Tender Specifications

Supply of ceramic wall and floor tiles

Product characteristics

Unglazed Porcelain Tiles (UGL)

Unglazed porcelain stoneware consists of a mixture of quality clay with the addition of feldspar, quartz and kaolin. It is manufactured by dry pressing of atomized powder and then sintered by industrial burning at temperatures above 1200ºC. The glazing level of the material makes it possible to obtain a compact, non-porous product, resistant to ice, bending, impact, staining, chemical attack and thermal shock.

The Thunder collection complies with the regulations required for top quality products in Europe according to EN 14411 - Annex G and internationally through ISO 13006 - Annex G.

Commercial description of the product	
Brand	Margres
Collection	Thunder
Colours	Beige, Light Grey, Anthracite, Rust*
Sizes	90x90 (NR, ASR) _ 60x120 (NR) _ 60x90 (E ASR) _ 60x60 (NR, E ASR) _ 30x60 (NR)
Finish - Surface	Natural (NR) _ Anti-Slip (ASR, E ASR)
Finish - Edge	Rectified
Thickness	20mm (60x90, 60x60) | 9,5mm (90x90, 60x120) | 8,5mm (60x60, 30x60)

* available only in 90x90, 60x120 sizes and 20mm thickness (E ASR).

MARGRES
CERAMIC TILES

THUNDER

Tender Specifications

Technical features

Product type: **Unglazed Body Porcelain Tiles (UGL)**
According to: ISO 13006 - Annex G (Group Bla), EN 14411 - Annex G (Group Bla)

Technical features		Test method	Required value ISO 13006 / EN 14411	Typical Margres value
Dimensions	Lenght and width	EN ISO 10545-2	Rect. ± 0,3% , máx ± 1 mm	Conform
	Side straightness		Rect. ± 0,3% , máx ± 0,8 mm	Conform
	Rectangularity		Rect. ± 0,3% , máx ± 1,5 mm	Conform
	Warpage		Rect. ± 0,4% , máx ± 1,8 mm	Conform
	Thickness		± 5% máx ± 0,5 mm	Conform
Water absorption		EN ISO 10545-3	≤ 0,5%	0,1%
Modulus of rupture		EN ISO 10545-4	≥ 35 N/mm²	48 N/mm²
Breaking strength (S)			≥ 1300 N	12000N 60x90 20mm_60x60 20mm 2400N 90x90_60x120_60x60_30x60
Abrasion resistance		EN ISO 10545-6	≤ 175mm³	139 mm³
Linear thermal expansion		EN ISO 10545-8	As indicated by manufacturer	$\alpha \leq 7{,}5x10^{-6}$ °C^{-1}
Thermal shock resistance		EN ISO 10545-9	Required	Resistant
Frost resistance		EN ISO 10545-12	Required	Resistant
Resistance against acids and alkalis		EN ISO 10545-13	As indicated by manufacturer	Minimum: LB
Resistance to household cleaning products			Minimum: B	Class A
Stain Resistance		EN ISO 10545-14	As indicated by manufacturer	4-5 Simple removal
Slip Resistence		DIN EN 16165 Annex B	As indicated by manufacturer	R11 ASR _ E ASR R10 NR
		DIN EN 16165 Annex A		Class C ASR _ E ASR Class B NR
		DIN EN 16165 Annex C		≥36 NR _ ASR _ E ASR
		AS/NZS 4586		P4 ASR _ E ASR P3 NR
		ENV 12633		Class 3 ASR _ E ASR Class 2 NR
Shade Variation		ANSI A137.1	V0 None _ V1 Minor V2 Low _ V3 Medium _ V4 Major	V2 Slight variation
Recomended joint		Indoor Outdoor	-	Minimum 2mm Minimum 3mm (5mm colour Anthracite and Rust)

It is guaranteed the compliance with the values required by norm EN 14411 Group Bla UGL. Typical Margres reference value is merely indicative, which can vary from real data, and does not have the purpose of any trading proposal.

ISO 9001 | ISO 14001 | ISO 50001 · EMAS · ENVIRONMENTAL PRODUCT DECLARATION · LEED · GREENGUARD GOLD · HEALTHY BUILDING PRODUCTS · HEALTH PRODUCT DECLARATION

Tender Specifications

Quality and environmental certifications

Certification ISO 9001 - ISO 14001 - ISO 50001
Quality, Environment and Energy Management Systems.
For establishments seeking low environmental impact and high efficiency.

download ISO 9001, ISO 14001 and ISO 50001

DoP - Performance Declaration
The CE mark is a safety certification required by the European Union with the intention of safeguarding health and safety.

download DoP porcelain tiles

EMAS
Community eco-management and auditing system. Being green and transparent.

download EMAS

LEED
Margres is a member of the U.S. Green Building Council and of the Green Building Council ITALIA. These organizations promote the construction of buildings and other works which respect the environment as well as the health and well-being of the people who live and work within them.

download U.S. Green Building Council and Green Building Council Italy

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EPD
The Environmental Product Declaration

download EPD porcelain tiles

GREENGUARD GOLD
GREENGUARD certifies products that guarantee the highest standards of air quality in indoor environments.

download Greenguard Gold

HEALTHY BUILDING PRODUCTS

download Declare porcelain tiles

HPD
Health Product Declaration

Protect® antibacterial technology
Continuous, effective and long-lasting protection against the proliferation of bacteria, tested and certified according to ISO 22196 and ASTM E3031. Anti-slip finish doesn't have antibacterial protection.

download Protect

CSTB
Centre Scientifique et Technique du Bâtiment

download UPEC