

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

<b>Company</b>	Fiandre
<b>Collection</b>	ASTER MAXIMUM
<b>Product</b>	VENUS, MERCURY, MOON
<b>Size in mm (inch)</b>	3000x1500, 3000x1000, 1500x1500, 1500x1000, 1000x1000, 1500x750, 750x750, 750x375
<b>Finish</b>	Semilucidato
<b>Thickness in mm (inch)</b>	6 mm

## DIMENSIONS

Materials supplied in Mono-caliber.

Nominal size in mm	Working size in mm
3000x1500	3002x1500
3000x1000	3002x1000
1500x1500	1500x1500
1500x1000	1500x1000
1000x1000	1000x1000
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%	0,04% ÷ 0,06%
Lenght and Width	ISO 10545-2	±0,6%	±0,1%
Thickness		±5%	±5,0%
Linearity		±0,5%	±0,1%
Rectangularity		±0,5%	±0,1%
Suface Flatness		±0,5%	±0,2%
Modulus of rupture (R)		ISO 10545-4	≥ 35 N/mm <sup>2</sup>
Resistance to deep abrasion	ISO 10545-6	≤ 175 mm <sup>3</sup>	140 mm <sup>3</sup>
Thermal expansion coefficient	ISO 10545-8	Testing method available	6,5x10 <sup>-6</sup> °C <sup>-1</sup>
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 <sub>FL</sub>

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

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