MARGRES
CERAMIC TILES

LINEA COSMOS

Tender Specifications

Supply of ceramic wall and floor tiles

Product characteristics

Unglazed Porcelain Tiles (UGL)

Margres Linea laminated porcelain tiles, totally carbon neutral (CO2 generated from the life cycle 100% neutralized), produced in a maximum size of 3000x1000mm and 3mm thick, reinforced with fibreglass mesh, obtained from raw materials of the highest quality and purity (light clay, feldspar and ceramic pigments with high chromatic performance), and manufactured by dry pressing on a belt of atomized powder, subsequently sintered by means of industrial firing at temperatures exceeding 1200 °C.
The innovative Linea manufacturing process produces a final product which is light, flat and flexible, but at the same time compact, non-absorbent, frost-resistant, resistant to stains, chemical attack and thermal shock. The application of the fibreglass mesh gives the product high resistance and extreme versatility and ease of use for a wide range of applications in the architectural world.

The Linea Cosmos 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	Linea Cosmos
Colours	Corten, Iron
Sizes	100x300 _ 100x100
Finish - Surface	Natural (NR)
Finish - Edge	Rectified
Thickness	3,5mm

Tender Specifications

Technical features

Product type: **Unglazed 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 Value Linea
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	45 N/mm²
Abrasion resistance		EN ISO 10545-6	≤ 175mm³	Conform
Linear thermal expansion		EN ISO 10545-8	As indicated by manufacturer	$\alpha \leq 7x10^{-6}$ °C^{-1}
Frost resistance		EN ISO 10545-12	Required	Resistant
Chemical resistance (**)		EN ISO 10545-13	As indicated by manufacturer UGL	LA - HA Resistent
Stain Resistance		EN ISO 10545-14	As indicated by manufacturer UGL	Class 5 Resistent
Slip Resistence		DIN EN 16165 Annex B	As indicated by manufacturer	R10 NR
		ANSI A326.3	DCOF ≥ 0.42	DCOF ≥ 0.42 NR
Shade Variation		ANSI A137.1	V0 None _ V1 Minor V2 Low _ V3 Medium _ V4 Major	V2 Slight variation
Recomended joint (***)		Indoor (wall) Indoor (floor)	-	Minimum 1mm Minimum 2mm
		Outdoor (wall)	-	Minimum 5mm
Fire reaction		EN 13823 EN 9239-1	CPR (UE) 305/2011, 2000/147/E, UNI EN 13501-1	Class A2-s1,d0 (wall) Class $A2_{fl}$-s1 (floor)
Thermal conductivity		EN 12524	-	λ = 1,3 W/m ºK λ = 0.7 BTU/ft h º F

It is guaranteed the compliance with the values required by norm EN 14411 Group Bla UGL. Typical Value is merely indicative, which can vary from real data, and does not have the purpose of any trading proposal.
* Average value referred to ceramic material only.
** Excluding hydrofluoridric acid and its derivatives.
*** The joints' width should be determined by the site's manager unless this is regulated by local installation laws.
We recommend the use of a levelling system upon the installation of large format tiles.
Linea Cosmos is suitable for light residential or commercial use, with low traffic - except areas subject to the passage of heavy, concentrated loads (for example, hard-wheeled trolleys).

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 lamined porcelain slabs plus

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 lamined porcelain slabs 3plus (3,5mm)

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

download Greenguard Gold

HEALTHY BUILDING PRODUCTS

download Declare laminated porcelain tiles

HPD
Health Product Declaration

Tender Specifications

Quality and environmental certifications

THINK ZERO
Thing Zero is the revolution for sustainable ceramic tiles. The ultra-thin ceramic slabs reduce environmental impacts withuout reducong performance.

download Think Zero

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

KEY-MARK / CERTIQUALITY-UNI
The KEY-MARK and the Certiquality-UNI marks confirm that the certified products are compliant with the EU laws regarding ceramic tiles.