



T-TONE
Superior Porcelain Countertop

Porcelain Countertop
Maintenance Guide

Dear Customer;

We thank you for preferring the T-One Porcelain Countertop brand, as your kitchen countertop.

The T-One Porcelain Countertop, which we created with the original use of our innovative brand Kalesinterflex, Turkey's first largest size porcelain slab, was designed to increase your kitchen pleasure thanks to its durable structure, hygienic surface, and aesthetic appearance.

We are bringing the T-One Porcelain Countertops user manual to your attention. The manual will allow you to receive the best performance from the countertop for years in your kitchen thanks to its durability, where you spend most of your time at your house.

We recommend you read the user manual entirely before using the product you have bought and keep it during the warranty period. In order for the warranty to be valid, the terms of use written in the user manual should be fully complied with.

If the warranty of the T-One Porcelain Countertop is recorded within a year from the purchase date and the original invoice is submitted, the warranty period is 15 years, beginning at the purchase date.

The Practitioner Firm should have you sign the "Warranty Information Form" and provide you with a copy of the form after the installation service. Please request a copy of the 'Warranty Information Form' from the practitioner firm and keep it.

For the problems regarding your counter that may exist, you should initially contact the store from which you have purchased the product.

You can get general information about the product from kale.com.tr or call our Customer Contact Center for free via **0850 800 5253** telephone number.

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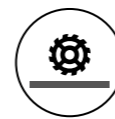
Essential Features of The Product

Kaleseramik is the manufacturer of T-One Porcelain Countertops. The T-One Porcelain Countertop is produced from the Kalesinterflex porcelain slab, and the thickness of the slab is 12 mm.

The original sizes of products are **160x320**, **162x323**. Manufactured with advanced production technology, the T-One Porcelain Countertop has a very high material quality. For this reason, food residues on the product cannot penetrate the material content if the conditions of use specified in the user manual are complied with.

Cleaning agents used in houses, and objects such as hot pots, trays, and pans don't damage the surface of the T-One Porcelain Countertops.

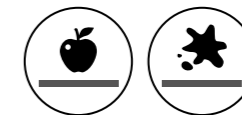
For the applications in commercial areas and outdoors, which are not approved by Kaleseramik (The company should be contacted via t-one@kale.com.tr e-mail address), products are not covered by the warranty, and such an attempt is not recommended



STRENGTH ABOVE ALL!

T-One Porcelain Countertop always protects itself against different usage and environmental conditions, and thus will accompany you for years with its durability in the kitchens where we spend a lot of time in our home.

You can chop any food you want on it without scratching, thanks to its unique surface. You can put any cooking equipment you've just taken out of the oven or off of the stove on your countertop, and easily clean it with the household cleaning products you want.



A "CLEAN" SHEET IN THE KITCHENS!

The hygiene of our kitchens is of vital importance with regard to nutritional health. T-One Porcelain Countertop offers high levels of standards and hygiene in your kitchen with its advanced technology. Offers a comfortable and hygienic kitchen experience with its ability to be easily and effortlessly cleaned.



Low Water Absorption (Near Zero)



Long-lasting



High Scratch Resistance



Fire resistant (Flame Resistant)



High Heat and Frost Resistance



Hygienic



Easy to Clean



High Breaking Strength



High Stain Resistance



High UV Rays Resistance



High Abrasion Resistance



Resistant to Household Cleaning Materials



High Scratch Resistance



High Breaking Strength



High Stain Resistance



High Abrasion Resistance



High Heat and Frost Resistance



Fire resistant (Flame Resistant)

Not valid for glossy product.

The Innovative Face of Living Kitchens



HYGIENIC

Due to their non-porous structure, T-One countertops resist harmful bacteria, so you never have to worry about safely cooking your food.

AESTHETIC

A wide variety of colors and patterns mean your T-One countertop fits right in with the rest of your kitchen.



RESISTANCE TO SCRATCHES

T-One's super hard porcelain lets you cut any food without worrying about scratching or abrasion.

FIREPROOF

T-One is fireproof so you can safely move your pots and pans from the oven or range to your counter.



EASY TO CLEAN

It's quick and easy to clean your T-One countertop with household cleaning products.

HIGH STAIN RESISTANCE

Permanent stains like tea, coffee and lemon are a thing of the past thanks to T-One's non-porous structure.

RESISTANT TO UV RAYS

T-One is UV resistant and nonfading when exposed to sunlight.

DURABLE

No countertop lasts longer thanks to T-One's high performance, high durability structure.



Attention: Resistance to scratches and fire is not effective for polished products. Contact these products with scratchers, cutters, and hot objects, and cutting on them should be avoided.

Fusion of Innovation,
Aesthetics and Performance



Information Regarding The Application

The product should be installed by **the Practitioner Firm**. In case of any problems regarding the product installation, the Practitioner Firm should be contacted. Practitioner firms are the autonomous firms in the market that purchase Kalesinterflex porcelain slabs from Kaleseramik and process and transform them into T-One Porcelain Countertops. All responsibilities related to the application belong to the company with which the customer has a commercial agreement.

Note: The descriptions of some frequently used phrases in the user manual are as follows

Kaleseramik; is the company producing and selling Kalesinterflex porcelain slabs.

Practitioner Firms: They are the firms purchasing the Kalesinterflex porcelain slabs, processing and transforming them into and installing them.

Kitchen Companies: They are kitchen companies selling produced from Kalesinterflex porcelain slabs by practitioner firms as a final product.

T-ONE Porcelain Countertop: It is our countertop brand consisting of Kalesinterflex porcelain slabs in 160x320, 162x323 and 12 mm thicknesses.



Information Regarding The Cleaning

Thanks to its material structure, daily and general cleaning of the T-One Porcelain Countertop is effortless.

Microfiber-glass cleaning cloth is recommended to clean the surface of your T-One porcelain slab used in your countertop. The kitchen countertop should be cleaned as soon as possible after each use due to stains and substances that may form dirt. Daily cleaning detergent would be sufficient for the dirt that can be easily cleaned.

The general cleaning of your T-One Porcelain Countertop may be done by adding some cleaning agents to warm water. (Ph<9)

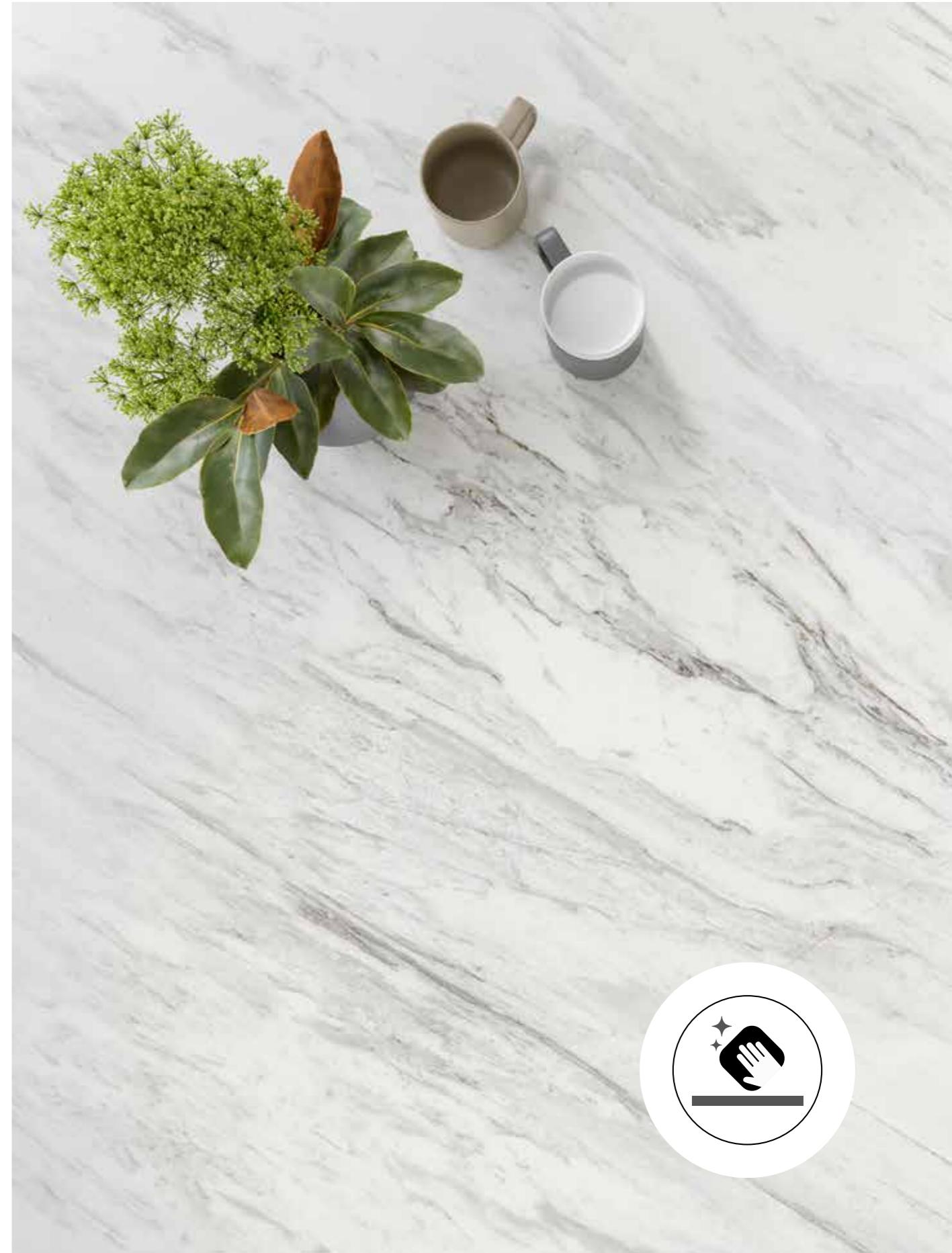
If a liquid that may leave color on the countertop (tea, coffee, juice, wine, pencil, etc.) is spilled, it is recommended to clean and dry the countertop as soon as possible.

When using your T-One Porcelain Countertop, you should avoid practices towards the surface, such as polishing.

Abrasive materials such as dishwashing wire, hard cleaning sponge, and wire brush should not be used to clean your T-One Porcelain Countertop. The countertop should be wiped with a damp and soft cloth and dried as soon as possible.

While cleaning the T-One Porcelain Countertop, acidic liquids such as hydrochloric acid and bleach, descaling agents containing sulfuric acid, nitric acid, hydrochloric acid, other acids and chlorine-based whiteners should not be used.

If you have not received any result despite the above recommendations regarding the stains and contaminations that cannot be removed from the countertop surface, authorized people should be contacted. For the issue, you can send an email to t-one@kale.com.tr or call our Customer Contact Center for free via **0850 800 5253**.



Cleaning Tips

The cleaning agent should be selected according to the conditions specified in the cleaning tips. Some stains cannot be removed, following ordinary cleaning procedures. Depending on the nature of these stains, specific methods should be used. It is very substantial how long the spilled liquid remains on the surface. Because of that, it is recommended to clean the contaminated area as soon as possible. This prevents drying of the material on the surface and allows easy cleaning.

Types of Dirt	Types of Detergent
Oil	Alkaline (basic) cleaning products
Ink, Permanent Pen	Solvent
Rust	Acid, Acidic cleaning products
Lime	Acid, Acidic cleaning products
Cement-Gypsum	Acid, Acidic cleaning products
Wine	Alkaline-acid
Coffee-tea	Alkaline (basic) cleaning products
Rubber-plastic	Solvent
Epoxy adhesives	Solvent
Candle	Solvent
Iodine	Oxidant
Blood	Oxidant
Ice Cream	Alkaline (basic) cleaning products
Resin	Solvent
Fruit Juice	Oxidant
Aluminum scratches	Acid, Acidic cleaning products

Acid, Acidic cleaning products: PH < 7.0 Cleaning products.

Ex: descalers, cement removers

Alkaline (basic) cleaning products: PH > 7.0 Cleaning products, e.g.

Ammonia degreasers

Solvent: Universal solvent, thinner, turpentine, acetone, alcohol

Oxidant: Diluted hydrogen peroxide or whitener



Important Notice: It is always necessary to comply with the dose and time recommended by the manufacturer.



Points to be Considered During Use

Thanks to the superior technology of Kalesinterflex, T-One offers unlimited color options and different surface alternatives for kitchen countertops. Before using the kitchen countertop, it is necessary to pay close attention to the following usage details:

Polished products have low scratch resistance and require sensitivity. Care should be taken while using kitchen utensils (fork, knife, spoon, teapot, pot, other products in direct contact, etc.), and their direct contact with the surface should be prevented. It is recommended to clean it with cleaning cloths having soft surfaces.

The kitchen countertop should be cleaned as soon as possible after each use due to stains and substances that may form dirt.

Firstly, the contact between the surfaces of T-One products and adhesive and joint filler materials used during the application should be minimal. The adhesive and joint filler material that comes into contact with the product surface should be wiped quickly before being cured.

Matte products have a high resistance to chemicals. Because of that, highly concentrated detergents may be used if needed.

In the routine cleaning process, clean the Matte and Polished products delicately by sweeping or using a dry brush. Clean Polished products with warm water, stain remover, or neutral detergents, which include low sulfate. After cleaning, rinse it several times with clean water. General cleaning for the countertop with a polished surface may be done with warm water by adding some detergent.

While cleaning the T-One Porcelain Countertop, acidic liquids such as hydrochloric acid and bleach, descaling agents containing sulfuric acid, nitric acid, hydrochloric acid, other acids and chlorine-based whiteners should not be used. If such chemical materials are used, the environment where the product is placed should be well-ventilated, and care should be taken not to be exposed to the vapor of these chemicals.

Use your countertop only for its intended purpose. Do not put heavy objects on the countertop, which may disturb its balance. Do not step up on the countertop for any purpose.

A cutting board or chopping board is recommended. Food cutting on the countertop surface is not recommended.

During the renovations in the kitchen, the countertop should be protected from possible external impacts.

The countertop should be protected against impacts during use, especially considering the joints.

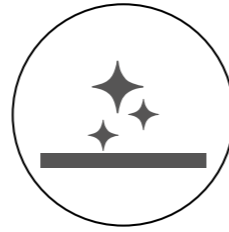
During the installation or de-installation of the countertop, it is necessary to contact the Practitioner Firm and comply with the rules specified in the warranty conditions.

The repairs and modifications regarding the countertop should be carried out by the Practitioner Firm only.

If a problem occurs while using the countertop, it is necessary to initially contact the store where the countertop was purchased and the practitioner firm.



Points to be Considered in The Use of Polished Products



Thanks to the superior technology of Kalesinterflex, T-One Porcelain Countertops offer unlimited color options and different surface alternatives. You can conveniently use our products with polished surfaces that match your kitchen cabinets on your countertops. The following usage details should be carefully read before use:

Scratch resistance of polished products is low. Care should be taken while using kitchen utensils (fork, knife, spoon, teapot, pot, etc.), and their direct contact with the surface should be prevented.

While cutting foods such as meat, vegetables, and fruits on polished products, direct contact of knives or similar kitchen utensils with the product should be avoided, and a cutting board should be used for these processes.

Due to their sensitivity, the surfaces of polished products are not resistant to impacts caused by rough objects and equipment, such as glass, plates, pots, and pans falling from above or their contacts from the sides. Care should be taken about falling kitchen utensils to them.

Direct contact of hot utensils, such as pots and pans, and flames with the surfaces of polished products should be prevented.

While cleaning polished products, detergents containing hydrofluoric acid, fluoride salts, their derivatives, and similar cleaning agents should be avoided. These derivative chemicals cause irreversible damage to ceramic surfaces.

Stains and dirt formed on the surface of polished countertops should be cleaned with standard alkaline cleaning agents without delay.

Polished products should not be cleaned and rubbed with abrasive dust cleaning detergents.

Abrasive materials such as hard cleaning sponges, cleaning wires, and metal brushes should not be used for polished products. A soft and damp sponge may be used for cleaning. It is recommended to dry it as soon as possible after cleaning.

Home repair tools should not be used on polished products, and direct contact and friction of these tools with them should be avoided.

T-One Porcelain Technical Specifications

ISO	Technical Specifications	T-ONE MATTE 1620x3230x12 mm	T-ONE POLISHED 1620x3230x12 mm
	Weight kg/m ²	30	30
ISO 10545-2	Surface Quality %	> 95	> 95
ISO 10545-3 ASTM C373	Water Absorbtion %	≤ 0,1	≤ 0,1
ISO 10545-4	Breaking Strenght (N)	≥ 4000	≥ 4000
ISO 10545-4	Bending strength (N/mm ²)	≥ 50	≥ 50
ISO 10545-6	Deep wear resistance (mm ³)	≤ 175	≤ 175
ISO 10545-8	Linear Thermal Expansion Coefficient	< 7 x 10 ⁻⁶	< 7 x 10 ⁻⁶
ISO 10545-9	Resistance to Thermal Shock	Resistant	Resistant
ISO 10545-13	Resistance to Chemical	Class A to B	Class A to C
ISO 10545-14	Resistance to Staining	Class 3 to 5	Class 2 to 5

Technical Tables

Physical and chemical properties	Reference test method	Kaleseramik 12 mm Matte Slab	Kaleseramik 12 mm Polished Slab
"1620X3240 Nominal dimension (mm) (non rectified)"	KALE	Minimum size ≥ 1620x3230mm (kiln exit full size; untrimmed)	Minimum size ≥ 1620x3230mm (kiln exit full size; untrimmed)
Weight (kg/m ²)	KALE	29,7	29,7
Surface quality	ISO 10545-2	> 95%	> 95%
Water absorption	"ISO 10545-3 ASTM C373"	Average ≤0,1%	Average ≤0,1%
Breaking strength in N	ISO 10545-4	≥ 4000	≥ 4000
Modulus of rupture N/mm ²	ISO 10545-4	≥ 50	≥ 50
Resistance to deep abrasion (mm ³)	ISO 10545-6	≤ 175	≤ 175
Coefficient of linear thermal expansion	ISO 10545-8	< 7x10 ⁻⁶	< 7x10 ⁻⁶
Thermal shock resistance	ISO 10545-9	RESISTANT	RESISTANT
Chemical resistance	ISO 10545-13	From class A to B	From class A to C
Stain resistance	ISO 10545-14	From class 3 to 5	From class 2 to 5
Resistance to freeze and thaw	ISO 10545-12	RESISTANT	RESISTANT
Fire reaction	EN 13501-1	A1* / A2 - s1 d0**	A1* / A2 - s1 d0**

* Porcelain slab without backmesh

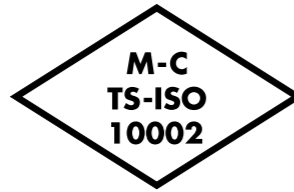
**Product supporting with fiber glass backmesh

Physical and chemical properties	Reference test method	Kaleseramik 12 mm Matte Slab	Kaleseramik 12 mm Polished Slab
Density (gr/mm ³)	EN 14617-1 / ASTM C97	2500	2500
Water absorption	EN 14617-1	Average ≤0,1%	Average ≤0,1%
Bending strength (N/mm ²)	EN 14617-2	≥ 50	≥ 50
Freeze and thaw resistance	EN 14617-5	RESISTANT	RESISTANT
Dry heat resistance	EN 12722 / EN 438-2 PAR:16	5 (no visible effect till 200°C)	5 (no visible effect till 200°C)
Chemical resistance	ISO 10545-13	From class A to B	From class A to C
Chemical resistance	ASTM-C650	RESISTANT	RESISTANT
Cold liquid resistance	EN 12720	5 ; A+ (reached class CEN/TS 16209:2022*)	From class 5 to 2
Cleaner product resistance	PTB 53 CATAS	5 no visible effect	From class 5 to 3
Abrasion resistance (mm)	EN 14617-4	< 26	< 28
Hygiene properties	METODO CATAS	Excellent (high degree of removal of bacterial cells >99% after cleaning with a biocide-free detergent)	Excellent (high degree of removal of bacterial cells >99% after cleaning with a biocide-free detergent)
Lead and cadmium given off mg/dm ³	ISO 10545-15	0	0
Overall migration	UNI EN 1186	0 mg/dm ³ no significant migration	0 mg/dm ³ no significant migration
VOC emission	UNI EN 16000-9	A+	A+
Shock resistance	ISO 4211-4 / EN 14617-9	Class 5 (no damage to ball drop 200mm)	Class 5 (no damage to ball drop 200mm)
Light resistance	UNI EN 15187	5 no visible effect	5 no visible effect
Thermal shock resistance	EN 14617-6	RESISTANT	RESISTANT
Resistance to staining	ASTM C1378	RESISTANT	RESISTANT

Technical Info

	Reference test method	Requirements for nominal size N		KALE 1620X3230 (mm) Non-rectified		KALE 1600X3200R (mm) Rectified	
		N \geq 15 cm		Matte	Polished	Matte	Polished
		%(for rectified)	mm(for rectified)				
Length and width	ISO 10545-2	$\pm 0,3$	± 1	N.A.	N.A.	Suitable	Suitable
Thickness		$\pm 0,5$	$\pm 0,5$	N.A.	N.A.	Suitable	Suitable
Straightness of sides		$\pm 0,3$	$\pm 0,8$	N.A.	N.A.	Suitable	Suitable
Rectangularity (Measurement only on short edges when L/l \geq 3)		$\pm 0,3$	$\pm 1,5$	N.A.	N.A.	Suitable	Suitable
Surface flatness		c.c. $\pm 0,4$	c.c. $\pm 1,8$	N.A.	N.A.	Suitable	Suitable
		e.c. $\pm 0,4$	e.c. $\pm 1,8$	N.A.	N.A.		
		w. $\pm 0,4$	w. $\pm 1,8$	N.A.	N.A.		
Water absorption	ISO 10545-3	Ev \leq 0,5% Individual max 0,6%		$\leq 0,1$ %	$\leq 0,1$ %	$\leq 0,1$ %	$\leq 0,1$ %
Breaking strength	ISO 10545-4	for thickness < 7,5mm ; S \geq 700 N for thickness \geq 7,5mm ; S \geq 1300 N		12 mm S \geq 4000N	12 mm S \geq 4000N	12 mm S \geq 4000N	12 mm S \geq 4000N
Modulus of rupture		R \geq 35 ; N/mm ²		12 mm ; R \geq 50 N/mm ²	12 mm ; R \geq 50 N/mm ²	12 mm ; R \geq 50 N/mm ²	12 mm ; R \geq 50 N/mm ²
Impact resistance, as coefficient of restitution	ISO 10545-5	Test method available		$\geq 0,55$	$\geq 0,55$	$\geq 0,55$	$\geq 0,55$
Resistance to deep abrasion of unglazed tiles (removed volume)	ISO 10545-6	≤ 175 mm ³		Suitable	Suitable	Suitable	Suitable
Coefficient of thermal linear expansion	ISO 10545-8	Test method available		$\leq 7 \times 10^{-6}$	$\leq 7 \times 10^{-6}$	$\leq 7 \times 10^{-6}$	$\leq 7 \times 10^{-6}$
Thermal shock resistance	ISO 10545-9	Pass according to EN ISO 10545-1		Resistant	Resistant	Resistant	Resistant
Moisture expansion	ISO 10545-10	Test method available		$\leq 0,01\%$	$\leq 0,01\%$	$\leq 0,01\%$	$\leq 0,01\%$
Frost resistance	ISO 10545-12	Required		Resistant	Resistant	Resistant	Resistant
Bond strength (adhesion for cementitious adhesives Type C1)	ISO 13007-2	Declared value		$\geq 0,5$ N/mm ²	$\geq 0,5$ N/mm ²	$\geq 0,5$ N/mm ²	$\geq 0,5$ N/mm ²
Reaction to fire	EN 13501-1	A1/ AFL		A1 / A1FL without back mesh	A1 / A1FL without back mesh	A1 / A1FL without back mesh	A1 / A1FL without back mesh
Resistance to household chemicals and swimming pool salts	ISO 10545-13	Minimum Class B		A	A	A	A
Resistance to low concentrations of acids and alkalis		Declared value		LA	LA	LA	LA
Resistance to high concentrations of acids and alkalis		Declared value		HA	-	HA	-
Resistance to staining	ISO 10545-14	Test method available		5	5	5	5
Release of dangerous substances: Cadmium (in mg/dm ²) and Lead (in mg/dm ²)	ISO 10545-15	Declared value		$\leq 0,01$ mg/dm ² Cd $\leq 0,1$ mg/dm ² Pb	$\leq 0,01$ mg/dm ² Cd $\leq 0,1$ mg/dm ² Pb	$\leq 0,01$ mg/dm ² Cd $\leq 0,1$ mg/dm ² Pb	$\leq 0,01$ mg/dm ² Cd $\leq 0,1$ mg/dm ² Pb

Certificates



Contact Information

In case of problems regarding your countertop, it is required to initially contact the company from which you purchased your product and/or the practitioner company.

To get information about the issues covered by the warranty, it is necessary to contact the following Kaleseramik customer contact touchpoints specified below.

Customer Contact Center

You can request general information about the product from kale.com.tr and you can reach us by sending an email to t-one@kale.com.tr or calling our Customer Contact Center for free via **0850 800 5253**.



 **Kale**

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Büyükdere Cad. Kaleseramik Binası 34330 Levent - İstanbul / Turkey

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 **0850 800 5253**
MÜŞTERİ İLETİŞİM MERKEZİ