

TECHNICAL DATA SHEET – ITEM SPECIFICATIONS

“PEARL” collection

1. Process characteristics

Ceramic Porcelain tiles made by dry pressing of atomized clay mix of high-quality natural raw materials (clays, feldspar, and aggregates). The support thus obtained is enamelled and baked at temperatures above 1200 °C resulting in a compact mass, impervious and resistant to chemical attack.

2. Regulatory compliance

The material complies, only for first choice, with the requirements UNI EN 14411 appendix G, and ISO 13006 with respect to physical and chemical surface properties. For the safety features of the CE marking, compliance is extended to all commercial choices. Compliance maintenance is ensured by the Quality Management System, implemented by the company and certified according to UNI EN ISO 9001:2008.

3. Technical features

European standard UNI EN 14411 - Appendix G – Dry-pressed ceramic tiles with low water absorption – GROUP BIa GL

	Technical features	Norms	Required standards (for S > 410 cm ²)	Average production
REGULARITY CHARACTERISTICS	LENGHT AND WIDTH (Acceptable deviation (%) of the average size of each tile from the manufacturing size W)	UNI EN ISO 10545-2	± 0,6 %	± 0,3 %
	THICKNESS		± 5 %	COMPLIANT
	STRAIGHTNESS OF EDGES		± 0,5 %	± 0,3 %
	RECTANGULARITY		± 0,6 %	± 0,3 %
	SURFACE FLATNESS		± 0,5 %	± 0,3 %
	SURFACE QUALITY		A minimum of 95 % of the tiles shall be free from visible defects	COMPLIANT

	Technical features	Norms	Required standards	Average production
BULK MECHANICAL CHARACTERISTICS (MASSIVE, SURFACE AND THERMO-HYGROMETRIC)	WATER ABSORPTION	UNI EN ISO 10545-3	$E_b \leq 0,5 \%$	$< 0,1 \%$
	BREAKING STRENGTH (S) – MODULUS OF RUPTURE (R)	UNI EN ISO 10545-4	$S \geq 1300 \text{ N}$ $R \geq 35 \text{ N/mm}^2$	$S > 2000 \text{ N}$ $R > 45 \text{ N/mm}^2$
	CRAZING RESISTANCE	UNI EN ISO 10545-11	REQUIRED	RESISTANT
	FROST RESISTANCE	UNI EN ISO 10545-12	REQUIRED	RESISTANT
CHEMICAL CHARACTERISTICS	RESISTANCE TO HOUSEHOLD CHEMICALS AND SWIMMING POOL SALTS	UNI EN ISO 10545-13	Minimum Class GB	GA (resistant)
	RESISTANCE TO LOW CONCENTRATIONS OF ACIDS AND ALKALIS		Manufacturer to state classification	GLA (resistant)
	RESISTANCE TO STAINING	UNI EN ISO 10545-14	Minimum Class 3	5
SAFETY CHARACTERISTICS	STATIC COEFFICIENT OF FRICTION	ASTM C 1028	$\geq 0,60$	COMPLIANT
	SLIP CLASSIFICATION	DIN 51130	Depending on workplace	R 10

Suggestion on how to use our products:

⇒ Classification of the floor tiles for wear resistance (as per General Catalogue):

- natural surface 5

Contribution of Ceramica Sant'Agostino products to LEED points of a building



This product contributes to reach the LEED points of the building in which it is laid, based on the following considerations.

LEED NC (New Constructions) (Analysis based on Leed 2009 USGBC rule)

SS Credit 7.1: Heat Island Effect – Nonroof	(1 point)
SS Credit 7.2: Heat Island Effect – Roof	(1 point)
MR Credit 1.2: Building Reuse 50% Interior	(1 point)
MR Credit 2.1: Construction Waste Management 50%	(1 point)
MR Credit 2.2: Construction Waste Management 75%	(1 point)
MR Credit 4.1: Recycled Content 10%	(1 point)
MR Credit 4.2: Recycled Content 20%	(1 point)
MR Credit 5.1: Regional Materials 10%	(1 point)
MR Credit 5.2: Regional Material 20%	(1 point)
EA Prereq 2: Minimum Energy Performance	
EA Credit 1: Optimize Energy Performance	(1-19 points)
EQ Credit 4.1: Low Emitting Materials – Adesive & Sealants	(1 point)
EQ Credit 4.2: Low Emitting Materials – Flooring Systems	(1 point)
ID Credits: Innovation in Design	(1-5 points)

LEED CI (Commercial Interiors) (Analysis based on Leed 2009 USGBC rules)

MR Credit 1.2a: Building Reuse 40%	(1 point)
MR Credit 1.2b: Building Reuse 60%	(1 point)
MR Credit 4.1: Recycled Content 10%	(1 point)
MR Credit 4.2: Recycled Content 20%	(1 point)
MR Credit 5.1: Regional Materials 10%	(1 point)
MR Credit 5.2: Regional Material 20%	(1 point)
EQ Credit 4.1: Low Emitting Materials – Adesive & Sealants	(1 point)
EQ Credit 4.2: Low Emitting Materials – Flooring Systems	(1 point)
ID Credits: Innovation in Design	(1-5 points)

LEED EB (Existing Buildings) (Analysis based on Leed 2009 USGBC rules)

SS Credit 7.1: Heat Island Effect – Nonroof	(1 point)
SS Credit 7.2: Heat Island Effect – Roof	(1 point)



Glazed porcelain tiles of “PEARL” collection by **Ceramica Sant’Agostino** are guaranteed by quality marks UNI/Certiquality and Cen/Keymark (limited to products marked in the general catalogue) and the product labelling **ANAB-ICEA**, which certifies the compatibility for green building, and the **ECOLABEL** mark, applicable to the eco-friendly products and services for environmental and performance criteria established by European rules.

For any other technical features and for more information please see the general catalogue or our internet site www.ceramicasantagostino.it

Ceramica Sant’Agostino reserves the right to make amendments or changes at any time as described in this document.