



Direzione Commerciale e Produzione:

S.S. 143 Loc. Vergnasco - 13882 CERRIONE (BI) - ITALIA Tel. +39 015.672.1 - Fax: +39 015.671.626 - Fax Export: +39 015.671.352

# **CERAMICA VOGUE - INTERNI PLUS RANGE (R9)**

**TECHNICAL DESCRIPTION AND TECHNICAL CHARACTERISTICS SHEET** 

Ceramic tiles in frost-resistant white body glazed stoneware produced by the dry pressing of an atomised mix of clay, inert materials, recycled glass and feldspars. The base is subsequently glazed and fired at a temperature of approximately 1200°C. The finished product has a satin anti-slip finish and is resistant to frost and chemicals (refer to the technical data sheets). This collection/finish meets both the current standards and practical norms for anti-slip surfaces in dry areas – R9. The tiles in the Interni Plus range are available in the 20x20 cm size and in 7 colours. Their particular physical and technical features make them suitable for floor tiling. The tiles in the Interni Plus range can be used not only for residential laying but also for floors subject to moderate foot traffic, such as commercial settings (shops, hotels, canteens etc.).

## UNI EN ISO 14411: 2012 Appendix H

Dry pressed ceramic tiles with low water absorption 0.5%  $< E \leq 3\%$  Group  $B1_b - M - GL$ 

Determination of size and surface qualities					
Nominal size (cm)	Production size (mm)	Test method	Requirements	Vogue results	
20x20 cm	sides: 198.4x198.4 mm thickness: 7 mm		sides: $\pm$ 0,60% thickness: $\pm$ 5%	sides: ± <b>0.30%</b> thickness: ± <b>4%</b>	
Straightness of sides (working surface)		UNI EN ISO 10545-2	$\pm$ 0.50%	$\pm$ 0.40%	
Squareness			$\pm 0.50\%$	$\pm$ 0.40%	
Flatness			± 0.50%	$\pm$ 0.40%	
Surface quality			min. 95%	min. 95%	







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Physical properties					
		Test method	Requirements	Vogue results	
Water absorption (%)		UNI EN ISO 10545-3	$0.5\% < E_{b} \le 3\%$	1.5%	
Tensile strength (N)	Thickness $\geq$ 7.5 mm	UNI EN ISO 10545-4	1.100 N min.	> 1.700 N	
Tensile strengtri (N)	Thickness < 7.5 mm		700 N min.	> 1.000 N	
Modulus of rupture (N/mm <sup>2</sup> )		UNI EN ISO 10545-4	30 N/mm <sup>2</sup> min.	> <b>40 N/mm<sup>2</sup></b>	
Abrasion resistance (P.E.I)		UNI EN ISO 10545-7	quote the abrasion class	refer to product page	
Coefficient of Linear thermal expansion		UNI EN ISO 10545-8	test method available	< 6,9*10 <sup>-6</sup> /⁰C	
Thermal shock resistance		UNI EN ISO 10545-9	test method available	GUARANTEED	
Crazing resistance		UNI EN ISO 10545-11	required	GUARANTEED	
Frost resistance		UNI EN ISO 10545-12	test method available	GUARANTEED (trims and bisello excepted)	
Expansion to humidity		UNI EN ISO 10545-10	test method available	< 0.04%	
Impact resistance		UNI EN ISO 10545-5	test method available	> 0.6 (see P Appendix)	

Other tests				
	Test method	Requirements	Vogue results	
Determination of the anti-slip characteristics	DIN 51130 Non – skid	R9 normal adhesion $(6^{\circ} \le \alpha \text{ tot} \le 10^{\circ})$ R10 medium adhesion $(10^{\circ} \le \alpha \text{ tot} \le 19^{\circ})$ R11 high adhesion $(19^{\circ} \le \alpha \text{ tot} \le 27^{\circ})$	R9	
Colour resistance to light	DIN 51094	not foreseen	GUARANTEED	
Fire reactivity	no test	decision 96/603/CE	class A1	







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Chemical properties					
	Test method	Requirements	Vogue results		
Stain resistance	UNI EN ISO 10545-14	class 3 min.	3 min. (see Appendix P)		
Resistance to common household chemicals and swimming pool additives		GB min.	GB min.		
Resistance to low concentrations of acids and alkalis	UNI EN ISO 10545-13	indicated by the manufacturer	GLB min.		
Resistance to high concentrations of acids and alkalis		available test method	GHB min.		
Lead and Cadmium release	UNI EN ISO 10545-15	available test method	available if required		

#### REMARKS

Modularity and dimensional characteristics of the Ceramica Vogue ceramic tiles are definitely over the prescriptions of the norms, enhancing the aesthetical effect and reducing at the same time the laying costs. The Vogue product is easy to lay. The tests about chemical properties confirm high performances of the Ceramica Vogue products concerning an easy maintenance, resistance to stains, hygienic conditions. In case of particular requests concerning the chemical resistance, specific tests are available on demand.

#### P APPENDIX

**EN ISO 10545-5: Determination of impact resistance by measurement of the coefficient of restitution:** This test is only applied on tiles to be used in areas where the impact resistance is of particular interest. The normal requirement for light uses is a restitution coefficient of 0,55. Higher values would be asked for heavy uses.

**EN ISO 10545-14: Determination of resistance to stains:** The test is compulsory for glazed tiles. If stains may be a problem for unglazed tiles please refer to the manufacturer. This test is not to be used for the temporary colour variations which may appear in certain types of glazed tiles because of the water absorbtion of the body under the glaze.

#### **N APPENDIX**

#### Classification of glazed floor tiles based on resistance to abrasion

This approximate classification is to be intended as a guide (see ISO 10545-7). It should not be used for product prescriptions related to specific requirements.

Class 0: Tiles in this class are not recommended for floor coverings.

Class 1: Floor coverings in barefoot areas or with use of shoes with soft soles without abrasive dirt (for example bathrooms and bedrooms in residential buildings, without direct access from outside).

**Class 2:** Floor coverings in areas where using shoes with soft or normal soles and with eventual small quantities of abrasive dirt (for example the day-rooms in private houses except kitchens, entrances and other rooms with high traffic ). This is not valid for not normal footwear, as for example hobnail shoes.

**Class 3:** Floor coverings in areas where using normal shoes with frequent presence of small quantities of abrasive dirt ( for example kitchens in residential buildings, living rooms, entrances, balconies, verandah and terraces ). This is not valid for not normal footwear, as for example hobnail shoes.

Class 4: Floor coverings in ordinary traffic areas with abrasive dirt, therefore with worst conditions than in Class 3 (for example entrances, commercial kitchens, hotel, shops and selling areas)

Class 5: Floor coverings in areas with high pedestrian traffic for extended times and with abrasive dirt, so that the conditions are the worst where you can use glazed floor tiles (for example public areas like commercial centers, airport halls, hotel entrances, public pedestrian crossings ad industrial applications).

This classification is valid for applications in standard conditions. Shoes, type of traffic and foreseeable cleaning systems should be taken in consideration and the floors should properly be protected from abrasive dirt at the building entrances through shoes cleaning systems. In extreme situations of very heavy traffic and lot of abrasive dirt, unglazed floor tiles of Group I can be taken in consideration.







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## **CONFORMITY TO STANDARDS**

Ceramica Vogue material (best quality) complies with the provisions of standard UNI EN 14411- 2012 - Appendix H.

The management system applies the provisions of the Standards in the series ISO 9000, ISO 14000 and the CE761/2001 EMAS Regulation.

The whole production cycle is covered by an Integrated Environmental Authorisation, pursuant to Art. 4 of Italian Legislative Decree (D.Lgs) 372/99 (I.P.P.C).

European Regulation 305/2011 (CPR) abrogates Directive 89/106/EEC concerning construction products, introducing a number of important changes concerning the **(** $\epsilon$ mark on construction products effective 01/07/2013. The Declaration of Conformity for construction products is replaced by the Declaration of Performance (DoP), with a different meaning and different content. Products cannot circulate within the European Union without this declaration. The presence of the **(** $\epsilon$ mark on all Ceramica Vogue packages demonstrates that the product contained in them conforms to the declarations of the technical information sheets and that the constancy of the product's performance has been tested as a guarantee for the user.

## LAYING AND MAINTENANCE ADVICE

For correct laying results, the material must be laid with a gap of not less than 2 mm. (UNI 11493:2013).

The quality of a ceramic wall tile depends not only on proper design and laying, but also the care taken of the surface thereafter. Ceramica Vogue ceramic tiles in frost resistant white body glazed stoneware are hard-wearing, hygienic and easy to clean. They require no particular maintenance other than the application of a number of simple cleaning rules. It is important to distinguish between the cleaning to be carried out when the building work is complete and ordinary cleaning.

## CLEANING AFTER BUILDING WORK IS COMPLETED

In addition to keeping surfaces protected during the various phases of the building work, it is of fundamental importance to ensure the tiles are cleaned properly for the first time once the building work is complete.

The purpose of this operation is to remove all traces and residue from the laying process from the surface of the tiles. Before washing the tiles, it is important to vacuum off the worst of the dirt, without scratching the surface of the tiles. Cleaning must be done using products such as Deterdek (www.filachim.com), Keranet (www.mapei.com) or similar. The indications on the technical specifications of the products used must be followed very carefully, and all cleaning products should be tested on a small portion of a tile before proceeding to clean the whole surface.

## ORDINARY CLEANING

For ordinary cleaning, it is best to use products able to remove any dirty marks without damaging the surface glaze, avoiding particularly aggressive (e.g. acid-based) products.

Use simple products suitable for cleaning ceramics. To improve the efficacy of the cleaning agents, dilute them in hot water.

## GENERAL RULES

Abrasive substances or cleaning instruments such as abrasive sponges or excessively hard brushes should be avoided, because they could scratch the surface or leave marks that will be impossible to remove. On products with anti-slip characteristics (R9 - R10 A + B - R11 B), wash and wax or wax products must not be used. For areas that lead directly outdoors, mats must be used in order to limit the abrasive agents brought in.

## DETERMINATION OF CLEANABILITY AND MICROBACTERIAL ANALYSIS

Ceramica Vogue materials, if properly cleaned with appropriate cleaning products, do not promote the proliferation of bacteria (laboratory tests available).

