

1 – PRODUCT IDENTIFICATION

Commercial reference: Precious	Product Reference: Calacatta Polido	Format: 592*592*10,0 mm
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2 – PHYSICAL SPECIFICATIONS

Characteristics	Norm	Requirements	Gres Panaria Portugal Aveiro Industrial Unit
Thickness	ISO 10545 – 2	± 5 % (Máx±0,5mm)	10,0± 0,5mm
Water absorption	ISO 10545 – 3	E ≤ 0,5 %	≤ 0,2 %
Modulus of rupture	ISO 10545 – 4	≥ 35 Nmm ⁻²	≥ 35 Nmm ⁻²
Resistance to surface Abrasion	ISO 10545 – 7	Minimum 2 (Annex N)	4
Coefficient of linear thermal expansion	ISO 10545 – 8	As per manufacturer	Maximum Value < 75*10 ⁻⁷
Thermal Shock resistance	ISO 10545 – 9	Required	Confirmed
Crazing resistance	ISO 10545 – 11	Required	Guaranteed
Frost resistance	ISO 10545 – 12	Required	Confirmed
Scratch hardness of surface according to MOHS	EN 101	Minimum: 5	5
Slipperiness	DIN 51130	As per manufacturer	—
	DIN 51097		—

3 – CHEMICAL SPECIFICATIONS

Characteristics		Norm	Requirements	Gres Panaria Portugal Aveiro Industrial Unit
Resistance to staining	Green staining agent in light oil (Cr ₂ O ₃)	ISO 10545-14	Minimum: 3	4
	Red staining agent in light oil (Fe ₂ O ₃)	ISO 1054 – 14	Minimum: 3	—
	Iodine	ISO 10545-14	Minimum: 3	3
	Olive Oil	ISO 10545-14	Minimum: 3	4
Resistance against acids and alkalis	Hydrochloric Acid	ISO 10545-13	Manufacturer to state classification	GLB
	Potassium Hydroxide	ISO 10545-13	Manufacturer to state classification	GLB
	Citric Acid	ISO 10545-13	Manufacturer to state classification	GLB
Resistance to swimming pool salts	Sodium hypochlorite	ISO 10545-13	Minimum: GB	GA
Resistance to household chemicals	Ammonium chloride	ISO 10545 – 13	Minimum: GB	GB

1 – PRODUCT IDENTIFICATION

Commercial reference: Precious	Product Reference: Calacatta Amaciado	Format: 592*592*10,0 mm
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2 – PHYSICAL SPECIFICATIONS

Characteristics	Norm	Requirements	Gres Panaria Portugal Aveiro Industrial Unit
Thickness	ISO 10545 – 2	± 5 % (Máx±0,5mm)	10,0± 0,5mm
Water absorption	ISO 10545 – 3	E ≤ 0,5 %	≤ 0,2 %
Modulus of rupture	ISO 10545 – 4	≥ 35 Nmm ⁻²	≥ 35 Nmm ⁻²
Resistance to surface Abrasion	ISO 10545 – 7	Minimum 2 (Annex N)	4
Coefficient of linear thermal expansion	ISO 10545 – 8	As per manufacturer	Maximum Value < 75*10 ⁻⁷
Thermal Shock resistance	ISO 10545 – 9	Required	Confirmed
Crazing resistance	ISO 10545 – 11	Required	Guaranteed
Frost resistance	ISO 10545 – 12	Required	Confirmed
Scratch hardness of surface according to MOHS	EN 101	Minimum: 5	5
Slipperiness	DIN 51130	As per manufacturer	—
	DIN 51097		—

3 – CHEMICAL SPECIFICATIONS

Characteristics	Norm	Requirements	Gres Panaria Portugal Aveiro Industrial Unit	
Resistance to staining	Green staining agent in light oil (Cr ₂ O ₃)	ISO 10545–14	Minimum: 3	3
	Red staining agent in light oil (Fe ₂ O ₃)	ISO 1054 –14	Minimum: 3	—
	Iodine	ISO 10545–14	Minimum: 3	3
	Olive Oil	ISO 10545–14	Minimum: 3	4
Resistance against acids and alkalis	Hydrochloric Acid	ISO 10545–13	Manufacturer to state classification	GLB
	Potassium Hydroxide	ISO 10545–13	Manufacturer to state classification	GLB
	Citric Acid	ISO 10545–13	Manufacturer to state classification	GLB
Resistance to swimming pool salts	Sodium hypochlorite	ISO 10545–13	Minimum: GB	GA
Resistance to household chemicals	Ammonium chloride	ISO 10545 – 13	Minimum: GB	GB