





















CARATTERISTICHE TECNICHE

CONFORME - ACCORDING TO - CONFORME - GEMÄß - IGUAL: ISO 13006 G - EN 14411 G

	CARATTERISTICHE TECNICHE TECHNICAL CHARACTERISTICS CARACTÉRISTIQUES TECHNIQUES TECHNISCHE EIGENSCHAFTEN CARACTERÍSTICAS TÉCNICAS	metodo di prova iso test method iso méthode d'essai iso prüfmethode iso método de prueba iso	requisiti prescritti required values / valeur requise vorgeschriebener wert requisitos prescritos iso 13006 - G / en 14411 - G gruppo / group BIa	valori medi average values / valeurs moyens durchschnittliche werte valores medianos LEA non smaltato / unglazed ugl	
	assorbimento d'acqua (E) water absorption (E) absorption d'eau (E) wasserabsorption (E) absorción de agua (E)	iso 10545-3	E ≤ 0,5%	≤ 0,04%	
	resistenza alla flessione bending strength résistance à la flexion beigefestigkeit resistencia a la flexión	iso 10545-4	≥ 35 N/mm ²	≥ 50 N/mm ²	
	sforzo di rottura (S) breaking strength (S) chargement de rupture (S) bruchlast (S) esfuerzo de rotura (S)	iso 10545-4	≥ 1300 N	≥ 13600 N	
	classe requisiti meccanici mechanical classification résistance mécanique klasse mechanisches Erfordernis clasificación mecánica	en 1339-f	non richiesto not required nicht erforderlich pas nécessaire no se requiere	U11	
	resistenza all'abrasione profonda résistance to deep abrasion résistance à l'abrasion profonde widerstand gegen tiefenabrieb resistencia a la abrasión profunda	iso 10545-6	≤ 175 mm ³	≤ 145 mm ³	
	dilatazione termica lineare linear thermal expansion dilatation thermique linéaire thermische dilatation dilatación térmica linear	iso 10545-8	requisito non previsto iso makes no provision for this test	$\alpha \leq 7 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$	
	resistenza agli sbalzi termici thermal shock resistance résistance aux chocs thermiques temperaturwechselbeständigkeit resistencia a los cambios térmico	iso 10545-9	requisito non previsto iso makes no provision for this test	resistente resistant résistant beständig resistente	
	resistenza al gelo frost resistance résistance au gel frostbeständigkeit resistencia al hielo	iso 10545-12	nessuna alterazione no alterations	resistente resistant résistant beständig resistente	
	resistenza attacco chimico chemical resistance résistance chimique chemische beständigkeit resistencia unión química	iso 10545-13	come indicato dal produttore as indicated by manufacturer	ula - uha (resistente) (resistant) (résistant) (beständig) (resistente)	
	resistenza chimica a prodotti di uso domestico house hold chemicals resistance résistance aux agents chimique des produits pour emploi domestique chemische beständigkeit gegen haushalt putzmittel resistencia química a productos de uso doméstico	iso 10545-13	ub / gb min.	ua (resistente) (resistant) (résistant) (beständig) (resistente)	
	resistenza alle macchie stain resistance résistance aux taches fleckenbeständigkeit resistencia a las manchas	iso 10545-14	classe 3 min.	classe 5 (resistente) (resistant) (résistant) (beständig) (resistente)	
	caratteristiche dimensionali dimensions caracteristiques dimensionnelles scitenmasse características dimensionales	lunghezza e larghezza length and width longueur et largeur länge und breite longitud y ancho	iso 10545-2	± 0,6% max ± 2 mm	conforme compliant conforme gemäß igual
	rettezza spigoli straightness of sides rectitude des arêtes kantengeradheit rectilineidad ángulos	iso 10545-2	± 0,5% max ± 1,5 mm	conforme compliant conforme gemäß igual	
	ortogonalità rectangularity orthogonalité rechtwinkligkeit ortogonalidad	iso 10545-2	± 0,6% max ± 2 mm	conforme compliant conforme gemäß igual	
	planarità warpage planéité ebenflächigkeit planicidad	iso 10545-2	± 0,5% max ± 2 mm	conforme compliant conforme gemäß igual	
	spessore thickness épaisseur stärke espesor	iso 10545-2	± 5% max ± 0,5 mm	conforme compliant conforme gemäß igual	



ACCORDING TO ANSI A 137.1 UNGLAZED PORCELAIN TILES (CLASS P1)

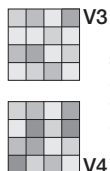
	TECHNICAL CHARACTERISTICS	test method astm	required values ansi a 137.1	values LEA unglazed ugl		
	water absorption	astm c373	≤ 0.5% (fully vetrified)	compliant		
	breaking strength	astm c648	≥ 250 lbs	≤ 2800 lbs		
	deep abrasion resistance	astm c1243	≤ 175 mm ³	compliant		
	linear thermal expansion	astm c372	not required	$\alpha \leq 8 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$ $\alpha \leq 4.4 \times 10^{-6} \text{ } ^\circ\text{F}^{-1}$		
	thermal shock resistance	astm c484	no alterations	resistant		
	chemical resistance	astm c650	not required	resistant		
	frost resistance	astm c1026	not required	resistant		
	bond resistance	astm c482	≥ 50 PSI	compliant		
	stain resistance	CTI 81-7 Ann. D	not required	resistant		
	dimensions	edge warpage	astm c485	rectified ± 0.40% or max ± 0.05 inch for tiles up to 24"x24" or max ± 0.07 inch for tiles larger than 24"x24"	calibrated ± 0.75% or max ± 0.09 inch	compliant
		diagonal warpage	astm c485	rectified ± 0.40% or max ± 0.07 inch	calibrated ± 0.50% or max ± 0.08 inch	compliant
		nominal dimensions	astm c499	rectified - 3.0% / + 2.0% of normal dimensions	calibrated ± 3.0% or max ± 0.08 inch	± 1.5%
		caliber range	astm c499	rectified ± 0.25% or max ± 0.03 inch	calibrated ± 0.50% or max ± 0.08 inch	compliant
		tickness	astm c499	≤ 0.040 inch		≤ 0.030 inch
		wedging	astm c502	rectified ± 0.25% or max ± 0.03 inch	calibrated ± 0.50% or max ± 0.08 inch	compliant

INFO TECNICHE - TECHNICAL INFO

SYSTEM L2

gres tutta massa UGL
full-body porcelain
grès cérame en pleine masse
vollgemischtes durchgefärbtes feisteinzeug

spessore 20mm
thickness
épaisseur
stärke



V3 (lime L2/cendre L2
oak patinato chiaro L2
oak patinato scuro L2)

V4 (doral L2/silver L2/gneiss L2)

fuga minima consigliata
minimum grout joint recommended
joint minimum conseillé
empfohlene minimalfugenbreit

2mm rett.
3mm nat.

caratteristiche tecniche*
technical characteristics
caractéristiques techniques
technische eigenschaften

metodo di prova
test method
methode d'essai
prüfmethode

fondi
plain tile
fond
unifliese



resistenza allo scivolamento
slip resistance
résistance au glissement
rutschfestigkeit

din 51130

R11



resistenza allo scivolamento
slip resistance
résistance au glissement
rutschfestigkeit

din 51097

A+B+C



coefficiente di attrito dinamico
dynamic friction coefficient
coefficient de friction dynamique
dynamischer reibungskoeffizient

B.C.R. tortus

$\mu > 0,40$



dynamic coefficient of friction (DCOF)

ANSI A 137.1:2012
(BOT 3000)

DCOF \geq 0.42



coefficient of friction

astm c1028

dry - COF \geq 0.60
wet - COF \geq 0.60



wet pendulum test AUS

AS 4586:2013

class P4 (W)



pendulum test UK

BS 7976:2002

slider 96 wet: 36+
slider 55 wet: 36+

*ISO 13006-G Bla UGL – EN 14411-G Bla UGL – ANSI A 137.1 (Unglazed Porcelain Tiles - Class P1)

REAZIONE AL FUOCO - FIRE REACTION - RÉACTION AU FEU - FEUERREAKTION - REACCIÓN AL FUEGO

CARATTERISTICHE TECNICHE
TECHNICAL CHARACTERISTICS
CARACTÉRISTIQUES TECHNIQUES
TECHNISCHE EIGENSCHAFTEN
CARACTERÍSTICAS TÉCNICAS

metodo di prova
test method
methode d'essai
prüfmethode
método de prueba

riferimenti per la classificazione
references for the classification
références pour le classement
referenzen für die Einstufung
referencias para la clasificación

valori
values / valeur
wert / valores
System L2



reazione al fuoco
fire resistance
caractéristique de résistance au feu
eigenschaften der feuerbeständigkeit
características de resistencia al fuego

uni en iso 9239:2006

normativa europea
europaean standards / réglementation européenne
europäische standards / legislación europea
direttiva 89/106/CE - decisione 2000/147/CE
UNI EN 13501-1:2005

posa a pav.
floor installation
classe A1_{fl}



resistenza allo scivolamento
slip resistance
résistance au glissement
rutschfestigkeit
resistencia al deslizamiento

vedi valori indicati in ciascuna collezione
see the declared technical features in each collection
voyez les valeurs déclarées dans chaque collection
vgl. die in jeder Kollektion deklarierten Werte
mira los valores declarados en cada colección

CARATTERISTICHE TERMICHE - THERMAL CHARACTERISTICS - CARACTÉRISTIQUES THERMIQUES THERMISCHE EIGENSCHAFTEN - CARACTERÍSTICAS TÉRMICAS



conducibilità termica
heat conducting ability
conductibilité thermique
wärmeleitfähigkeit
conductividad térmica

uni en 12524:2001

$\lambda = 1,3 \text{ W/m}^{\circ}\text{K}$
 $\lambda = 1,1 \text{ kcal/m h}^{\circ}\text{C}$
 $\lambda = 0.7 \text{ Btu/ft h}^{\circ}\text{F}$

**imballaggi
packing
emballage
verpackungen**

articolo	scatola			europallet		
	pz.	mq	kg	scat.	mq	kg
fondo 60,4x60,4 24"x24"	2	0,73	33,5	32	23,3	1072,0
fondo 60x60 24"x24"	2	0,72	32,5	32	23,0	1040,0
costa toro 30x60 12"x24"	1	0,18	8,1	100	18,0	812,5
costa toro angolare 30x60 12"x24"	1	0,14	6,1	100	13,5	610,0
costa retta 30x60 12"x24"	1	0,18	8,1	100	18,0	812,5
costa retta angolare 30x60 12"x24"	1	0,14	6,1	100	13,5	610,0
costa toro step 30x60 12"x24"	1	0,18	8,1	100	18,0	812,5
costa retta step 30x60 12"x24"	1	0,18	8,1	100	18,0	812,5
costa toro con gocc. 30x60 12"x24"	1	0,18	8,1	100	18,0	812,5
costa retta con gocc. 30x60 12"x24"	1	0,18	8,1	100	18,0	812,5
griglia 15x60 6"x24"	2	0,18	8,0	100	18,0	800,0
griglia angolare 15x60 6"x24"	2	0,16	7,0	100	15,8	700,0

Le rappresentazioni fotografiche e descrittive dei prodotti di Lea Ceramiche riportate sui depliant, sui cataloghi e sugli altri materiali pubblicitari dell'azienda, sono puramente illustrative dello specifico prodotto rappresentato. Si precisa infatti che, successivamente alla pubblicazione dei materiali pubblicitari dell'azienda, il prodotto potrebbe subire leggere modifiche nel relativo processo produttivo, al fine di renderlo tecnologicamente migliore. Tali aggiustamenti tecnologici potrebbero determinare lievi differenze, anche estetiche e/o cromatiche, nel prodotto medesimo, con la conseguenza che lo stesso potrebbe risultare diverso da come rappresentato e/o illustrato e/o descritto nel materiale pubblicitario di Lea Ceramiche. Tali differenze non potranno essere in alcun modo considerate dall'acquirente un vizio e/o difetto del materiale ceramico stesso, bensì una caratteristica dello specifico prodotto. Tutti i materiali ceramici che imitano pietre naturali presentano differenze di colore e sfumature che non potranno in nessun modo essere considerate quale difetto del prodotto, ma bensì una qualità caratteristica di tali tipi di produzione.

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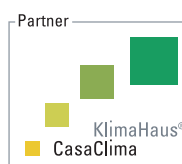
iso 14001



iso 9001



emas



casaclima



leed*

CE
DOP001LEA
OS
LEA CERAMICHE
Via Cameazzo n°21 - 41042 Fiorano Modenese (MO) - Italy Panariagroup Industrie Ceramiche SpA
EN 14411:2012
Dry-pressed ceramic tiles with low water absorption $E_w \leq 0,5\%$ for flooring and wall finishes, internal and external applications.

marchio CE



leed**

* LEED
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** LEED
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