immediately transfer the ownership of said records to COSENTINO upon the formal request of and at no cost to the latter.

The Client shall not use any trademark, trade name or copyright of COSENTINO as a part of its company name or trade name.

COSENTINO reserves all proprietary rights, patent rights, design rights and copyrights with respect to images,

drawings, designs, details, cost estimations and other documents. This also applies to any document designated as "confidential". The express written consent of Cosentino is required before such documents may be disclosed to third parties.

## 12. Assingment

COSENTINO shall be entitled to transfer or assign in favour of third parties the manufacturing and delivery of the goods as well as assign the delivery of any other services under these General Conditions of Sale.

## 13. Applicable law and jurisdiction

The present General Conditions of Sale shall be subject to Spanish law or that law that would be applicable to the commercial relationship between the Cosentino subsidiary that carries out the sale and the Client.

In case of discrepancies regarding the interpretation, application or execution thereof or dispute regarding the terms set forth in these general conditions, the Parties agree to submit to the jurisdiction of the courts and tribunals of the city of Almería or those courts that may be competent to settle any dispute between the Cosentino subsidiary and the Client. Notwithstanding, COSENTINO may request any measure seeking to satisfy its interests before a different court.

COSENTINO and the Client agree to the non-applicability of the United Nations Convention on Contracts for the International Sale of Goods (CISG) or Vienna Sales Convention.

*"The client undertakes not to market the products supplied by Cosentino to individuals or legal entities (hereinafter, "Persons"), or entities in which such Persons have an ownership stake or control, that (i) appear as persons sanctioned by laws, regulations, directives, judgements, programmes or restrictive measures with regards to international economic-financial sanctions imposed by the United Nations, the European Union, including the Kingdom of Spain, or any other Member State whose regulations on Sanctions are applicable. This includes the Office of Financial Sanctions Implementation (OFSI) of the Her Majesty's Treasury (HMT) of the United Kingdom and/or the U.S. Department of the Treasury's Office of Foreign Assets Control (OFAC) (hereinafter, "Sanctioned Persons"); (ii) have an ownership stake in or control a Sanctioned Person; (iii) act directly or indirectly for or on behalf of a Sanctioned Person; (iv) are constituted, located or with an operating headquarters or resident in a country or territory, or whose government is recorded in laws, regulations, directives, judgements, programmes or restrictive measures with regards to international economic-financial sanctions imposed by the United Nations, European Union, the Kingdom of Spain, the OFSI of HMT and/or the OFAC (hereinafter, "Sanctions"); (v) maintain business relationships or carry out transactions with Clients that involve the transfer of funds from or to countries, territories or jurisdictions subject to Sanctions."*

# Technical conditions of Dekton facades

This document outlines the technical conditions for the specific use of Dekton for facades, including the limitations on the use of the materials and systems supplied by Cosentino.

## 1. Dekton slab: specifications and finishes

The technical specifications of the Dekton panel can be found in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later. Performance may vary slightly depending on the technical families of finishes chosen (Families I, II, III and IV), so it is recommended to analyse the performance per range before making a final choice.

The four families of finishes are listed in Annex N of ETA 14/0413 issued by ITeC on 20/07/2020. The performance of each family of finishes is listed in the 'Declaration of Performance No. 092013DK' document, updated as of January 2019.

The environmental impact of Dekton panels is described in the Environmental Product Declaration (EPD). S-P-00916 – Version 2, last updated 09/12/2021.

The colour stability of Dekton finishes has been evaluated using accelerated ageing tests. The results are included in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later.

The specifications of the Dekton facade system when used as a ventilated facade with mechanical fixings are set out in the European Technical Assessment ETA 14/0413 issued by ITeC on 20/07/2020. The system designer shall refer to

sections 1, 2 and 3 of such document for the technical description of the system, its specifications for use and its performance.

In the event that the fixing solution proposed by the project designer differs from that described in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, Cosentino recommends that the verification tests contained in the European Assessment Document EAD 090062-00-0404 be carried out: Kits for mechanically fixed exterior facade cladding.

## 2. Limitations on use, cutting, handling, assembly and transport

Depending on the expected impact on the panels, the recommended edge finish for Dekton panels will vary. See the table of recommendations in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later.

The use of flat L- or U-shaped Dekton panels for facades is not recommended due to the concentration of stress in the inner corners. See the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later.

When drilling holes in the panels, holes must first be drilled in the corners of the hole. The minimum distances from the holes to the edge of the panel must be maintained. See the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later.

Three-dimensional pieces can be created by mechanically assembling return parts with straight or bevelled

edges on ventilated facades. Please refer to the limitations contained in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later.

Corners between adjacent facades can be made as indicated in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later.

## 3. Impact category

The impact resistance of Dekton facade surfaces varies according to their thickness and family. This value is given in section 3.5 of Dekton ETA 14/0413 dated 18/01/2022. The panels were subjected to a series of hard and soft body impacts at different energy levels. The results place Dekton in impact category IV for thicknesses of 12 mm or 20 mm.

Category IV: The degree of exposure in use should be a zone out of reach from ground level.

It is the responsibility of the project engineer to decide which facade construction solution is ultimately chosen for a specific project.

## 4. Fixings used in Dekton panels and their limitations of use

The Dekton facade panel allows for various mechanical fixing systems to the substructure. The fixing systems can be hidden (DKT1, DKT2 and DKT3) or visible (DKT4 and DKR). There are also gluing systems such as chemical (DKC), mixed (DKBG), with cement-based adhesives (DKB) or on external ETICS type insulation (DKS). However, not all of

these fixing systems are suitable for use on ventilated facades. Please refer to the limitations contained in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later.

The instructions and limitations of use for each type of fixing system on the back of the panel, as set out in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later, and in the relevant ETA standards, must be followed:

→ DKT1 System: Manual and Annex 2 of ETA 14/0413

→ DKT2 System: Manual and Annex 2 of ETA 14/0413

→ DKT3 System: Manual and Annex 2 of ETA 14/0413

→ DKT4 System: Manual

→ DKR system: Manual

→ DKBG system: Manual

→ DKC system: Manual

→ DKB system: Manual

→ DKS system: Manual

In the event that the fixing solution proposed by the project designer and facade contractor differs from that described in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, Cosentino recommends that the verification tests contained in the European Assessment Document EAD 090062-00-0404 be carried out: Kits for mechanically fixed exterior facade cladding.

## 5. Adhesive fixings for cladding panels

For glued fixings, whether chemical (DKC), mixed (DKBG), with cement-based adhesives (DKB) or on external ETICS type insulation (DKS), the installer must strictly adhere to all the criteria and limitations for design, calculation, placement patterns, cleaning, surface preparation, pre-priming, gluing process, tapes and temperature of use specified in the Dekton manuals and in the technical documentation of the adhesive suppliers.

As these are products not manufactured by Cosentino, the installer must request technical documentation from the supplier of the adhesive and its ancillary components for each gluing system.

## 6. Substructure, slab support and anchors and their limitations of use

The general instructions for the substructure and its anchoring to the main structure of the building, as described in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later, must be followed.

In the case of ventilated facades, the general instructions for the substructure and its anchoring to the main structure of the building, as described in the Cosentino Facade Manual and in Annex 4 of ETA 14/0413, dated 20/07/2020, must also be followed.

In the case of joints between facade panels, the structural and thermal movement joints of the building must be respected, as recommended in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later.

## 7. Other materials supplied by Cosentino and their limitations of use

Cosentino can supply the customer with materials that are not manufactured by Cosentino but are part of the facade design, such as fixings, glues, adhesives, structural profiles, anchors or thermal insulation elements, among others.

In this case, it is the sole responsibility of the customer to use these materials in accordance with the technical instructions of their suppliers.

Cosentino shall not be held responsible for any failure on the part of the customer to comply with the technical data sheets, product specifications and limitations on the use of materials manufactured by other companies and supplied by Cosentino for use in facades.

## 8. On-site installation

The instructions and recommendations given in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023) and later, must be followed.

In the case of ventilated facades, the general installation instructions, as described in the Cosentino Facade Manual and in Annex 4 of ETA 14/0413, dated 20/07/2020, must also be followed.

## 9. Reaction to fire and fire transmission through the air gap

Within the limits of liability set out in the agreement, an aggregate limit of €100,000 shall apply in respect of claims relating to the combustibility of the facade cladding or panels, the insulation material and its fixing systems, or claims relating to the fire safety of any air gap barrier or fire compartmentation (or lack thereof) on the building facade.

## 10. Quality requirements (QA/QC)

It is the responsibility of the project designer to specify the quality requirements for the execution of the facade, which may include requirements for dimensions, flatness, testing, sampling, etc. The quality requirements to be met will depend on the geographical location of the project.

If there are no specific quality requirements for facades in the project drawn up by the architect, and if the requirements to be followed by the facade contractor are not specified, Cosentino will follow the quality requirements set out in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023). In the absence of other standards, Cosentino recommends that the facade contractor follow the quality criteria of the Centre for Window and Cladding Technology (CWCT) in its 'Guide to good practice for facades', section 'Quality'.

In particular, Cosentino requires the customer to validate the production drawings and the final product prior to loading and shipment.

Cosentino's quality team checks the finished product and assists with the reception of the piece/material by its technicians for each project.

## 11. Facade maintenance and cleaning

It is the responsibility of the project designer to specify the maintenance and cleaning requirements of the facade throughout its life cycle. In any case, Cosentino recommends that the requirements for final cleaning of the job, maintenance, cleaning and conservation set out in the Dekton Facades Maintenance and Cleaning document be followed.

## 12. Reference standard according to geographical area

It is the responsibility of the project designer to specify the reference standards to be followed in the development of the facade solutions, including requirements for wind load, impact resistance, fixings, durability, reaction to fire, fire resistance, etc. The technical standards to be met will depend on the geographical location of the project.

If there is no specific standard for facades in the project drawn up by the architect, and if the standard to be followed by the facade contractor is not specified, Cosentino will follow the European standard for its calculations, checks and recommendations. In particular, the European Assessment Document EAD 090062-00-0404 shall be taken into account: Kits for mechanically fixed exterior facade cladding and the European and international reference standards listed in section 4 of both documents, together with all their Annexes.

## 13. Health and Safety (H&S) requirements

It is the responsibility of the project designer to specify the health and safety requirements to be met in the

development of the facade solutions. These requirements will depend on the country in which the project site is located.

If there are no health and safety requirements for facades in the project drawn up by the architect, and if these are not specified by the facade contractor, Cosentino will follow the health and safety requirements indicated in the Cosentino Facade Manual – Cosentino Facade Fixing Systems, rev. 08 (March 2023).

## 14. Liability

Engineering, site and installation support (if applicable) are services for which Cosentino is liable only if a separate order for such services is placed and paid for. In this case, Cosentino's civil liability (general and professional) towards the customer shall be limited to the amount invoiced for these services.

## 15. Dekton brand

Only those facade elements that have been manufactured exclusively from Dekton components in accordance with the current Cosentino facade manuals can be branded as Dekton. The use of construction components other than those recommended by Cosentino in its manuals shall render this right null and void. Furthermore, Dekton test reports relating to such units will no longer be valid.

## 16. Supplementary conditions

These Technical Conditions for Facades supplement, but do not replace, Cosentino's General Terms and Conditions of Sale and Terms and Conditions for the Provision of Services, in the version in force at the time of prescription or sale. These three documents apply to the ancillary services of facade prescription, consultancy and installation (where applicable).

# Notes for Dekton prescription on facades

This note is joint and severally supplied together with the preliminary study or specific documentation issued to the architects for their project at design stage. For future deliverables during design stage, this note will be understood as delivered and accepted by the architects and will also be valid for any of the deliverables that would be sent to the architects during that stage.

The drawings supplied by Cosentino, if any, have been drawn up based on information received by Cosentino and sent by the designer. Cosentino is not responsible for the accuracy and scope of the information received, whether in dimensions, orientation, height, or others. The plans are not drawn for installation; their objective is to give indications to the designer about the application of Dekton on the facade during the development of the project.

The calculations supplied by Cosentino, if any, have been prepared based on the information received by Cosentino and sent by the designer. Cosentino is not responsible for the accuracy and scope of the information received, whether in dimensions, orientation, height, or others. Calculations are not made for installation; their objective is to give indications and limitations to the designer on the application of Dekton on the facade during the development of the project.

For the **impact resistance** of a facade cladding, please refer to the European approved document "Kits for external wall claddings mechanically fixed". Dekton surfaces on facades have an impact resistance that varies according to their thickness and their family. This information is included in section 3.5 of the ETA 14-0413 dated 18.01.2022, issued by Dekton. The panels have been subjected to a series of hard body and soft body impacts at different energy levels. The results classify Dekton in the impact category IV for thicknesses of 12mm or 20mm. Category IV: The degree of exposure to use must be an area out of reach from ground level. The responsibility for the decision of the built solution of the facade to be adopted in the specific project falls on the designer.

The facade study carried out by Cosentino Technical Team, in accordance with the instructions received, has focused on what was requested, which can be one of these four options: a) Dekton panels without reference to their fixing system; (b) Dekton panels for adhered attachment to a continuous surface; (c) Dekton panels excluding fastening substructure; or (d) Dekton panels including a fastening substructure.

The facade study carried out by Cosentino Technical Team is complemented by the following documents, which are an inseparable part of the study:

- [ETA 14-0413 certification, dated 18.01.2022, for ventilated \(not adhered\) facades.](#)
- [Dekton Environmental Product Declaration.](#)
- [Technical Manual of Dekton Facades.](#)
- [Maintenance and Cleaning requirements for Dekton Facades.](#)
- [25-year Dekton Facades warranty.](#)
- [Conditions of Provision of Services \(CPS\)](#)
- [Technical Conditions of Facades \(TCF\)](#)

We recommend that the designer consult the Cosentino **Manuals, Certificates and Tests** for Dekton facades, accessible on the web, <https://www.cosentino.com/professional/technical-documentation> and/or with the Technical Department of Cosentino.

# Dekton Warranty

Cosentino has a specific team from the Quality Department, trained to provide on-site support. In addition, we have our Dekton Trainers. Their mission is to provide training and the certification of workshops for the proper preparation of materials.

Cosentino offers a 25-year material guarantee on its Dekton facades executed anywhere in the world and offers its clients, if necessary, all its support and project monitoring services so that they are executed according to the highest quality standards.



\*Warranty subject to the terms and conditions of the "Dekton Facades Warranty" to be requested from Cosentino Global, S.L.U.

## COSENTINO®

Ctra. Baza a Huércal-Overa, km 59 / 04850  
Cantoria - Almería (España) / Tel.: +34 950 444 175  
info@cosentino.com / www.cosentino.com



\* To obtain more information about colours with an NSF certificate please visit [www.nsf.org](http://www.nsf.org)

Rev: 11 06/2024