



#### CERAMICHE

## Tender specifications SLIMTECH CONCRETO 6mm collection

Supply of ceramic tiles made of LEA Ceramiche Slimtech laminated porcelain tile for floors and walls.

#### **Product characteristics**

LEA Ceramiche Slimtech laminated porcelain tiles, totally carbon neutral (CO<sub>2</sub> generated from the life cycle 100% neutralized), produced in a maximum size of 2600x1200mm and 6mm thick, 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 Slimtech 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, and extreme versatility and ease of use for a wide range of applications in the architectural world.

#### Compliance with EN 14411-G / ISO 13006-G

The Slimtech Concreto 6mm 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 LEA Ceramiche 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 recognised standard) and EMAS (Regulation 1221/09 - eco-management and audit community system).

The collection helps to meet the criteria for obtaining LEED credits. The product contains no VOC (volatile organic compounds) and got the GREENGUARD GOLD certification. The Environmental Product Declaration (EPD) is available, this tool communicates clearly the environmental performances of the Slimtech Concreto 6mm collection based on its Life Cycle Assessment (LCA).

Think Zero: Slimtech ultra-thin slabs are totally carbon neutral and produced with innovative technology to minimise environmental impact: the CO<sub>2</sub> generated by the life cycle of this product has been 100% neutralised with the purchase of carbon credits belonging to the CDM (Clean Development Mechanism) standard.

#### Antibacterial properties

Thanks to Protect antibacterial technology, the tiles from the Slimtech Concreto 6mm collection have continuous, effective and durable protection against the proliferation of bacteria, tested and certified in accordance with ISO 22196 and ASTM E3031.

| Commercial description of the product |  |  |  |  |
|---------------------------------------|--|--|--|--|
| Company                               | LEA Ceramiche (Panariagroup Industrie Ceramiche S.p.A.)          |  |  |  |
| Collection                            | SLIMTECH CONCRETO 6mm  |  |  |  |
| Colours                               | EXTRA LIGHT, LIGHT, MEDIUM, DARK, RUST, FOAM MEDIUM, TIDE MEDIUM |  |  |  |
|                                       | 60X120cm   |  |  |  |
| Sizes                                 | 120X120cm (*)  |  |  |  |
|                                       | 120X260cm  |  |  |  |
| Surfaces                              | aces NATURAL   |  |  |  |
| Edges                                 | RECTIFIED  |  |  |  |
| Thickness                             | 6mm  |  |  |  |

(\*) 120x120 Nat finish available in Slimtech 6plus (6.5mm) reinforced whit fiberglass





ISO 14001







BC Antibacterial for Life

R()TE

ANTIBACTERIA



ISO 9001

GREENGUARD GOLD

EPD

LEED

CE MARK

MADE IN ITAL





# Tender specifications SLIMTECH CONCRETO 6mm collection

### **Technical features**

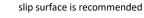
Product type: laminated porcelain stoneware (UGL) According to: ISO 13006-G (Group Bla), EN 14411-G (Group Bla)

| Technical features                |                       | Test method            | Required values<br>ISO 13006-G, EN 14411-G        | Average values<br>SLIMTECH CONCRETO<br>6mm              |
|-----------------------------------|-----------------------|------------------------|---|---|
| Water absorption                  |                       | ISO 10545-3            | ≤ 0,5 %   | 0,1 %   |
| Modulus of rupture                |                       | ISO 10545-4            | ≥ 35 N/mm <sup>2</sup>                            | 50 N/mm <sup>2</sup>                                    |
| Deep abrasion resistance          |                       | ISO 10545-6            | ≤ 175 mm <sup>3</sup>                             | COMPLIANT   |
| Linear thermal expansion          |                       | ISO 10545-8            | No provision                                      | $\alpha \leq 7 \cdot 10^{-6} \ ^{\circ}C^{-1}$          |
| 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   |
| Dimensions                        | Lenght and width      | ISO 10545-2            | ± 0,3 %, max ± 1 mm                               | COMPLIANT   |
|                                   | Straightness of sides | ISO 10545-2            | ± 0,3 %, max ± 0,8 mm                             | COMPLIANT   |
|                                   | Rectangularity        | ISO 10545-2            | ± 0,3 %, max ± 1,5 mm                             | COMPLIANT   |
|                                   | Warpage               | ISO 10545-2            | ± 0,4 %, max ± 1,8 mm                             | COMPLIANT   |
|                                   | Thickness             | ISO 10545-2            | ± 5 %, max ± 0,5 mm                               | COMPLIANT   |
| Slip resistance                   |                       | DIN EN 16165 – Annex B | -   | R10   |
|                                   |                       | BCR-TORTUS             | -   | μ > 0,40  |
|                                   |                       | ANSI A 326.3           | -   | ID - DCOF≥0.42 (Dry)<br>IW - DCOF≥0.42 (Wet)<br>IW+ *** |
| Shade variation                   |                       | ANSI A 137.1           | As indicated by manufacturer                      | V3  |
| Fire reaction                     |                       | EN 13823               | CPR (UE) 305/2011,<br>2000/147/CE, UNI EN 13501-1 | Class A1 (wall)   |
|                                   |                       | EN 9239-1              |   | Class A1 <sub>fl</sub> (floor)                          |
| Thermal conductivity              |                       | EN 12524               | -   | λ = 1,3 W/m °K  |
| Recommended minimum joint<br>(**) |                       | Indoor                 | -   | 1mm (wall)<br>2mm (floor)                               |

(\*) 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.

(\*\*\*)With the exception of areas characterized by a higher risk of slipping (such as public showers, indoor swimming pools, etc.) for which an Anti-













ISO 14001















CE MARK



ISO 9001

EMAS

ULTRATHIN - CO2 NEUTRAL ULTRASUSTAINABLE

GREENGUARD GOLD

EPD

LEED

LEED

ANTIBACTERIAL

MADE IN ITALY