

ZERO.3[®]












by  CERAMICA
PANARIA

LA NUOVA DIMENSIONE CERAMICA

THE NEW CERAMIC DIMENSION / LA NOUVELLE DIMENSION CÉRAMIQUE / DIE NEUE KERAMISCHE DIMENSION

CARATTERISTICHE TECNICHE/ TECHNICAL CHARACTERISTICS













Conforme alla norma ISO 13006-G ed EN 14411-G GRUPPO Bla UGL/ According to ISO 13006-G and EN 14411-G Group Bla UGL

CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS	METODO DI PROVA ISO TEST METHOD		REQUISITI PRESCRITTI DA REQUIRED VALUES ISO 13006-G EN 14411-G GRUPPO Bla- UGL	VALORI/ VALUES ZER0.3	VALORI/ VALUES ZER0.3 PLUS	VALORI/ VALUES ZER0.3 TWIN
 ASSORBIMENTO D'ACQUA (E) WATER ABSORPTION (E)	10545-3		$E \leq 0,5\%$	$E \leq 0,1\%$	$E \leq 0,1\%$ (*)	$E \leq 0,1\%$ (*)
 RESISTENZA ALLA FLESSIONE BENDING STRENGTH	10545-4		$\geq 355 \text{ Kg/cm}^2$ $\geq 35 \text{ N/mm}^2$	$\geq 355 \text{ Kg/cm}^2$ $\geq 35 \text{ N/mm}^2$	$\geq 1200 \text{ Kg/cm}^2$ $\geq 120 \text{ N/mm}^2$	$\geq 550 \text{ Kg/cm}^2$ $\geq 55 \text{ N/mm}^2$
 CARICO DI ROTTURA (S) BREAKING STRENGTH (S)	10545-4		$\geq 70 \text{ Kg}$ $\geq 700 \text{ N}$	NON RICHIESTO Materiale per parete NOT REQUIRED Wall tiles	$\geq 100 \text{ Kg}$ $\geq 1000 \text{ N}$	$\geq 180 \text{ Kg}$ $\geq 1800 \text{ N}$
 RESISTENZA A COMPRESIONE RESISTANCE TO COMPRESSION	-		REQUISITO NON PREVISTO ISO MAKES NO PROVISION FOR THIS TEST	$\geq 4000 \text{ Kg/cm}^2$ $\geq 400 \text{ N/mm}^2$	$\geq 4000 \text{ Kg/cm}^2$ $\geq 400 \text{ N/mm}^2$	$\geq 4000 \text{ Kg/cm}^2$ $\geq 400 \text{ N/mm}^2$
 RESISTENZA ALL'ABRASIONE PROFONDA DEEP ABRASION RESISTANCE	10545-6		$\leq 175 \text{ mm}^3$	$\leq 145 \text{ mm}^3$	$\leq 145 \text{ mm}^3$	$\leq 145 \text{ mm}^3$
 DILATAZIONE TERMICA LINEARE LINEAR THERMAL EXPANSION	10545-8		REQUISITO NON PREVISTO ISO MAKES NO PROVISION FOR THIS TEST	$\alpha \leq 7 \times 10^{-6} \text{ }^\circ\text{C}^{-1}$	$\alpha \leq 7 \times 10^{-6} \text{ }^\circ\text{C}^{-1}$	$\alpha \leq 7 \times 10^{-6} \text{ }^\circ\text{C}^{-1}$
 RESISTENZA AGLI SBALZI TERMICI THERMAL SHOCK RESISTANCE	10545-9		REQUISITO NON PREVISTO ISO MAKES NO PROVISION FOR THIS TEST	RESISTENTE RESISTANT	RESISTENTE RESISTANT	RESISTENTE RESISTANT
 RESISTENZA ALL'ATTACCO CHIMICO CHEMICAL RESISTANCE	10545-13		COME INDICATO DAL PRODUTTORE AS INDICATED BY MANUFACTURER	ULA - UHA (RESISTENTE/ RESISTANT)	ULA - UHA (RESISTENTE/ RESISTANT)	ULA - UHA (RESISTENTE/ RESISTANT)
 RESISTENZA CHIMICA A PRODOTTI DI USO DOMESTICO HOUSEHOLD CHEMICALS RESISTANCE	10545-13		UB O GB MIN.	UA (RESISTENTE/ RESISTANT)	UA (RESISTENTE/ RESISTANT)	UA (RESISTENTE/ RESISTANT)
 RESISTENZA ALLE MACCHIE STAIN RESISTANCE	10545-14		CLASSE 3 MIN.	5 (RESISTENTE/ RESISTANT)	5 (RESISTENTE/ RESISTANT)	5 (RESISTENTE/ RESISTANT)
 RESISTENZA AL GELO FROST RESISTANCE	10545-12		NESSUNA ALTERAZIONE NO ALTERATIONS	RESISTENTE RESISTANT	RESISTENTE RESISTANT	RESISTENTE RESISTANT
 CARATTERISTICHE DIMENSIONALI DIMENSIONS	LUNGHEZZA E LARGHEZZA LENGTH AND WIDTH	10545-2	$\pm 0,6\%$	$\pm 0,6\%$	$\pm 0,6\%$	$\pm 0,6\%$
	RETTILINEITÀ SPIGOLI STRAIGHTNESS OF SIDES	10545-2	$\pm 0,5\%$	$\pm 0,2\%$	$\pm 0,2\%$	$\pm 0,2\%$
	ORTOGONALITÀ RECTANGULARITY	10545-2	$\pm 0,6\%$	$\pm 0,2\%$	$\pm 0,2\%$	$\pm 0,2\%$
	PLANARITÀ FLATNESS	10545-2	$\pm 0,5\%$	$\pm 0,5\%$	$\pm 0,5\%$	$\pm 0,5\%$
	SPESSORE THICKNESS	10545-2	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$

(*) VALORE RIFERITO SOLO A MATERIALE CERAMICO/ (*) VALUE REFERRED TO CERAMIC MATERIAL ONLY.


TECHNICAL CHARACTERISTICS

According to ANSI 137.1 (Unglazed Porcelain Tiles - P1 Class)


TECHNICAL CHARACTERISTICS	TEST METHOD		ANSI 137.1 REQUIRED VALUE FOR UNGLAZED PORCELAIN TILES - P1 GROUP	VALUES ZER0.3	VALUES ZER0.3 PLUS	VALUES ZER0.3 TWIN
 WATER ABSORPTION	ASTM C373		≤ 0,5%	COMPLIANT	COMPLIANT	COMPLIANT
 BREAKING STRENGTH	ASTM C648		≥ 250 lbf	NOT REQUIRED Wall tiles	COMPLIANT	COMPLIANT
 RESISTANCE TO COMPRESSION	-		ANSI MAKES NO PROVISION FOR THIS TEST	≥ 56000 PSI	≥ 56000 PSI	≥ 56000 PSI
 DEEP ABRASION RESISTANCE	ASTM C1243		≤ 175 mm ³	≤ 145 mm ³	≤ 145 mm ³	≤ 145 mm ³
 RESISTANCE TO ABRASIVE WEAR	ASTM C501		lw ≥ 100	lw ≥ 200	lw ≥ 200	lw ≥ 200
 LINEAR THERMAL EXPANSION	ASTM C372		NOT REQUIRED	$\alpha \leq 8 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$ $\alpha \leq 4.4 \times 10^{-6} \text{ } ^\circ\text{F}^{-1}$	$\alpha \leq 8 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$ $\alpha \leq 4.4 \times 10^{-6} \text{ } ^\circ\text{F}^{-1}$	$\alpha \leq 8 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$ $\alpha \leq 4.4 \times 10^{-6} \text{ } ^\circ\text{F}^{-1}$
 CHEMICAL RESISTANCE	ASTM C650		NOT REQUIRED	RESISTANT	RESISTANT	RESISTANT
 STAIN RESISTANCE	ASTM C1378		NOT REQUIRED	RESISTANT	RESISTANT	RESISTANT
 BOND STRENGTH	ASTM C482		≥ 50 PSI	COMPLIANT	COMPLIANT	COMPLIANT
 FROST RESISTANCE	ASTM C1026		NOT REQUIRED	RESISTANT	RESISTANT	RESISTANT
 	WARPAGE EDGE	ASTM C485	± 0.40% or max ± 0.05 inch for tiles up to 24"x24" or max ± 0.07 inch for tiles larger to 24"x24	COMPLIANT	COMPLIANT	COMPLIANT
	WARPAGE DIAGONAL	ASTM C485	± 0.40% or max ± 0.07 inch	COMPLIANT	COMPLIANT	COMPLIANT
	NOMINAL SIZES	ASTM C499	- 3.0% / + 2.0% of nominal dimensions	± 0.5%	± 0.5%	± 0.5%
	CALIBER RANGE	ASTM C499	± 0.25% or max ± 0.03 inch	COMPLIANT	COMPLIANT	COMPLIANT
	THICKNESS	ASTM C499	≤ 0.040 inch	≤ 0.030 inch	≤ 0.030 inch	≤ 0.030 inch
	WEDGING	ASTM C502	± 0.25% or max ± 0.03 inch	COMPLIANT	COMPLIANT	COMPLIANT

CARATTERISTICHE DI SICUREZZA E TERMICHE/ SAFETY AND THERMAL FEATURES

RESISTENZA ALLO SCIVOLAMENTO/ SLIP RESISTANCE

 CARATTERISTICA TECNICA TECHNICAL CHARACTERISTIC	METODO DI PROVA TEST METHOD	RIFERIMENTI PER LA CLASSIFICAZIONE REFERENCES FOR THE CLASSIFICATION	ZER0.3	ZER0.3 PLUS	ZER0.3 TWIN
COEFFICIENTE DI ATTRITO DINAMICO DYNAMIC FRICTION	B.C.R.	> 0,40 LEATHER/DRY, RUBBER/WET CUOIO/ASCIUTTO, GOMMA/BAGNATA LEGGE ITALIANA / ITALIAN LAWS (L. 13/89, DM 236/89, DL 503/96)	NON RICHiesto Materiale per parete NOT REQUIRED Wall tiles	> 0,40	> 0,40
RESISTENZA ALLO SCIVOLAMENTO SLIP RESISTANCE	DIN 51130	R9 ($6^\circ \leq \alpha \leq 10^\circ$)	NON RICHiesto Materiale per parete NOT REQUIRED Wall tiles	R9	R9
SLIP RESISTANCE	ASTM C1028	COF < 0.50 QUESTIONABLE 0.50 \leq COF < 0.60 CONDITIONALLY SLIP RESISTANT COF \geq 0.60 SLIP RESISTANT	NOT REQUIRED Wall Tiles	DRY-NEOLITE: \geq 0.60 WET-NEOLITE: \geq 0.60	DRY-NEOLITE: \geq 0.60 WET-NEOLITE: \geq 0.60

RESISTENZA AL FUOCO: POSA A PARETE/ FIRE RESISTANCE: WALL INSTALLATION

 CARATTERISTICA TECNICA TECHNICAL CHARACTERISTIC	METODO DI PROVA TEST METHOD	RIFERIMENTI PER LA CLASSIFICAZIONE REFERENCES FOR THE CLASSIFICATION	ZER0.3	ZER0.3 PLUS	ZER0.3 TWIN
RESISTENZA AL FUOCO FIRE RESISTANCE	ISO/DIS 1182.2	NORMATIVA ITALIANA ITALIAN LAWS DM 14/01/85 DM 15/03/05	CLASSE/CLASS 0	CLASSE/CLASS 1	CLASSE/CLASS 1
RESISTENZA AL FUOCO FIRE RESISTANCE	UNI EN 13823:2005	NORMATIVA EUROPEA EUROPEAN STANDARDS DIR. 89/106/CE 2000/147/CE UNI EN 13501-1:2005	CLASSE/CLASS A1	CLASSE/CLASS A2-s1,d0	CLASSE/CLASS A2-s1,d0

RESISTENZA AL FUOCO: POSA A PAVIMENTO/ FIRE RESISTANCE: FLOOR INSTALLATION

 CARATTERISTICA TECNICA TECHNICAL CHARACTERISTIC	METODO DI PROVA TEST METHOD	RIFERIMENTI PER LA CLASSIFICAZIONE REFERENCES FOR THE CLASSIFICATION	ZER0.3	ZER0.3 PLUS	ZER0.3 TWIN
RESISTENZA AL FUOCO FIRE RESISTANCE	ISO/DIS 1182.2	NORMATIVA ITALIANA ITALIAN LAWS DM 14/01/85 DM 15/03/05	CLASSE/CLASS 0	CLASSE/CLASS 1	CLASSE/CLASS 1
RESISTENZA AL FUOCO FIRE RESISTANCE	UNI EN 13823:2005	NORMATIVA EUROPEA EUROPEAN STANDARDS DIR. 89/106/CE 2000/147/CE UNI EN 13501-1:2005	CLASSE/CLASS A1 FL	CLASSE/CLASS A2 FL - s1	CLASSE/CLASS A2 FL - s1

CARATTERISTICHE TERMICHE/ THERMAL CHARACTERISTICS

 CARATTERISTICA TECNICA TECHNICAL CHARACTERISTIC	RIFERIMENTI PER LA CLASSIFICAZIONE REFERENCES FOR THE CLASSIFICATION	ZER0.3	ZER0.3 PLUS	ZER0.3 TWIN
CONDUCIBILITÀ TERMICA THERMAL CONDUCTIVITY	UNI EN 12524:2001	$\lambda = 1,3 \text{ W/m}^\circ\text{K}$ $\lambda = 1,1 \text{ KCal/m h}^\circ\text{C}$ $\lambda = 0.7 \text{ BTU/ft h}^\circ\text{F}$	$\lambda = 1,3 \text{ W/m}^\circ\text{K}$ $\lambda = 1,1 \text{ KCal/m h}^\circ\text{C}$ $\lambda = 0.7 \text{ BTU/ft h}^\circ\text{F}$	$\lambda = 1,3 \text{ W/m}^\circ\text{K}$ $\lambda = 1,1 \text{ KCal/m h}^\circ\text{C}$ $\lambda = 0.7 \text{ BTU/ft h}^\circ\text{F}$