

## DEKTON TECHNICAL DATA SHEET

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



# DEKTON TECHNICAL DATA SHEET

## Family I

Dekton®: Bromo, Domoos, Eter, Kelya, Keon, Kira, Kovik, Kreta, Laos, Laurent, Sirius, Soke, Somnia, Umber, Valterra, Grafite, Zentum.

## Family II

Dekton®: Daze kC, Laguna kC, Marina kC, Morpheus kC, Neural kC, Opera kC, Polar kC, Portum kC, Rem kC, Reverie kC, Sandik kC, Trevi 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®: Aeri kC, Adia kC, Albarium 22 kC, Argentium kC, Aura 22 kC, Ava kC, Avorio kC, Ceppo kC, Danae kC, Entzo 22 kC, Grigio kC, Kairos 22 kC, Lunar 22 kC, Mooné kC, Nacre kC, Nara kC, Nebu kC, Nebbia kC, Marmorio kC, Oschner kC, Sabbia kC, Silver 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 standards EN 14411, EN 16165, ANSI A137.1, ANSI A326.3, ISO 13006

All data in this document are based on spot tests carried out in external, accredited and independent laboratories on representative batches.

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 (Almería) - Spain

# DEKTON® TECHNICAL DATASHEET

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

	Thickness	Ud	Family I	Family II	Family III	Family IV
Weight	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]

Flexure EN ISO 10545-4 Tested format: 200 x 200 mm	Thickness	Ud	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	Ud	Family I	Family II	Family III	Family IV
Water absorption, open porosity and densities 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
	Relative bulk density	g/cm <sup>3</sup>	2,51	≤ 2,43	2,53	2,44
	Bulk density	g/cm <sup>3</sup>	2,50	≤ 2,43	2,53	2,44
Impact resistance EN ISO 10545-5	Average coefficient of restitution	-	0,85	0,85	0,85	0,92
Resistance to deep abrasion EN ISO 10545-6	Abrasion volume	mm <sup>3</sup>	125	106	115	119
Determination of linear thermal expansion EN ISO 10545-8	Dilatation between 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
Dilatation due to humidity EN ISO 10545-10	Maximum expansion	mm/m	0,1	0,1	0,1	0,1
	Minimum 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
Chemical resistance EN ISO 10545-13	C <sub>INH4</sub> / 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)

→ ( \* ) Thickness tested: 12 mm ( n/a ) Does not qualify.

( N/A ) Not applicable.

# DEKTON® TECHNICAL DATASHEET

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

Test   Standard	Determination	Ud	Family I	Family II	Family III	Family IV
<b>Resistance to stains</b> EN ISO 10545-14	Green agent		5	5	5	5
	Iodine (solution)	Class	5	5	5	5
	Olive oil		5	5	5	5
<b>Absorption and apparent specific gravity</b> ASTM C97	Average absorption	%	0,05	0,04	0,04	0,03
	Specific bulk density	lb/ft <sup>3</sup>	157,3	159,6	150,9	154,4
<b>Modulus of rupture</b> ASTM C99	Modulus of rupture (dry)	psi	7.918	7.821	8.144	7.510
	Modulus of rupture (wet)		7.948	7.573	7.251	6.705
<b>Expansion by humidity</b> ASTM C370	-	%	0,003	0,003	0,001	0,005
<b>Linear thermal expansion</b> ASTM C372	-	10 <sup>-6</sup> · °C <sup>-1</sup>	6,10	5,11	5,69	5,78
<b>Water absorption</b> ASTM C373	-	%	0,0	0,0	0,0	0,0
		Class	Impervious	Impervious	Impervious	Impervious
<b>Cracking resistance</b> ASTM C424	-	-	No crazing observed	No crazing observed	No crazing observed	No crazing observed
<b>Strength of adhesion</b> ASTM C482	-	psi	189	367	133	409
<b>Edge and diagonal deformation</b> ASTM C485	Edge deformation	%	- 0,01 / 0,01	0 / 0,04	- 0,01 / 0,02	- 0,01 / 0,03
		inches	0 / 0	0 / 0,01	0 / 0,01	0 / 0,01
	Diagonal deformation	%	- 0,02 / 0	0 / 0,04	- 0,01 / 0,01	- 0,02 / 0,03
		inches	- 0,01 / 0	0 / 0,01	0 / 0	- 0,01 / 0,01
<b>Facial dimensions and thickness</b> ASTM C499	Maximum nominal variation	%	0,05	0,08	0,07	0,09
	Maximum variation from the mean	%	- 0,05	- 0,06	0,04	- 0,08
		inches	0,008	0,012	0,019	0,013
	Thickness (range)					
<b>Resistance to wear (Taber abrasion)</b> ASTM C501	Average index of wear resistance	-	182,2	337	240	239
<b>Planarity (wedge effect)</b> ASTM C502	Average flatness	%	0	0	0	0
		inches	0	0	0	0
<b>Breaking strength</b> 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

→ ( \* ) Thickness tested: 12 mm ( n/a ) Does not qualify.

( N/A ) Not applicable.

# DEKTON® TECHNICAL DATASHEET

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

Test   Standard	Determination	Ud	Family I	Family II	Family III	Family IV
<b>Resistance chemical</b> ASTM C650	<b>Everyday cleaning products</b>		<b>Class A</b>	<b>Class A</b>	<b>Class A</b>	<b>Class A</b>
	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
	Sulphamic acid, 30 g/L		Not affected	Not affected	Not affected	Not affected
	Sulphamic 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, 3% (v/v) dissol.		Not affected	Not affected	Not affected	Not affected
	Dissol. hydrochloric acid, 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 resistance (dry)	psi	3.471	3.594	3.520	3.058
	Flexural strength (wet)		3.030	3.045	3.172	2.817
<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	Medium resistance	mm <sup>3</sup>	82,6	65	76,4	87,3
	Maximum resistance		89,1	72	83,1	95,3
<b>Resistance to stains</b> ASTM C1378			<b>Class A</b>	<b>Class A</b>	<b>Class A</b>	<b>Class A</b>
	Contrast 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

→ ( \* ) Thickness tested: 12 mm ( n/a ) Does not qualify.

( N/A ) Not applicable.

# DEKTON® XGLOSS TECHNICAL DATASHEET

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

Test   Standard	Determination	Ud	Family I	Family II	Family III	Family IV
<b>Water absorption, open porosity and densities</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	
	Apparent density	g/cm <sup>3</sup>		≤ 2,43	2,53	
<b>Flexural resistance and load breaking strength</b> EN ISO 10545-4	Average Flexural resistance	N/mm <sup>2</sup>		45	55	
	Average breaking load	N	N/A	2.313	2.356	N/A
	Average breaking strength	N		13.559	13.818	
<b>Impact resistance</b> EN ISO 10545-5	Average coefficient of restitution	-	N/A	0,85	0,85	N/A
<b>Deep abrasion resistance</b> EN ISO 10545-6	Abrasion volume	mm <sup>3</sup>	N/A	106	115	N/A
<b>Linear thermal expansion</b> EN ISO 10545-8	Dilatation between 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>Dilatation due to humidity</b> EN ISO 10545-10	Maximum expansion	mm/m	N/A	0,1	0,1	N/A
	Medium 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>Chemical resistance</b> EN ISO 10545-13	C <sub>INH4</sub> / Cleaning agents	Clase	N/A	A (no damage)	A (no damage)	N/A
	Bleach / Swimming pool salts			A (no damage)	A (no damage)	
<b>Resistance to stains</b> EN ISO 10545-14	Green agent			5	5	
	Iodine (solution)	Clase	N/A	5	5	N/A
	Olive oil			5	5	
<b>Absorption and apparent specific gravity</b> ASTM C97	Average absorption	%	N/A	0,04	0,04	N/A
	Specific bulk density	lb/ft <sup>3</sup>		159,6	150,9	
<b>Modulus of rupture</b> ASTM C99	Modulus of rupture (dry)	psi	N/A	7.821	8.144	N/A
	Modulus of rupture (wet)			7.573	7.251	
<b>Resistance to compression*</b> ASTM C170	Compressive strength (dry)	psi	N/A	38.864	52.955	N/A
	Compressive strength (wet)			42.980	20.648	
<b>Expansion by humidity</b> ASTM C370	-	%	N/A	0,003	0,001	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

→ ( \* ) Thickness tested: 12 mm ( n/a ) Does not qualify.

( N/A ) Not applicable.

# DEKTON® XGLOSS TECHNICAL DATASHEET

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

Test   Standard	Determination	Ud	Family I	Family II	Family III	Family IV
<b>Water absorption</b> ASTM C373	-	% Class	N/A	0,0 Impervious	0,0 Impervious	N/A
<b>Cracking resistance</b> ASTM C424	-	-	N/A	No crazing observed	No crazing observed	N/A
<b>Strength of adhesion</b> ASTM C482	-	psi	N/A	367	133	N/A
<b>Facial dimensions and thickness</b> ASTM C499	Maximum nominal variation	%		0,08	0,07	
	Maximum variation from the average	%	N/A	- 0,06	0,04	N/A
	Thickness (range)	inches		0,012	0,019	
<b>Resistance to wear (Taber abrasion)</b> ASTM C501	Average index of wear resistance	-	N/A	337	240	N/A
<b>Planarity (wedge effect)</b> ASTM C502	Average flatness	%		0	0	
		inches	N/A	0	0	N/A
<b>Breaking strength</b> ASTM C648	Average breaking strength	lbf	N/A	1.176	1.171	
	Minimum breaking strength			1.070	1.067	N/A
<b>Resistance chemical</b> ASTM C650	<b>Everyday cleaning products</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	
	Sulphamic acid, 30 g/L			Not affected	Not affected	
	Sulphamic 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, 3% (v/v) dissol.			Not affected	Not affected	
Dissol. hydrochloric acid, 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)	psi	N/A	3.594	3.520	
	Flexural strength (wet)			3.045	3.172	N/A

→ ( \* ) Thickness tested: 12 mm ( n/a ) Does not qualify.

( N/A ) Not applicable.

# DEKTON® XGLOSS TECHNICAL DATASHEET

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

Test   Standard	Determination	Ud	Family I	Family II	Family III	Family IV
<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	Medium resistance Maximum resistance	mm <sup>3</sup>	N/A	71,1 77,4	74,2 77,4	N/A
				<b>Class A</b>	<b>Class A</b>	
<b>Resistance to stains</b> ASTM C1378	Contrast grout			Not affected	Not affected	
	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	
→ ( * ) Thickness tested: 12 mm ( n/a ) Does not qualify.		( N/A ) Not applicable.				

## DEKTON® SLIPPERINESS

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

	UNE-EN 16165 (Annex C AN A) UNE 41901 EX (wet PTV)	DIN-EN 16165 (Annex B)	DIN-EN 16165 (Annex A)	ANSI A326.3 (Wet DCOF)
Adia <u>kC</u> , Avorio <u>kC</u> , Ava <u>kC</u> , Ceppo <u>kC</u> , Grafite, Grigio <u>kC</u> , Marmorio <u>kC</u> , Nebbia <u>kC</u> , Nebu <u>kC</u> , Polar <u>kC</u> , Sabbia <u>kC</u> , Sandik <u>kC</u> , Trevi <u>kC</u> .	15 < Rd < 35 (Class 1)	R9	A	DCOF ≥ 0,42
Kelya, Keon, Kovik, Laos, Umber, Valterra	15 < Rd < 35 (Class 1)	R9	n/c	DCOF ≥ 0,42
Aeris <u>kC</u> , Argentium <u>kC</u> , Albarium 22 <u>kC</u> , Aura 22 <u>kC</u> , Bromo, Danae <u>kC</u> , Domoos, Entzo 22 <u>kC</u> , Eter, Kairos 22 <u>kC</u> , Kreta, Kira, Laurent, Lunar 22 <u>kC</u> , Mooné <u>kC</u> , Nacre <u>kC</u> , Nara <u>kC</u> Neural <u>kC</u> , Oschner <u>kC</u> , Rem <u>kC</u> , Silver <u>kC</u> , Sirius, Soke, Somnia, Trilium, Uyuni <u>kC</u> , Zenith <u>kC</u> , Zentum.	15 < Rd < 35 (Class 1)	n/c	n/c	DCOF ≥ 0,42
Daze <u>kC</u> , Laguna <u>kC</u> , Marina <u>kC</u> , Morpheus <u>kC</u> , Opera <u>kC</u> , Portum <u>kC</u> , Reverie <u>kC</u> .	Rd < 15 (Class 0)	n/c	A	DCOF ≥ 0,42
Arga <u>kC</u> , Awake <u>kC</u> , Bergen <u>kC</u> , Dunna <u>kC</u> , Halo <u>kC</u> , Helena 22 <u>kC</u> , Khalo <u>kC</u> , Limbo <u>kC</u> , Lucid <u>kC</u> , Malibu <u>kC</u> , Natura 22 <u>kC</u> , Rio Branco, Salina <u>kC</u> , Taga <u>kC</u> , Trance <u>kC</u> , Vigil <u>kC</u>	Rd < 15 (Class 0)	n/c	n/c	DCOF ≤ 0,21

→ ( \* ) Thickness tested: 12 mm ( n/a ) Does not qualify. ( N/A ) Not applicable.

## DEKTON® GRIP+ SLIPPERINESS

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

	EN 16165 (Annex C AN A) UNE 41901 EX (wet PTV)	DIN-EN 16165 (Annex B)	DIN-EN 16165 (Annex A)	ANSI A326.3 (Wet DCOF)
Aeris <u>kC</u> , Albarium 22 <u>kC</u> , Argentium <u>kC</u> , Danae <u>kC</u> , Grigio <u>kC</u> , Grafite, Keon, Kreta, Laurent, Lunar 22 <u>kC</u> , Marmorio <u>kC</u> , Nacre <u>kC</u> , Sabbia <u>kC</u> , Sandik <u>kC</u> , Nebbia <u>kC</u> .	Rd > 45 (Class 3)	R11	C	≥ 0,60

→ ( \* ) Thickness tested: 12 mm ( n/a ) Does not qualify. ( N/A ) Not applicable.

This Technical data sheet shows results of tests carried out in accredited external laboratories and performed on an ad hoc basis on representative batches of samples. Cosentino's responsibility for such results is limited solely to the content described herein, and no warranty, express or implied, is made as to the properties or performance of the product tested, either alone or in the final application of the product. Verification of the performance and suitability of the product in a building system in combination with other elements is the ultimate responsibility of the installer and/or specifier of that system.

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