TECHNICAL INFORMATION

DEKTON

Name and Identification
Product: Dekton®
Code: Family I – II – III - IV

Name and address of manufacturer:
Company: Cosentino S.A
Address: Carretera A-334, km 59, código postal 04850 Cantoria (Almería) - Spain

Updated: October 2017

TECHNICAL INFORMATION DEKTON FAMILY I | STANDARD EN-14411

(Domoos, Sirius, Sirocco, Kadum, Strato, Keranium, Ananke, Vegha, Kelya, Valterra, Aldem, Borea, Keon, Odin, Galema, Korus, Ventus, Fossil, Orix, Kira)

Test	Standard	Determination	UD	Family I	Standard
Flexural tensile strength or modulus of rupture	EN ISO 10545-4	Average flexural resistance	N/mm^2	60	≥ 35
		Average break load	N	2548	≥ 1300
		Average break strength	N	14966	–
Water absorption, apparent porosity, density	EN ISO 10545-3	Water absroption by boiling	%	0	–
		Water absortion by vacuum	%	0.1	≤ 0.5
		Open porosity	%	0.2	–
		Aparent relative density	g/cm^3	2.51	–
		Aparente density	g/cm^3	2.50	–
Resistance to deep abrasion	EN ISO 10545-6	Wear volume	mm^3	125	≤ 175
Dimensions and surface quality	EN ISO 10545-2	Length and width	%	0.11/-0.18	±0.6
		Thickness	%	±0.50	±5
		Straightness of sides	%	±0.01	±0.5
		REctangularity	%	0.07/-0.16	±0.5
		Centre curvature	%	0.04/-0.08	±0.5
		Side curvature	%	±0.06	±0.5
		Warpage	%	-0.11	±0.5
		Surface quality	%	100	≥ 95
Impact resistance	EN ISO 10545-5	Coefficient of restitution (COR)	-	0.85	DV
Determination of linear termal expansion	EN ISO 10545-8	Expansion 30-100ºC	$ºC^{-1}$	$6.5 \cdot 10^{-6}$	DV
Thermal shock resistance	EN ISO 10545-9	Damage	-	No affected	No damage
Moisture expansion	EN ISO 10545-10	Expansion max	mm/m	0.1	DV
		Expansion mid	mm/m	0.0	DV
Frost resistance	EN ISO 10545-12	Damage	-	No affected	No damage
Resistance to chemicals	EN ISO 10545-13 (Range A-C, being A the best value) U: unglazed L: Low concentration H: High concentration	$ClNH_4$ / Cleaning products	Type	UA (no damage)	Minimum type B
		Bleach/swimming pool salts	Type	UA (no damage)	Minimum type B
		HCl (3% v/v)	Type	ULA (no damage)	DV
		Citric acid (100 g/l)	Type	ULA (no damage)	DV
		KOH (30 g/l)	Type	ULA (no damage)	DV
		HCl (18%)	Type	UHA (no damage)	DV
		Lactic acid (5%)	Type	UHA (no damage)	DV
		KOH (100 g/l)	Type	UHA (no damage)	DV
Resistance to staining	EN ISO 10545-14 (Range 1-5, being 5 the best value)	Green agent	Type	5	DV
		Red agent	Type	-	DV
		Iodine (solution)	Type	5	DV
		Olive oil	Type	5	DV

(–) The standard doesn't limit the value

(DV) The standard only forces to declare the value

TECHNICAL INFORMATION DEKTON FAMILY II | STANDARD EN-14411

(Zenith, Aura, Ariane, Kairos, Entzo, Aura15, Nayla, Nilium, Opera)

Test	Standard	Determination	UD	Family II-A	Standard
Flexural tensile strength or modulus of rupture	EN ISO 10545-4	Average flexural resistance	N/mm^2	67	≥ 35
		Average break load	N	2313	≥ 1300
		Average break strength	N	13559	–
Water absorption, apparent porosity, density	EN ISO 10545-3	Water absroption by boiling	%	0.1	–
		Water absortion by vacuum	%	0.1	≤ 0.5
		Open porosity	%	0.2	–
		Aparent relative density	g/cm^3	2.61	–
		Aparente density	g/cm^3	2.61	–
Resistance to deep abrasion	EN ISO 10545-6	Wear volume	mm^3	106	≤ 175
Dimensions and surface quality	EN ISO 10545-2	Length and width	%	0.04/-0.08	±0.6
		Thickness	%	4.95/-2.20	±5
		Straightness of sides	%	±0.03	±0.5
		REctangularity	%	0.04/-0.09	±0.5
		Centre curvature	%	-0.06	±0.5
		Side curvature	%	0.02/-0.04	±0.5
		Warpage	%	-0.07	±0.5
		Surface quality	%	100	≥ 95
Impact resistance	EN ISO 10545-5	Coefficient of restitution (COR)	-	0.85	DV
Determination of linear termal expansion	EN ISO 10545-8	Expansion 30-100ºC	$ºC^{-1}$	$5.1 \cdot 10^{-6}$	DV
Thermal shock resistance	EN ISO 10545-9	Damage	-	No affected	No damage
Moisture expansion	EN ISO 10545-10	Expansion max	mm/m	0.1	DV
		Expansion mid	mm/m	0.0	DV
Frost resistance	EN ISO 10545-12	Damage	-	No affected	No damage
Resistance to chemicals	EN ISO 10545-13 (Range A-C, being A the best value) U: unglazed L: Low concentration H: High concentration	$ClNH_4$ / Cleaning products	Type	UA (no damage)	Minimum type B
		Bleach/swimming pool salts	Type	UA (no damage)	Minimum type B
		HCl (3% v/v)	Type	ULA (no damage)	DV
		Cítric acid (100 g/l)	Type	ULA (no damage)	DV
		KOH (30 g/l)	Type	ULA (no damage)	DV
		HCl (18%)	Type	ULA (no damage)	DV
		Lactic acid (5%)	Type	ULA (no damage)	DV
		KOH (100 g/l)	Type	ULA (no damage)	DV
Resistance to staining	EN ISO 10545-14 (Range 1-5, being 5 the best value)	Green agent	Type	5	DV
		Red agent	Type	-	DV
		Iodine (solution)	Type	5	DV
		Olive oil	Type	5	DV

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TECHNICAL INFORMATION DEKTON FAMILY III | STANDARD EN-14411

(Danae, Irok, Edora, Blanc Concrete, Gada, Bento, Makai, Aged Timber, Sterling, Sarey, Dove)

Test	Standard	Determination	UD	Family III	Standard
Flexural tensile strength or modulus of rupture	EN ISO 10545-4	Average flexural resistance	N/mm^2	59	≥ 35
		Average break load	N	2356	≥ 1300
		Average break strength	N	13818	–
Water absorption, apparent porosity, density	EN ISO 10545-3	Water absroption by boiling	%	0.1	–
		Water absortion by vacuum	%	0.1	≤ 0.5
		Open porosity	%	0.2	–
		Aparent relative density	g/cm^3	2.53	–
		Aparente density	g/cm^3	2.52	–
Resistance to deep abrasion	EN ISO 10545-6	Wear volume	mm^3	115	≤ 175
Dimensions and surface quality	EN ISO 10545-2	Length and width	%	±0.04	±0.6
		Thickness	%	±0.53	±5
		Straightness of sides	%	0.01/-0.03	±0.5
		REctangularity	%	±0.21	±0.5
		Centre curvature	%	-0.06	±0.5
		Side curvature	%	0.02/-0.04	±0.5
		Warpage	%	-0.06	±0.5
		Surface quality	%	100	≥ 95
Impact resistance	EN ISO 10545-5	Coefficient of restitution (COR)	-	0.85	DV
Determination of linear termal expansion	EN ISO 10545-8	Expansion 30-100ºC	$ºC^{-1}$	$6.3 \cdot 10^{-6}$	DV
Thermal shock resistance	EN ISO 10545-9	Damage	-	No affected	No damage
Moisture expansion	EN ISO 10545-10	Expansion max	mm/m	0.1	DV
		Expansion mid	mm/m	0.0	DV
Frost resistance	EN ISO 10545-12	Damage	-	No affected	No damage
Resistance to chemicals	EN ISO 10545-13 (Range A-C, being A the best value) U: unglazed L: Low concentration H: High concentration	$ClNH_4$ / Cleaning products	Type	UA (no damage)	Minimum type B
		Bleach/swimming pool salts	Type	UA (no damage)	Minimum type B
		HCl (3% v/v)	Type	ULA (no damage)	DV
		Cítric acid (100 g/l)	Type	ULA (no damage)	DV
		KOH (30 g/l)	Type	ULA (no damage)	DV
		HCl (18%)	Type	ULA (no damage)	DV
		Lactic acid (5%)	Type	ULA (no damage)	DV
		KOH (100 g/l)	Type	ULA (no damage)	DV
Resistance to staining	EN ISO 10545-14 (Range 1-5, being 5 the best value)	Green agent	Type	5	DV
		Red agent	Type	-	DV
		Iodine (solution)	Type	5	DV
		Olive oil	Type	5	DV

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TECHNICAL INFORMATION DEKTON FAMILY IV | STANDARD EN-14411

(Trilium, Radium)

Test	Standard	Determination	UD	Family IV	Standard
Flexural tensile strength or modulus of rupture	EN ISO 10545-4	Average flexural resistance	N/mm^2	60	≥ 35
		Average break load	N	2568	≥ 1300
		Average break strength	N	15620	–
Water absorption, apparent porosity, density	EN ISO 10545-3	Water absroption by boiling	%	0.1	–
		Water absortion by vacuum	%	0.1	≤ 0.5
		Open porosity	%	0.2	–
		Aparent relative density	g/cm^3	2.44	–
		Aparente density	g/cm^3	2.44	–
Resistance to deep abrasion	EN ISO 10545-6	Wear volume	mm^3	119	≤ 175
Dimensions and surface quality	EN ISO 10545-2	Length and width	%	±0.02	±0.6
		Thickness	%	-1	±5
		Straightness of sides	%	±0.02	±0.5
		REctangularity	%	±0.08	±0.5
		Centre curvature	%	-0.07	±0.5
		Side curvature	%	±0.02	±0.5
		Warpage	%	-0.04	±0.5
		Surface quality	%	100	≥ 95
Impact resistance	EN ISO 10545-5	Coefficient of restitution (COR)	-	0.92	DV
Determination of linear termal expansion	EN ISO 10545-8	Expansion 30-100ºC	$ºC^{-1}$	$5.8 \cdot 10^{-6}$	DV
Thermal shock resistance	EN ISO 10545-9	Damage	-	No affected	No damage
Moisture expansion	EN ISO 10545-10	Expansion max	mm/m	0.1	DV
		Expansion mid	mm/m	0.1	DV
Frost resistance	EN ISO 10545-12	Damage	-	No affected	No damage
Resistance to chemicals	EN ISO 10545-13 (Range A-C, being A the best value) U: unglazed L: Low concentration H: High concentration	$ClNH_4$ / Cleaning products	Type	UA (no damage)	Minimum type B
		Bleach/swimming pool salts	Type	UA (no damage)	Minimum type B
		HCl (3% v/v)	Type	ULA (no damage)	DV
		Citric acid (100 g/l)	Type	ULA (no damage)	DV
		KOH (30 g/l)	Type	ULA (no damage)	DV
		HCl (18%)	Type	ULA (no damage)	DV
		Lactic acid (5%)	Type	ULA (no damage)	DV
		KOH (100 g/l)	Type	ULA (no damage)	DV
Resistance to staining	EN ISO 10545-14 (Range 1-5, being 5 the best value)	Green agent	Type	5	DV
		Red agent	Type	-	DV
		Iodine (solution)	Type	5	DV
		Olive oil	Type	5	DV

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SLIPPERINESS DEKTON | STANDARD EN-14231

Finishing	Color	Determination	Value
Smooth Matt	Domoos Strato Sirocco Kadum Keranium Vegha Ventus Korus Galema Keon Kelya Zenith Aura Kairos Aura15 Entzo Danae Irok Sterling Sarey Trilium Orix Nayla Nilium Radium	USRV dry USRV humid	48 23
Textured -Slate-like/limestone	Sirius Gada Edora Dove Valterra Blanc Concrete	USRV dry USRV humid	49 22
Textured - Wood-like	Ananké Borea Aldem Odin Ariane Bento Makai Aged Timber	USRV dry USRV humid	44 21
Velvet – Satin matt	Opera	USRV dry USRV humid	*

* Pending test

SLIPPERINESS DEKTON | DIN 51130 AND DIN 51097

Finishing	Color	Norm	Value (°)	Type
Smooth Matt	Domoos Strato Sirocco Kadum Keranium Vegha Ventus Korus Galema Keon Kelya Zenith Aura Kairos Aura15 Entzo Danae Irok Sterling Sarey Trilium Orix Nayla Nilium Radium	DIN 51130 DIN 51097	7.2 8	R9 -
Textured -Slate-like/limestone	Sirius Gada Edora Dove Valterra Blanc Concrete	DIN 51130 DIN 51097	6.7 9	R9
Textured - Wood-like	Ananke Borea Aldem Odin Ariane Bento Makai Aged Timber	DIN 51130 DIN 51097	5.7 14	- A
Velvet – Satin matt	Opera	USRV dry USRV humid	*	*

* Pending test

SLIPPERINESS DEKTON | DIN 51130 AND DIN 51097

Treatment	Color	Norm	Value (°)	Type
Dekton Grip	Sirocco Strato Keon Danae Irok Makai Blanc Concrete	DIN 51130 DIN 51097	*	R10 A
Dekton Grip+	Valterra Danae Sirocco Strato Ventus Keon Trilium Irok Galema Korus Blanc Concrete Makai	DIN 51130 DIN 51097	*	R11 C