

Technical Data Sheet

DEKTON® | DEKTON® XGLOSS | DEKTON® GRIP/GRIP+
FAMILIES I - II - III - IV

Family I

Dekton®: Bromo, Domoos, Eter, Fossil, Kelya, Keon, Keranium, Kira, Kovik, Kreta, Laos, Laurent, Liquid Embers, Micron, Orix, Sirius, Sirocco, Soke, Somnia, UMBER, Valterra, Vk04 Grafite, Zentum.

Family II

Dekton®: Daze kC, Laguna kC, Marina kC, Morpheus kC, Neural kC, Opera kC, Portum kC, Rem kC, Reverie kC, Uyuni kC, Zenith kC.

Dekton® XGloss: Awake kC, Bergen kC, Halo kC, Limbo kC, Lucid kC, Malibu kC, Olimpo kC, Salina kC, Trance kC, Vigil kC.

Family III

Dekton®: AERIS, Albarium 22, Argentium, Aura 22, Danae, Edora, Entzo 22, Gk07 Ceppo, Kairos 22, Liquid Shell 22, Liquid Sky 22, Lunar 22, Mooné, Nacre, Nilium 22, Sasea, Tk05 Sabbia, Tk06 Marmorio, Vk01 Nebbia, Vk02 Avorio, Vk03 Grigio.

Dekton® XGloss: Arga, Dunna, Helena 22, Khalo, Natura 22, Rio Branco, Taga, Tundra 22.

Family IV

Dekton®: Radium, Trilium.

According to EN 14411, EN 16165, ANSI A137.1, ANSI A326.3, ISO 13006

All the data collected in this document are based on the results of periodic tests on representative products of each Technical Family carried out in accredited external laboratories.

This *Technical Data Sheet* applies to thicknesses 8 mm, 12 mm, 20 mm and 30 mm.

Name and address of manufacturer

Company: Cosentino Industrial, S.A.U.

Address: Carretera A-334, km 59, 04850 Cantoria (Almeria) - Spain

**TECHNICAL
CONTENT**

REV. 26 - 11/2023

Dekton® Technical Data Sheet

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

	Thickness	Unit	Family I	Family II	Family III	Family IV
Weight	8 mm	Kg/m ² [lb/ft ²]	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 ²	55	53	50	50
Breaking strength	12 mm	N	4,992	4,616	4,947	4,509
Flexural resistance		N/mm ²	54	48	54	49
Breaking strength	20 mm	N	14,174	13,708	13,629	13,614
Flexural resistance		N/mm ²	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 ³	2.51	≤ 2.43	2.53	2.44
	Apparent density	g/cm ³	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 ³	125	106	115	119
Determination of linear thermal expansion EN ISO 10545-8	Expansion 30 - 100 °C	10 ⁻⁶ · °C ⁻¹	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 ₄ / Cleaning products	Type	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)

→ (*) Tested thickness: 12 mm.

(n/c) Does not classify.

(N/A) Does not apply.

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
Resistance to staining EN ISO 10545-14	Green agent		5	5	5	5
	Iodine (solution)	Class	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 ³	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 ⁻⁶ · °C ⁻¹	6.10	5.11	5.69	5.78
Water absorption ASTM C373	-	%	0.0	0.0	0.0	0.0
		Class	Impervious	Impervious	Impervious	Impervious
Crazing resistance ASTM C424	-	-	No crazing observed	No crazing observed	No crazing observed	No crazing observed
Bond strength ASTM C482	-	psi	189	367	133	409
Edge and diagonal warpage ASTM C485	Edge warpage	%	- 0.01 / 0.01	0 / 0.04	- 0.01 / 0.02	- 0.01 / 0.03
		in	0 / 0	0 / 0.01	0 / 0.01	0 / 0.01
	Diagonal warpage	%	- 0.02 / 0	0 / 0.04	- 0.01 / 0.01	- 0.02 / 0.03
		in	- 0.01 / 0	0 / 0.01	0 / 0	- 0.01 / 0.01
Facial dimensions and thickness 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
Wear resistance (Taber abrasion) ASTM C501	Average wear resistance index	-	182.2	337	240	239
Wedging ASTM C502	Average wedging	%	0	0	0	0
		in	0	0	0	0
Breaking strength ASTM C648	Average breaking strength	lbf	1,192	1,176	1,171	1,138
	Minimum breaking strength		1,144	1,070	1,067	1,013

→ (*) Tested thickness: 12 mm.

(n/c) Does not classify.

(N/A) Does not apply.

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
Chemical resistance ASTM C650	Common cleaning chemicals		Class A	Class A	Class A	Class A
	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
	Swimming pool chemicals		Class A	Class A	Class A	Class A
	Sodium hypochlorite sol., 20 mg/L	-	Not affected	Not affected	Not affected	Not affected
	Acids and bases		Class A	Class A	Class A	Class A
	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	
Flexural strength ASTM C880	Flexural strength (dry conditions)	psi	3,471	3,594	3,520	3,058
	Flexural strength (wet conditions)		3,030	3,045	3,172	2,817
Resistance to freeze-thaw cycling ASTM C1026	-	-	Not affected	Not affected	Not affected	Not affected
Resistance to deep abrasive wear ASTM C1243	Average resistance	mm ³	82.6	65	76.4	87.3
	Maximum resistance		89.1	72	83.1	95.3
Resistance to staining ASTM C1378			Class A	Class A	Class A	Class A
	Contrasting grout		Not affected	Not affected	Not affected	Not affected
	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
Water absorption, open porosity and density 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 ³		≤ 2.43	2.53	
	Apparent density	g/cm ³		≤ 2.43	2.53	
Flexural tensile strength or modulus of rupture EN ISO 10545-4	Average flexural resistance	N/mm ²		45	55	
	Average break load	N	N/A	2,313	2,356	N/A
	Average break strength	N		13,559	13,818	
Impact resistance EN ISO 10545-5	Coefficient of restitution (COR)	-	N/A	0.85	0.85	N/A
Resistance to deep abrasion EN ISO 10545-6	Wear volume	mm ³	N/A	106	115	N/A
Determination of linear thermal expansion EN ISO 10545-8	Expansion 30 - 100 °C	10 ⁻⁶ · °C ⁻¹	N/A	5.1	6.3	N/A
Thermal shock resistance EN ISO 10545-9	Damage	-	N/A	Pass/ no damage	Pass/ no damage	N/A
Moisture expansion EN ISO 10545-10	Maximum expansion	mm/m	N/A	0.1	0.1	N/A
	Average expansion			0.0	0.0	
Frost resistance EN ISO 10545-12	Damage	-	N/A	Pass/ no damage	Pass/ no damage	N/A
Resistance to chemicals EN ISO 10545-13	CINH ₄ / Cleaning products	Type	N/A	A (no damage)	A (no damage)	N/A
	Bleach / Swimming pool salts			A (no damage)	A (no damage)	
Resistance to staining EN ISO 10545-14	Green agent			5	5	
	Iodine (solution)	Class	N/A	5	5	N/A
	Olive oil			5	5	
Absorption and bulk specific gravity ASTM C97	Average absorption	%	N/A	0.04	0.04	N/A
	Bulk specific gravity	lb/ft ³		159.6	150.9	
Modulus of rupture* 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	
Compressive strength* ASTM C170	Compressive strength (dry conditions)	psi	N/A	38,864	52,955	N/A
	Compressive strength (wet conditions)			42,980	20,648	
Moisture expansion ASTM C370	-	%	N/A	0.003	0.001	N/A
Water absorption ASTM C373	-	% Class	N/A	0.0 Impervious	0.0 Impervious	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	
Linear thermal expansion ASTM C372	-	10 ⁻⁶ · °C ⁻¹	N/A	5.11	5.69	N/A	
Crazing resistance ASTM C424	-	-	N/A	No crazing observed	No crazing observed	N/A	
Bond strength ASTM C482	-	psi	N/A	367	133	N/A	
Facial dimensions and thickness 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		
Wear resistance (Taber abrasion) ASTM C501	Average wear resistance index	-	N/A	337	240	N/A	
Wedging ASTM C502	Average wedging	%	N/A	0	0	N/A	
		in		0	0		
Breaking strength ASTM C648	Average breaking strength	lbf	N/A	1,176	1,171	N/A	
	Minimum breaking strength			1,070	1,067		
Chemical resistance ASTM C650	Common cleaning chemicals			Class A	Class A		
		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	
		Swimming pool chemicals			Class A	Class A	
		Sodium hypochlorite sol., 20 mg/L	-	N/A	Not affected	Not affected	N/A
		Acids and bases			Class A	Class A	
		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		
Flexural strength ASTM C880	Flexural strength (dry conditions)	psi	N/A	3,594	3,520	N/A	
	Flexural strength (wet conditions)			3,045	3,172		

→ (*) 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
Resistance to freeze-thaw cycling ASTM C1026	-	-	N/A	Not affected	Not affected	N/A
Resistance to deep abrasive wear ASTM C1243	Average resistance	mm ³	N/A	71.1	74.2	N/A
	Maximum resistance			77.4	77.4	
Resistance to staining ASTM C1378	Contrasting grout	-	N/A	Class A Not affected	Class A Not affected	N/A
	Carbon lamp black			Not affected	Not affected	
	Waterproof ink (black)			Not affected	Not affected	
	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® Slipperiness

According to ISO 13006, EN 14411, EN 16165, ANSI A137.1 and ANSI A326.3 standards

	EN 16165 (Annex C AN A) UNE 41901 EX (PTV wet)	EN 16165 (Annex B) DIN 51130	EN 16165 (Annex A) DIN 51097	ANSI A326.3 (DCOF wet)
Gk07 Ceppo, Tk05 Sabbia, TK06 Marmorio, Vk01 Nebbia, Vk02 Avorio, Vk03 Grigio, Vk04 Grafite	15 < Rd < 35 (Class 1)	R9	A	≥ 0,42
Danae, Edora, Kelya, Keon, Kovik, Laos, Liquid Sky 22, Lunar 22, Micron, Nacre, Nilium 22, Radium, Sasea, Sirocco, Umber, Valterra	15 < Rd < 35 (Class 1)	R9	n/c	≥ 0,42
Aeris, Argentium, Albarium 22, Aura 22, Bromo, Domoos, Entzo 22, Eter, Fossil, Kairos 22, Keranium, Kreta, Kira, Laurent, Liquid Embers, Mooné, Neural <u>k</u> C, Orix, Rem <u>k</u> C, Sirius, Soke, Somnia, Trilium, Uyuni <u>k</u> C, Zenith <u>k</u> C, Zentum	15 < Rd < 35 (Class 1)	n/c	n/c	≥ 0,42
Daze <u>k</u> C, Laguna <u>k</u> C, Liquid Shell 22, Marina <u>k</u> C, Morpheus <u>k</u> C, Opera <u>k</u> C, Portum <u>k</u> C, Reverie <u>k</u> C	Rd < 15 (Class 0)	n/c	A	≥ 0,42
Arga, Awake <u>k</u> C, Bergen <u>k</u> C, Dunna, Halo <u>k</u> C, Helena 22, Khalo, Limbo <u>k</u> C, Lucid <u>k</u> C, Malibu <u>k</u> C, Natura 22, Olimpo <u>k</u> C, Rio Branco, Salina <u>k</u> C, Taga, Trance <u>k</u> C, Tundra 22, Vigil <u>k</u> C	Rd < 15 (Class 0)	n/c	n/c	≤ 0,21
→ (*) Tested thickness: 12 mm. (n/c) Does not classify. (N/A) Does not apply.				

Dekton® Grip Slipperiness

According to ISO 13006, EN 14411, EN 16165, ANSI A137.1 and ANSI A326.3 standards

	EN 16165 (Annex C AN A) UNE 41901 EX (PTV wet)	EN 16165 (Annex B) DIN 51130	EN 16165 (Annex A) DIN 51097	ANSI A326.3 (DCOF wet)
Aeris, Albarium 22, Danae, Lunar 22, Nacre, Sasea, Vk01 Nebbia	Rd > 45 (Class 3)	R10	B	≥ 0,55
→ (*) Tested thickness: 12 mm. (n/c) Does not classify. (N/A) Does not apply.				

Dekton® Grip+ Slipperiness

According to ISO 13006, EN 14411, EN 16165, ANSI A137.1 and ANSI A326.3 standards

	EN 16165 (Annex C AN A) UNE 41901 EX (PTV wet)	EN 16165 (Annex B) DIN 51130	EN 16165 (Annex A) DIN 51097	ANSI A326.3 (DCOF wet)
Aeris, Albarium 22, Argentium, Bromo, Danae, Gk07 Ceppo, Keon, Kreta, Lunar 22, Nacre, Sasea, Soke, Vk02 Avorio, Vk03 Grigio	Rd > 45 (Class 3)	R11	C	≥ 0,60
→ (*) Tested thickness: 12 mm. (n/c) Does not classify. (N/A) Does not apply.				