COSENTINO

Technical Data Sheet

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

Family I

Dekton®: Bromo, Domoos, Eter, Fossil, Kelya, Keon, Kira, Kovik, Kreta, Laos, Laurent, Micron, Sirius, 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, Salina kC, Trance kC, Vigil kC.

Family III

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

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

Family IV

Dekton®: 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. 27 - 01/2024

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/m² [lb/ft²]	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/mm²	55	53	50	50
Breaking strength	**12 mm**	N	4,992	4,616	4,947	4,509
Flexural resistance		N/mm²	54	48	54	49
Breaking strength	**20 mm**	N	14,174	13,708	13,629	13,614
Flexural resistance		N/mm²	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/cm³	2.51	≤ 2.43	2.53	2.44
	Apparent density	g/cm³	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	mm³	125	106	115	119
Determination of linear thermal expansion EN ISO 10545-8	Expansion 30 - 100 °C	$10^{-6} \cdot °C^{-1}$	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	$ClNH_4$ / 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	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^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	-	$10^{-6} \cdot °C^{-1}$	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)	%	N/A	0.1	0.1	N/A
	Open porosity	%		0.2	0.2	
	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	N/A	45	55	N/A
	Average break load	N		2,313	2,356	
	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	$10^{-6} \cdot °C^{-1}$	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	$ClNH_4$ / 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	Class	N/A	5	5	N/A
	Iodine (solution)			5	5	
	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	-	%	N/A	0.0	0.0	N/A
		Class		Impervious	Impervious	

→ (*) 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	-	$10^{-6} \cdot °C^{-1}$	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	%	N/A	0.08	0.07	N/A
	Maximum variation from average	%		- 0.06	0.04	
	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**	-	N/A	**Class A**	**Class A**	N/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)			Not affected	Not affected	
	Phosphoric acid, 3% (v/v)			Not affected	Not affected	
	Phosphoric acid, 10% (v/v)			Not affected	Not affected	
	Sulfamic acid, 30 g/L			Not affected	Not affected	
	Sulfamic acid, 100 g/L			Not affected	Not affected	
	Swimming pool chemicals			**Class A**	**Class A**	
	Sodium hypochlorite sol., 20 mg/L			Not affected	Not affected	
	Acids and bases			**Class A**	**Class A**	
	Hydrochloric acid sol., 3% (v/v)			Not affected	Not affected	
	Hydrochloric acid sol., 18% (v/v)			Not affected	Not affected	
	Potassium hydroxide, 30 g/L			Not affected	Not affected	
	Potassium hydroxide, 100 g/L			Not affected	Not affected	
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	
				Class A	**Class A**	
Resistance to staining ASTM C1378	Contrasting grout	-	N/A	Not affected	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 kC, Tk05 Sabbia kC, TK06 Marmorio kC, Vk01 Nebbia kC, Vk02 Avorio kC, Vk03 Grigio kC, Vk04 Grafite	15 < Rd < 35 (Class 1)	R9	A	≥ 0,42
Danae kC, Kelya, Keon, Kovik, Laos, Lunar 22 kC, Micron, Nacre kC, Nilium 22 kC, Sasea kC, Umber, Valterra	15 < Rd < 35 (Class 1)	R9	n/c	≥ 0,42
Aeris kC, Argentium kC, Albarium 22 kC, Aura 22 kC, Bromo, Domoos, Entzo 22 kC, Eter, Fossil, Kairos 22 kC, Kreta, Kira, Laurent, Mooné kC, Neural kC, Rem kC, Sirius, Soke, Somnia, Trilium, Uyuni kC, Zenith kC, Zentum	15 < Rd < 35 (Class 1)	n/c	n/c	≥ 0,42
Daze kC, Laguna kC, Liquid Shell 22 kC, Marina kC, Morpheus kC, Opera kC, Portum kC, Reverie kC	Rd < 15 (Class 0)	n/c	A	≥ 0,42
Arga kC, Awake kC, Bergen kC, Dunna kC, Halo kC, Helena 22 kC, Khalo kC, Limbo kC, Lucid kC, Malibu kC, Natura 22 kC, Rio Branco, Salina kC, Taga kC, Trance kC, Vigil kC	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 kC, Albarium 22 kC, Danae kC, Lunar 22 kC, Nacre kC, Sasea kC, Vk01 Nebbia kC	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 kC, Albarium 22 kC, Argentium kC, Bromo, Danae kC, Gk07 Ceppo kC, Keon, Kreta, Lunar 22 kC, Nacre kC, Sasea kC, Soke, Tk05 Sabbia kC, Vk01 Nebbia kC, Vk02 Avorio kC, Vk03 Grigio kC, Vk04 Grafite	Rd > 45 (Class 3)	R11	C	≥ 0,60

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