



TECHNICAL FEATURES

Collection Royal Stone 6mm Grip+

1. PRODUCT CHARACTERISTICS AND PROCESSING METHOD

Porcelaingres tiles are formed by dry pressing an atomised mixture of natural minerals such as kaolin, feldspar, clays, quartz and natural dyes and sintering these during the firing process at a temperature no greater than 1250°C, giving the tiles' their mechanical resistance.

This creates a chemically inert construction product which does not contain sealants, waxes, epoxy resins, or artificial binding agents or dyes; this means that Porcelaingres tiles do not release any volatile organic compounds (VOC) after being laid.

2. COMPLIANCE WITH STANDARDS

The material complies with the European standards EN 14411 and international standards ISO13006 annex G.

EN ISO 10545.2 (Determination of dimensions and surface quality)

EN ISO 10545.3 (Determination of water absorption)

EN ISO 10545.4 (Determination of modulus of rupture and breaking strength)

EN ISO 10545.6 (Determination of resistance to deep abrasion for unglazed tiles)

EN ISO 10545.8 (Determination of linear thermal expansion)

EN ISO 10545.9 (Determination of resistance to thermal shock)

EN ISO 10545.12 (Determination of frost resistance)

EN ISO 10545.13 (Determination of chemical resistance)

EN ISO 10545.14 (Determination of resistance to stains)

And it must also guarantee conformity with DIN 51094 (lightfastness of the colours).

Compliance with these characteristics is checked in accordance with the certified quality management system of the UNI-EN ISO 9001: 2015 standard in addition to being guaranteed by the manufacturer.

Porcelaingres tiles are made with low environmental impact in accordance with LEED_BREEAM guidelines by using both new strategies for the continuous improvement of environmental friendliness and the aim of reducing wasting of non-renewable resources, in addition to using natural raw materials commonly found in the environment and recycled materials.

1. PRODUCT DESCRIPTION

Collection	Royal Stone
Material/name	BLACK DIAMOND; IMPERIAL BROWN; PALLADIUM GREY; NOBLE BEIGE; PLATINUM WHITE
Nominal size cm:	100x100
Surface:	Natur
Surface finish:	unglazed (UGL)
Thickness:	6mm
Declaration of performance :	Nr. 001PG2019DOP

2. TECHNICAL FEATURES

Technical Features	Norms	Required valuee	Porcelaingres Mean value
Water Absorption	ISO 10545.3	≤ 0,5 %	≤0,05%
Length and width	ISO 10545.2	± 0,6 %	± 0,2 %
Thickness		± 5 %	± 5,0 %
Linearity		± 0,5%	± 0,2 %
Wedging		± 0,5 %	± 0,2 %
Warpage		± 0,5 %	± 0,2 %
modulus of rupture (R)	ISO 10545.4	≥ 35 N/mm ²	≥48 N/mm ²
Resistance to deep abrasion of unglazed tiles: removed volume	ISO 10545.6	≤ 175 mm ³	≤140 mm ³
Thermal Expansion Coefficient	ISO 10545.8	Testing method available	7 MK ¹
Thermal Shock Resistance	ISO 10545.9	Testing method available	Resistance
Frost Resistance	ISO 10545.12	No sample must show alterations to surface	Frost proof
Chemical Resistance (with the exception of products that Hydrogen fluoride and its contain by-products)	ISO 10545.13	Minimum class (U)B (U) = unglazed tiles class C: Partial or complete loss of the original surface appearance class B: Discernible change in appearance class A: No visible effect	Nicht angegriffen mit Prüflösungen nach ISO 10545.13 class: UA – Resistance to household chemicals and swimming pool salts ULA – Resistance to low concentrations of acids and alkalis UHA – Resistance to high concentrations of acids and alkalis.
Resistance to staining,	ISO 10545.14	Testing method available	class 5 – Surface completely restored to the pristine aspect stain removal by means hot current water of 5 minutes

Resistance of light	DIN 51094	No sample must show noticeable colour change	No change in brightness or colour
Reaction to fire		-----	A1 – A1 _{FL}
Slip Resistance for industrial Area	DIN 51130	-----	R10
Slip Resistance - wet barefoot areas	DIN 51097	-----	A+B
Degree of colour change	according to manufacturer	-----	V3 Product with high shade chromatic variation
Bond strength/adhesion for: cementitious adhesives	DIN 12004	≥1 N/mm ²	conform
Content of recycling material for the environmental assessment according to LEED and BREEAM criteria	ISO 14021	-----	Recycled material at a minimum percentage of 40% by weight

The confirmation of specification is issued under the sole responsibility of the manufacturer.

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Anwendungstechnik/Technischer Support



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