

Supply of Fiandre porcelain stoneware.

1. Product and process features

Porcelain stoneware slabs classifiable as group Bla, frost-proof slabs that resist to chemical attacks, achieved through dry-forming of high-quality bodies made up of natural raw materials (kaolin minerals, feldspars), atomised, mixed. The slabs are made mechanically resistant through a sintering process at very high temperatures.

2. Compliance with Standards

The material, in compliance with the requirements of European standards EN 14411 Encl. G and International standards ISO13006 Encl. G, must meet the following Chemical Physical Properties:

- ISO 10545-3 (Water absorption)
 - ISO 10545-2 (Dimensions and surface quality)
 - ISO 10545-4 (Modulus of rupture)
 - ISO 10545-6 (Resistance to deep abrasion)
 - ISO 10545-8 (Thermal expansion coefficient)
 - ISO 10545-9 (Thermal shock resistance)
 - ISO 10545-12 (Frost resistance)
 - ISO 10545-13 (Chemical resistance)
 - ISO 10545-14 (Stain resistance)
- and it must comply with the DIN 51094 standard (Color resistance to light).

The Quality Control System implemented by the company guarantees the mentioned above features in accordance with **UNI-EN-ISO 9001:2015** standards, our company also guarantees the constant respect of the laws in force concerning the health and safety of workers through the **OHSAS 18001** management scheme.

Slabs, with a low environmental impact, obtained by pursuing policies of continuous improvement aimed at reducing the wastes of non-renewable resources by using natural raw materials that are not environmentally valuable.

Objectives achieved through the adoption of Environmental and Energy Management Systems respectively certified in accordance with the **UNI-EN ISO 14001:2015** and **ISO 50001:2011** standards as well as through the registration to the "ECO-MANAGEMENT" Community system according to the requirements of the **EMAS** Regulations.

The slabs have been checked and evaluated by an independent third-party Body which certifies their compliance to the **LEED_BREEAM** requirements and registered at Environdec, having obtained the Environmental Product Declaration **EPD** (type III) based on analysis of the product life cycle (s. CRADLE-TO-GATE approach – <https://www.environdec.com/Detail/epd1439>).

3. Commercial Description of the Product

Company	Fiandre
Collection	MARMI MAXIMUM
Product	DARK MARQUINA, PREMIUM WHITE, GLAM BRONZE, CALACATTA ELITE, PIETRA GREY
Size in mm (inch)	3000x1500, 1500x1500, 1500x750, 750x750, 750x375
Finish	Satin
Thickness in mm (inch)	6 mm

DIMENSIONS

Materials supplied in Mono-caliber.

Nominal size in mm	Working size in mm
3000x1500	3002x1500
1500x1500	1500x1500
1500x750	1500x749
750x750	749x749
750x375	749x373,5

4. Technical Features

Chemical Physical Properties	Norms	Required Standards	(Average Values of Production)
Water absorption	ISO 10545-3	≤0,5%	<0,1%
Length and Width	ISO 10545-2	±0,6%	±0,1%
Thickness		±5%	±5,0%
Linearity		±0,5%	±0,1%
Rectangularity		±0,5%	±0,1%
Surface Flatness		±0,5%	±0,2%
Modulus of rupture (R)		ISO 10545-4	≥ 35 N/mm ²
Resistance to deep abrasion	ISO 10545-6	≤ 175 mm ³	140 mm ³
Thermal expansion coefficient	ISO 10545-8	Testing method available	6,5x10 ⁻⁶ °C ⁻¹
Thermal shock resistance	ISO 10545-9	Testing method available	Resistant
Frost resistance	ISO 10545-12	No sample must show alterations to surface	Compliant
Chemical resistance* - Household chemicals - Swimming pool salts	ISO 10545-13	Min. Class B	Compliant
Stain resistance	ISO 10545-14	Testing method available 1<X≤5	Compliant
Color resistance to light	DIN 51094	No sample must show noticeable color change	No change in brightness or color
Reaction to fire	Decision 96/603 CE <i>Test absent</i>	-----	A1 – A1 _{FL}

(*) With the exception of HYDROFLUORIC acid (HF) or its derivatives and compounds.

Date: 18-10-2019