









V1 Variation | Matte Finish

GRAPH

The collection of rectified glazed stoneware tiles named Graph reflects, in its very name, the aim of being adopted by designers and end users as a drawing tool for vertical and horizontal surfaces. The three available sizes and the 29 colors can be matched with colored grouts to create countless combinations suiting every environment in which Graph is to be used. Its easy-to-clean, non-slip surface is suitable for residential and nonresidential applications, such as offices, restaurants, schools, hospitals and sports facilities. With its micro patterns and color contrasts, Graph makes its mark on any room. At the same time, its discreet design makes it easy to pair with other materials and furnishings.





Dimensions and surface quality

nominal shape	actual size		test methods	requirements		results	results	
50x50 cm (20"x20") 25x25 cm (10"x10")	sides	500x500 mm 249x249 mm 98x249 mm	— EN ISO 10545-2	sides	600	sides	± 0,3%	
10x25 cm (4"x10")	thickness	10 mm		thickness		thickness ± 4%		
Straightness of sides (working surface)			EN ISO 10545-2	± 0,5%		± 0,4%		
Squareness		EN ISO 10545-2	± 0,5%		± 0,4%			
Flatness		EN ISO 10545-2	± 0,5% ± 0,4		± 0,4%			
Surface quality			EN ISO 10545-2	min. 95%		min. 95%		

Physical properties

	test		test methods	requirements	results	
***	Water absorption (%) Tensile strength thickness ≥ 7,5 mm		EN ISO 10545-3	$0.5\% < E_b \le 3.0 \%$	1,5 %	
1			EN ISO 10545-4	1.100 N min.	> 1.700 N	
₩,	Modulus of rupture		EN ISO 10545-4	30 N/mm2 min.	> 40 N/mm2	
P.E.I.	Abrasion resistance (P.E.I.)		EN ISO 10545-7	quote the abrasion class	refer to product page	
0	Coefficient of linear thermal expansion		EN ISO 10545-8	test method available	< 6,9x10 ⁻⁶ /°C	
J.†	Thermal shock resistance		EN ISO 10545-9	test method available	guaranteed	
	Crazing resitance		EN ISO 10545-11	required	guaranteed	
3	Frost resistance		EN ISO 10545-12	test method available	guaranteed	
	Expansion to humidity		EN ISO 10545-10	test method available	< 0,04%	
5	Impact resistance		EN ISO 10545-5	test method available	> 0,6 (see P appendix)	

Chemical properties

	test	test methods	requirements	results
đ	Stain resistance	EN ISO 10545-14	classe 3 min.	3 min. (see P appendix)
4	Resistance to chemical products for housekeeping and to the additives used in swimming-pools	EN ISO 10545-13	GB min.	GB min.
	Resistance to acids and bases at low concentrations	EN ISO 10545-13	indicated by the producer	GLB min.
	Resistance to acids and bases at high concentrations	EN ISO 10545-13	test method available	GHB min.
b Cd	Lead and cadmium losses	EN ISO 10545-15	test method available	available if required

Non-slip properties (except GP 015 - GP 020 - GP 025)

	fest	test methods	requirement	5			results
,		DIN 51130	R9	R10	R11	0 =	
16	Determination of the anti-slip characteristics:	non-skid characteristics	normal adhesion $6^{\circ} \le a \text{ tot} \le 10^{\circ}$	$\begin{array}{l} \text{medium} \\ \text{adhesion} \\ 10^{\circ} \leq \text{a tot} {\leq} 19^{\circ} \end{array}$	high adhesion $19^{\circ} \leq \alpha \text{ tot} {\leq} 27^{\circ}$		R10
			A	В	С		
K	Determination of the anti-slip characteristics for barefoot wet areas:	DIN 51097 inclination angle (*)	medium adhesion ≥ 12 <18	high adhesion ≥ 18 < 24	strong adhesion ≥ 24		A
,	Post I constitute	PC 7074 0 0000	2 test method available			dry >36	
٥.	Pendulum test UK	BS 7976-2:2002	lest method dydliddie			wet -	
4	DCOF – Dynamic Coefficient of Friction (Wet Areas Only)	ANSI A 137.1.:2012					> 0,42
,	Coefficient of friction:		µ ≤ 0,19	0,20 ≤ µ ≤0,39	0,40 ≤ µ ≤0,74	$\mu \ge 0.75$	(1) μ>0,45
2	(1) dry (leather) (2) wet (Rubber)	B.C.R.A.	dangerous slipperiness	extreme slipperiness	satisfactory friction	excellent friction	(2) µ>0,52

Other tests

test	test methods	requirements	results
Colour resistance to light	DIN 51094	not foreseen	guaranteed
Reaction to the fire	without test	decision 96/603/CE	classe Al

Modularity and laying

To obtain a correct laying result the material should be laid with joints of no less than 2 mm (UNI 11493:2013).

Sizes



