



Town and Country surfaces is a distributor of high-quality handcrafted flooring and cladding, where each batch is unique and characterized by aesthetic variations that reflect the authenticity of the artisanal process. Unlike industrial ceramic tiles, which are produced using standardized processes and materials, this T&C product is the result of meticulous manual craftsmanship, making every piece different and one-of-a-kind. The tests and UNI standards referenced by industrial products apply to tiles produced through repetitive manufacturing processes, which are not relevant to the characteristics and customization of our artisanal approach. The presented results represent a summary of the tests conducted annually, calculated as an average value. It is important to note that these results may be subject to variations or updates based on new analyses or changes in the production processes. Upon request, specific tests can be conducted on the batch related to the order.

TECHNICAL FEATURES

	TECHNICAL CHARACTERISTICS	STANDARD	STANDARD VALUES	NATURAL TERRACOTTA	TERRE OSSIDATE	GLAZES	NOTES
	Determination of dimensional characteristics and surface quality.	UNI EN ISO 10545-2:2018	The standard defines the methods for determining the dimensional characteristics (length, width, thickness, edge straightness, squareness, flatness) and surface quality of ceramic tiles.	2% SAME BATCH	2% SAME BATCH	2% SAME BATCH	As the material is handcrafted, variations between production batches are normal. Any additional orders should be managed with a sample from the previous batch.
	Determination of water absorption, apparent porosity, apparent relative density, and apparent density.	UNI EN ISO 10545-3:2018	The standard specifies a method for determining water absorption under vacuum, apparent porosity, apparent relative density, and apparent density of ceramic tiles. The method is applicable for tile classification and product specifications.	27%	20%	18%	
	Determination of liquid absorption on the surface of installed and grouted flooring.	N/A	Test performed on finished installed surfaces, grouted and not treated with MATT CARE / WET CARE.	13%	5%	3%	
	Determination of the breaking modulus and breaking strength.	UNI EN ISO 10545-4:2019	The standard defines a test method for determining the breaking modulus and breaking strength of all ceramic tiles.	>12,2 N/mm ²	>12,2 N/mm ²	>12,2 N/mm ²	
	Determination of surface hardness according to the Mohs scale.	UNI EN ISO 6769:2023	Determination of surface scratch hardness according to the Mohs scale	5	5	C-finishing 5 smooth finishing 4	The C finish is the Contemporary finish by T&C, characterised by a thin glaze applied in such a way as to enhance the natural appearance of the underlying substrate. The smooth finish features a thicker layer of glaze, making the surface smoother.
	Determination of Frost Resistance.	UNI EN ISO 10545-12:2000	The standard describes a method for determining the frost resistance of ceramic tiles intended for use in freeze-thaw conditions and in the presence of water.	RESISTENT	RESISTENT	RESISTENT (LIMIT -5°C) classe 5 >12000 cycles	After immersion in water, subject the tiles to a cycle between +5°C and -5°C; all sides of the tile must be exposed to freezing with a duration of at least 100 freeze-thaw cycles.
	Determination of surface Abrasion Resistance for glazed tiles.	EC 1-2022 UNI EN ISO 10545-7:2000	The test measures the breaking resistance of ceramic tiles (including ceramic flooring, terracotta, porcelain, etc.) when subjected to a concentrated load applied to the tile, which is positioned on two equidistant supports. The aim is to determine the maximum load the tile can withstand without breaking.	N/A	N/A		
	Determination of Thermal Shock Resistance.	UNI EN ISO 10545-9:2000	The standard describes a test method for determining the thermal shock resistance of all ceramic tiles under normal usage conditions.	RESISTENT	RESISTENT	RESISTENT	
	Determination of Stain Resistance.	UNI EN ISO 10545-14:2015	Light oil green	1	1	5	It is always recommended to use NATURAL CARE as a pre-grouting agent to facilitate grout cleaning, and the use of NATURAL STRONG CARE + MATT CARE / WET CARE is strongly recommended in high-traffic areas such as KITCHEN and DINING ROOM on NATURAL TERRACOTTA and ANTICO FORNO COLORE surfaces.
			Iodine in alcohol 13 g/l	5	5	5	
			Olive oil	1	1	5	
	Determination of Slip Resistance	DIN EN 16165:2023 Annex B	Determination of the R coefficient.	R12	R12	R10	
	Determination of the Dynamic Coefficient of Friction (DCOF).	ANSI A326.3:2022	The DCOF measures how resistant a tile is to sliding when subjected to dynamic movement. A high DCOF indicates greater slip resistance.	MIN 0,65	MIN 0,52	MIN 0,28	It is recommended to use Natural Terracotta or Antico Forno Colore for wet areas or areas exposed to water contact, such as pools, changing rooms, showers. For Glazes, the result varies depending on color/type. Finish C is recommended. Anti-slip treatment is available upon request.
	Determination of Chemical Resistance.	UNI EN ISO 10545-13:2017	TEST SOLUTIONS:	CLASS :	CLASS:	CLASS:	T&C guarantees the resistance of its products in accordance with the values of the physical-chemical parameters of water in public swimming pools, as per Italian regulations for bathing water, provided that the correct water balance is maintained throughout the year. Citric acid, hydrochloric acid, potassium hydroxide, and lactic acid are permitted only in very low concentrations <1%. It is recommended to check water alkalinity for ANTICO FORNO COLORE even in the presence of neutral pH (ALK always from a minimum of 100 to 160 mg/L). In the event of extraordinary maintenance, the PH oscillation can be from 5 to 9 for a maximum of 96 hours. For swimming pool specifications, please contact info@tnccsurfaces.com
			Ammonium chloride 100 g/l - 24 hours	A	A	A	
			Sodium hypochlorite solution 20 mg/l - 24 hours	A	A	A	
			Citric acid solution 100 g/l - 24 hours	LA	LA	LA	
			Hydrochloric acid solution 3% (V/V) (96±1) hours	LA	LA/LB*	LA	
			Potassium hydroxide 30 g/l (96±1) hours	LA	LA/LB*	LA	
			Hydrochloric acid solution 18% (V/V) (96±1) hours	HA	HA/HB*	HA	
			Lactic acid 5% (V/V) (96±1) hours	HA	HA/HB*	HA	
			Potassium hydroxide 100 g/l (96±1) hours	HA	HA/HB*	HA	
	Standard Practice for Operating Salt Spray (Fog) Apparatus.	ASTM B117	Test for the corrosion resistance of metallic materials subjected to salt spray for 500 hours.	RESISTENT	RESISTENT	RESISTENT	case must be considered same as stone/travertine if used for swimming pool interiors.