

Tender specifications **BLUTECH collection**

Supply of Blustyle by Cotto d'Este porcelain stoneware tiles for walls and floors.

Product characteristics

Blustyle by Cotto d'Este full body porcelain stoneware tiles, unglazed, composed of a very fine mixture of quality clay with the addition of feldspar, quartz and kaolin, manufactured by dry pressing of atomized powders and subsequently sintered by industrial firing at temperatures above 1200°C.

The complete vitrification of the tiles allows for a compact, non-absorbent, frost-proof product, resistant to bending, impacts, staining, chemical attack and thermal shock.

Compliance with EN 14411-G / ISO 13006-G

The Blutech collection is in compliance with the regulations required for first quality products in Italy and Europe UNI EN 14411-G and internationally through ISO 13006-G.

Quality and environmental certifications

The conservation of the product characteristics is guaranteed by the Quality Management System put into practice by Bluestyle by Cotto d'Este in its plants and certified in accordance with UNI EN ISO 9001.

The collection is manufactured in plants with UNI EN ISO 14001 certified Environmental Management Systems (internationally recognized standard) and EMAS (Regulation 1221/09 - eco-management and audit community system).

The collection helps to meet the criteria for obtaining LEED credits. The content of "pre-consumer" recycled material is 40%, as certified by a qualified external body (LEED V4 Regulations - MR Credit). The product contains no VOC (volatile organic compounds).

Commercial description of the product				
Company	BLUSTYLE by COTTO D'ESTE (Panariagroup Industrie Ceramiche S.p.A.)			
Collection	BLUTECH			
Colours	BIANCO, AVORIO, BEIGE, CEMENTO, CENERE, ANTRACITE			
	30X60			
Sizes	60X60 (NO JUTA)			
	90X90 (NO JUTA)			
Surfaces	NATURALE, LAPPATA, PERLATA, JUTA LEVIGATA - Recommended, as well as for wall cladding, also for flooring in residential or light commercial areas that are not subjected to heavy traffic, where anti-slip characteristics are not required. The occasional presence of small inconsistencies or little spots on the surface is to be considered a characteristic of the material and of its unique production process. If the product is laid in direct contact with external environments, it is recommended to use protective solutions to reduce the formation of scratches.			
Edges	RETTIFICATI (RTT)			
Thickness	10,5mm (LEVIGATA) - 11mm			



















Tender specifications

BLUTECH collection

Technical features

Product type: full body porcelain stoneware (UGL)

According to: ISO 13006-G (Group Bla), EN 14411-G (Group Bla)

Technical features		Test method	Required values ISO 13006-G, EN 14411-G	Average values BLUTECH
Water absorption		ISO 10545-3	≤ 0,5 %	0,05 %
Breaking strength (S)		ISO 10545-4	≥ 1300 N	Spess. 11mm: 3900 N Spess.10 ,5mm: 3500N
Modulus of rupture		ISO 10545-4	≥ 35 N/mm ²	50 N/mm ²
Deep abrasion resistance		ISO 10545-6	≤ 175mm³	123mm ³
Linear thermal expansion		ISO 10545-8	No provision	$\alpha \le 7 \cdot 10^{-6} {}^{\circ}\text{C}^{-1}$
Stain resistance		ISO 10545-14	Class 3 Min.	5 RESISTANT
Chemical resistance (*)		ISO 10545-13	As indicated by manufacturer	LA, HA RESISTANT
Frost resistance		ISO 10545-12	No alteration	RESISTANT
ons	Lenght and width	ISO 10545-2	± 0,6 % ± 2mm	COMPLIANT
	Straightness of sides	ISO 10545-2	± 0,5 % ± 1,5mm	COMPLIANT
Dimensions	Rectangularity	ISO 10545-2	± 0,5 % ± 2mm	COMPLIANT
Dim	Warpage	ISO 10545-2	± 0,5 % ± 2mm	COMPLIANT
	Thickness	ISO 10545-2	± 5 % ± 0,5mm	COMPLIANT
Slip resistance		DIN 51130	-	R9 LAPP. R10 (NAT) R11 (JUTA)
		DIN 51097	-	A+B Nat A+B+C (JUTA)
		BCR-TORTUS	-	μ > 0,40 (NAT,JUTA)
		ANSI A326.3	-	DCOF≥0.42 (LAPP,NAT,JUTA)
		BS 7976-2	-	PTV 36+ Slider 96 (NAT)
		UNE ENV 12633	-	Clase 1 (LAPP.) Clase 2 (NAT) Clase 3 (JUTA)
Shade variation		ANSI A 137.1	As indicated by manufacturer	V2
Fire Reaction		EN 13823	CPR (UE) 305/2011, 2000/147/CE,	Class A1 (wall)
		EN 9239-1	UNI EN 13501-1	Class A1 _{fl} (floor)
Thermal conductivity		EN 12524	-	λ = 1,3 W/m °K
Recommended minimum joint (**)		Indoor	-	2mm (RECT)

^(*) Excluding hydrofluoric acid and its derivatives.

^(**) The width of grout joints must be established by the installation supervisor, unless grout widths are regulated by national laying standards.















