

# REVERSO

## EN 14411:2012 Annex G Group Bla UGL

TECHNICAL FEATURE	TEST METHOD	REQUIRED STANDARDS	REVERSO
		Length and width ±0,6%/±2.0 mm	Compliant
_		Thickness $\pm 5\%/\pm 0.5$ mm	Compliant
SIZES AND LOOK OF THE TILE	ISO 10545-2	Straightness of sides ±0,5%/±1.5 mm	Compliant
SIZES AND LOOK OF THE HEL	130 10343 2	Rectangularity ±0,5%/±2.0 mm	Compliant
		Surface flatness $\pm 0.5\%/\pm 2.0$ mm	Compliant
		Surface quality: 95% of tiles with no defaults	
			0,03 %
WATER ABSORPTION	ISO 10545-3	≤ 0.5 %	(average values referred to the last production)
			48,4 N/mm <sup>2</sup>
AVERAGE BENDING STRENGTH	ISO 10545-4	35 N/mm² min.	(average values referred to the last production)
BREAKING STRENGTH	ISO 10545-4	Thickness ≥ 7,5 mm: 1300 N min.	Compliant
RESISTANCE TO DEEP ABRASION	ISO 10545-6	175 mm³ max.	Compliant
FROST RESISTANCE	ISO 10545-12	Required	Compliant
CHEMICAL RESISTANCE (DOMESTIC USE AND SWIMMING POOL CHEMICALS)	ISO 10545-13	min. UB	Compliant

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COEFFICIENT OF FRICTION	B.C.R.A. METHOD (D.M. no. 236 of 14/06/1989 of Italian Republic)	Unpolished/Outdoor:  DRY: > 0.40  WET: > 0.40
ANTISLIP PROPERTIES	DIN 51130	Unpolished: R10 Outdoor: R11
ANTISLIP PROPERTIES ON WET SURFACES	DIN 51097	Outdoor: A+B
DYNAMIC COEFFICIENT OF FRICTION	DCOF* (ANSI A137- 1:2012)	Unpolished/Outdoor: WET: > 0.42

Valid only for items in 1st. choice.

On request we can certify conformity with standards that are not mentioned hereby

The special trims for the series, apart from those used for stair coverings, do not comply with the ISO EN 14411 standard.

Average values refer to tests which have been made on the unpolished surface if not otherwise specifically indicated.

\*DCOF Test on Patina finish surface available on request.



### (V3):

Tiles with moderate shade and aspect variation

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### **GRES PORCELLANATO** EN 14411:2012 ALLEGATO G GRUPPO Bla UGL

Tutti i materiali Coem appartenenti a questa categoria sono conformi ai requisiti di norma. All Coem materials in this category comply with statutory requirements. Alle Materialien von Coem, die zu dieser Kategorie gehören, erfüllen die gesetzlichen Voraussetzungen. Tous les matériaux Coem qui appartiennent à cette catégorie sont conformes aux critères normatifs.

	CARATTERISTICA TECNICA TECHNICAL FEATURE TECHNISCHE IEBENSCHAFT CARACTERISTIQUE TECHNIQUE	METODO DI PROVA TEST METHOD PRÜFUNGSMETHODE METHODE D'ESSAI	TEST METHOD REQUIRED STANDARDS RÜFUNGSMETHODE NORMVORGABE		WIDE
			Lunghezza e larghezza / Length and width Länge und Breite / Longueur et largeur	±0,6% / ±2.0 mm	±0,15%
			Spessore / Thickness / Stärke / Epaisseur	±5% / ±0.5 mm	±5%
	Dimensioni e Aspetto		Rettilineità spigoli / Straightness of sides Kantengeradheit / Rectitude des arêtes	±0,5% / ±1.5 mm	±0,1%
7	Sizes and look of the tile Abmessungen und Aussehen der Fliese Dimensions et Aspect du carreau	ISO 10545-2	Ortogonalità / Rectangularity Rechtwinkligkeit / Angularité	±0,5% / ±2.0 mm	±0,2%
			Planarità / Surface flatness / Ebenheit / Planéité	±0,5% / ±2.0 mm	±0,2%
			Qualità della superficie: il 95% delle piastrelle esenti d Surface quality: 95% of tiles with no defaults Qualitätsanforderungen für die Oberfläche: 95% der Fli Qualitě de la surface: 95% des carreaux sans défauts		Conforme Compliant Konform Conforme
4.6	Assorbimento d'acqua Water absorption Wasseraufnahme Absorption d'eau	ISO 10545-3	< 0,5% (Massimo valore singolo - Maximum sin Maximaler Einzelwert - Valeur individuelle m		< 0,1%
1	Resistenza alla flessione media Average bending strength Mittlere Biegefestigkeit Résistance à la flexion moyenne	ISO 10545-4	35 N/mm² min. (Valore singolo - Single value - Einze Valeur individuelle 32 N/mm² mii		> 50 N/mm²
0	Resistenza all'abrasione profonda Resistance to deep abrasion Tiefenabriebestigkeit Résistance à l'abrasion profonde	ISO 10545-6	175 mm² max.		Conforme Compliant Konform Conforme
*	Resistenza al gelo Frost resistance Frostbestandigkeit Résistance au gel	ISO 10545-12	Richiesta - Required Notwendig - Requise		Conforme Compliant Konform Conforme
<u>^</u>	Resistenza agli agenti chimici (Uso domestico e additivi per piscina) Chemical resistance (Domestic use and swimming pool chemicals) Beständigkeit gegen Chemikalien (Gebrauch im Wohnbereich und Chemikalien für Schwimmbad) Résistance à l'attaque chimique (Usage domestique et additifs pour piscine)	ISO 10545-13	UB min min. UB UB mind min UB		Conforme Compliant Konform Conforme

VALIDO SOLO PER I PRODOTTI 1º SCELTA
VALID ONLY FOR ITEMS IN 1ST. CHOICE. - NUR FÜR PRODUKTEN IN 1 SORTE GÜLTIG. - VALABLE SEULEMENT POUR LES PRODUITS EN 1ER CHOIX.

La conformità ad altre norme qui non espressamente citate può essere fornita su richiesta.

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Gli elementi di corredo alle serie, esclusi quelli usati per rivestimento di scale, non rispondono alla normativa ISO EN 14411.

The special trims for the series, apart from those used for stair coverings, do not comply with the ISO EN 14411 standard. - Die Formteile der Serie, ausgenommen derjenigen für die Verkleidung von Treppen, entsprechen der Norm ISO EN 14411 nicht. - Les pièces coordonnées aux séries ne sont pas conformes à la norme ISO EN 14411, à l'exception de celles qui sont utilisées pour le revêtement des marches.

Valori medi riferiti alla nostra produzione, secondo test effettuati su superficie naturale se non esplicitamente indicati.

Average values refer to tests which have been made on the unpolished surface if not otherwise specifically indicated. - Die Mittelwerte beziehen sich auf Prüfungen, die für das Ausführungen unpoliert, wenn nicht anders deutlich angegeben, durchgefuert worden sind. - Valeurs moyens référant à notre production, tests effectués sur base de surface naturel si non autrement spécifié.

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SERIE COEM CHE RISPONDONO ALLA NORMATNA EN 14411:2012 ALLEGATO G GRUPPO BIA UGL E LORO CARATTERISTICHE QUALIFICANTI
COEM SERIES THAT COMPLY WITH THE EN 14411:2012 ANNEX G GROUP BIA UGL STANDARD AND THEIR QUALIFING CHARACTERISTICS
COEM-SERIEN, DIE DER NORM EN 14411:2012 ANLAGE G GRUPPE BIA UGL ENTSPRECHEN UND IHRE QUALIFIZIERENDEN EIGENSCHAFTEN
SERIES COEM CONFORMES A LA NORME EN 14411:2012 ANNEXE G GROUPE BIA UGL ET LEURS CARACTERISTIQUES DETERMINANTES



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SERIE SERIES SERIE SERIE	COEFFICIENTE DI ATTRITO COEFFICIENT OF FRICTION (B.C.R.A. METHOD D.M. 14/06/89 n° 236 par. 8.2.2)	CARATTERISTICA ANTISDRUCCIOLO ANTI-SLIP PROPERTIES (DIN 51130)	DCOF AcuTest <sup>SM</sup> ANSI A137.1
REVERSO	DRY: > 0,40 WET: > 0,40	R10	WET: 0.60

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	CARATTERISTICA TECNICA METODO DI PROVA REQUISITO NORMA TECHNICAL FEATURE TEST METHOD REQUIRED STANDARDS TECHNISCHE EIGENSCHAFT PRÜFUNGSMETHODE NORMVORGABE CARACTERISTIQUE TECHNIQUE METHODE DESSAI VALEUR PRESCRITE SELON LA NORME		gresx2		
7	Dimensioni e Aspetto Sizes and look of the tile Abmessungen und Aussehen der Fliese Dimensions et Aspect du carreau	ISO 10545-2	Lunghezza e larghezza / Length and width Lange und Breite/ Longueur et largeur Spessore / Thiokness / Starke/ Epaiseur Rettilineità spigoli / Straightness of sides / Kantengeradheit Rectitude des arkees Ortogonalith / Rectangularity / Rechtwinkligkeit Angularitè Planarità / Surface flatness/ Ebenheit/ Planéité Qualità della superficie: il 95% delle piastrelle esenti di Surface quality: 95% of tiles with no defaults Qualità superficie il 05% delle piastrelle esenti di Qualità del superficie: il 05% delle piastrelle esenti di Qualità del surface: 95% des carreaux sans défauts		Conforme Compliant Konform Conforme
4.6	Assorbimento d'acqua Water absorption Wasseraufnahme Absorption d'eau	ISO 10545-3	< 0,5% (Massimo valore singolo - Maximum sin Maximaler Einzelwert - Valeur individuelle m:		< 0,2%
1	Resistenza alla flessione media Average bending strength Mittlere Biegefestigkeit	ISO 10545-4	35 N/mm² min. (Valore singolo - Single value - Einze Valeur individuelle 32 N/mm² mir		Conforme Compliant Konform Conforme
	Résistance à la flexion moyenne	EN 1339	-		T11*
•	Sforzo di rottura Breaking strength Bruchlast Force de rupture	ISO 10545-4	Spessore / Thickness / Stärke - Epai > 7,5 mm: 1300 N min. < 7,5 mm: 700 N min.	sseur	10.000 N
0	Resistenza all'abrasione profonda Resistance to deep abrasion Tiefenabriebfestigkeit Résistance à l'abrasion profonde	ISO 10545-6	175 mm² max.		145 mm²
辮	Resistenza al gelo Frost resistance Frostbeständigkeit Résistance au gel	ISO 10545-12	Richiesta - Required Notwendig - Requise		Resistente Resistant Wiederstandsfaehig Resistent
<u>^</u>	Resistenza agli agenti chimici (Uso domestico e additivi per piscina) Chemical resistance (Domestic use and swimming pool chemicals) Bestandigkeit gegen Chemikalien (Gebrauch im Wohnbereich und Chemikalien für Schwimmbad) Résistance à l'attaque chimique (Usage domestique et additifs pour piscine)	ISO 10545-13	UB min min. UB UB mind min UB		UA Resistente Resistant Wiederstandsfaehig Resistent

<sup>\*</sup> Valido solo per i formati quadrati - Valid only for square formats - Gilt nur für die quadratischen Formate - Valable uniquement pour les formats carrés

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SERIE COEM CHE RISPONDONO ALLA NORMATIVA EN 14411:2012 ALLEGATO G GRUPPO BI<sub>B</sub> UGL E LORO CARATTERISTICHE QUALIFICANTI COEM SERIES THAT COMPLY WITH THE EN 14411:2012 ANNEX G GROUP BI<sub>B</sub> UGL STANDARD AND THEIR QUALIFING CHARACTERISTICS COEM-SERIEN, DIE DER NORM EN 14411:2012 ANLAGE G GRUPPE BI<sub>B</sub> UGL ENTSPRECHEN UND IHRE QUALIFIZIERENDEN EIGENSCHAFTEN SERIES COEM CONFORMES A LA NORME EN 14411:2012 ANNEXE G GROUPE BI<sub>B</sub> UGL ET LEURS CARACTERISTIQUES DETERMINANTES



SERIE SERIES SERIE SERIE	REAZIONE AL FUOCO EN 13823	CARATTERISTICA ANTISDRUCCIOLO METODO DIN 51130	CARATTERISTICA ANTISDRUCCIOLO SU BAGNATO METODO DIN 51097	COEFFICIENTE DI ATTRITO METODO B.C.R.A. D.M. 14/06/89 nº 236 par. 8.2.2
REVERSO	A1fl-A1	Esterno:	Esterno:	DRY: > 0,40
60,4x90,6	(nessuna reazione*)	R11	A + B	WET: > 0,40

\* Nessuna reazione - No reaction - Keine reaktion - Aucune réaction

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## eco+

PRODUCT COMPLIANT WITH LEED\* REQUIREMENTS (LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN)

Ceramiche Coem is a member of the U.S. Green Building Council (USGBC), the American association that takes care of implementing and regulating the construction of sustainable buildings through LEED® certification (Leadership in Energy and Environmental Design).

As a result of their technical and structural characteristics, our products can help buildings obtain a score based on LEED® parameters, and have been duly certified by the external certification body CERTIQUALITY.

Our products are compliant with LEED® requisites thanks to their high recyclable material content.

Our products have obtained the EPD (Environmental Product Declaration) for the sector, which provides environmental details on the life cycle of products, in accordance with the international standard ISO 14025, compliant with LEED® requisites.

The light refractive index of the porcelain stoneware support guarantees maximum heat insulation and excellent energy performance.

Hygienic and easy to clean, our products help improve the quality and safety of building interiors.

The eco-sustainable requisites do not affect the appearance of the product, and our porcelain stoneware is always on the leading edge of design and technological innovation.

Sustainable sites – Reduction of the heat island effect
Depending on the type of colour and use, the high SRI (Solar Reflectance Index) of
Ceramiche Coem products can help reduce the heat island effect (the difference
in the thermal gradient between urban and extra-urban areas) and its effects on
the microclimate, human habitat and wildlife.

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 REQUISITES
 Credits

 OUTDOOR PAVING SR > 33
 1 point

 LOW SLOPE ROOFS SRI > 82
 1 point

 HIGH SLOPE ROOFS SRI > 39
 1 point

Materials and resources – Declaration and optimisation of construction products Ceramiche Coem products can help improve LEED® rating in terms of materials and resources.

REQUISITES	Credits
SECTOR EPD	1/2 points
ORIGIN OF RAW MATERIALS - RECYCLED CONTENT	1 point
COMPONENTS – END PRODUCTS AND MATERIALS THAT DO NOT CONTAIN SUBSTANCES CLASSIFIED AS OF VERY HIGH CONCERN ACCORDING TO REACH CRITERIA	1 point

### Low-emission materials

Ceramiche Coem products do not emit VOC (Volatile Organic Compounds).

REQUISITES	Credits
PRODUCTS THAT DO NOT CONTAIN VOC	1 point

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DT 55







High content of recycled material

SERIES	COLORS	LEED® additional points for recycled material content Credits: Building Product Disclosure and Optimization – Sourcing of Raw Materials
REVERSO	AVORIO BEIGE	> 20% pre_consumer
	GRIGIO NOCE	1 Point

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