**Product:** AUREUS **Date:** 27/03/2023 **Inspection:** 1/1

| | | | |
|---|---|---|---|
| **Material:** | Ceramic tile dry pressed | **Size:** | 60 x 60 |
| **Clay:** | White body porcelain | **Group:** | BIa |
| **Recommended use:** | Floors, walls and ceilings, interior and exterior | | |

*Dimensions and surface appearance (ISO 10545-2)*

| | | | | | |
|---|---|---|---|---|---|
| **Length:** | 600 ± 2,00 mm | **Straightness of Sides:** | 600 ± 1,50 mm<br>600 ± 1,50 mm | **Orthogonality:** | 600 ± 2,00 mm<br>600 ± 2,00 mm |
| **Width:** | 600 ± 2,00 mm | **Thickness:** | 9,1 mm. ±0.46 mm | | |

**Surface flatness**

| | | | | |
|---|---|---|---|---|
| **Centre curvature:** | **(Concave)** | - 2,00 mm | **(Convex)** | + 2,00 mm |
| **Edge curvature:** | **(Concave)** | - 2,00 mm<br>- 2,00 mm | **(Convex)** | + 2,00 mm<br>+ 2,00 mm |
| **Warpage:** | **(Concave)** | - 2,00 mm | **(Convex)** | + 2,00 mm |

**Surface appearance:** Minimun 95% of the tiles have to be free of defects that could damage the superficial aspect of the tile. See criteria to determine quality: page 3

*Physical properties*

| | | | |
|---|---|---|---|
| **Water absorption (ISO 10545-3):** | ≤ 0,5 % | **Frost resistance (ISO 10545-12):** | According to standard |
| | | **Thermal shock resistance (ISO 10545-9):** | According to standard |
| | | **Cracking resistance (ISO 10545-11):** | According to standard |
| **Breaking strength (ISO 10545-4):** | > 1.300 N | **Bending strength (ISO 10545-4):** | > 35 N/mm² |
| **Scratch resistance (UNE-67-101):** | | Mohs 7 | |
| **Abrasion resistance (ISO 10545-7):** | | Class 4 | |

**Slip resistance**

Not Applicable

*Chemical properties*

**Stain resistance (ISO 10545-14):** 5

**Chemical products resistance (ISO 10545-13)**

| | | | |
|---|---|---|---|
| Acids and bases in low concentration: | GLA | Acids and bases in high concentration: | GHA |
| Household cleaning products and chemical products for swimming pools: | GA | | |

 The technical specs shown above are obtained following the regulation UNE-EN 14411 2004, with the exception of the slip resistance that follows the regulation UNE-ENV 12633: 2003.

**DESCRIPTION OF SURFACE DEFECTS ON CERAMIC TILES**

The following types of surface defects are described:

- **Crack:** fracture in the body of the tile visible on the seen side, on the unseen face or on both.
- **Breah:** fracture of the piece produced in the kiln during cooling, which appears in the enamel as a thin crack as a irregular stroke.
- **Lack of enamel:** small areas on the enameled face that do not contain enamel.
- **Raft:** unintended depression in the surface of the tile.
- **Pinhole:** tiny holes in the surface of the tile.
- **Devitrification:** unintentional crystallisations of the enamel visible to the naked eye.
- **Dotts and stains:** any unintentional visible point that contrasts with the enameled surface of the piece.
- **Press defects:** clay attached on the surface of biscuit or later covered by enamel.
- **Serigraphy defects:** areas where little sharpness is seen, or lack of silkscreen in the decoration of the piece.
- **Blunt:** broken fragments coming from the edges, corners or surface of the tile.
- **Scrubbing Defects:** unusual presence of enamel along the sides of the piece.
- **Burr:** excessive enamel accumulation along the edge of a tile.
- **Irregular edge:** unintentional irregularities in the edges of the piece.
- **Bubbles:** small superficial blisters resulting from the degassin process during fiering.
- **Wave and bell grating:** straight line or circular in the enamel of different tonality to it.
- **Off shade:** difference of shades between tiles of the same batch.
- **Decentering:** loss of sharpness of the drawing due to the poor layout between the different serigraphs that form the drawing of the tile.
- **Grazed:** superficial loss of the enamel and / or screen printing by contact of the tile with some object.
- **Failure of screenprinted by alternative screens:** error in the sequence of screens established in the design of th

**RESULTS CRITERIA**

The criteria for determining the quality of the piece are shown in the following table::

| Defect | 1st Quality |
|---|---|
| Cracking | Total absence |
| Crazing | Total absence |
| Breach | Total absence |
| Lack of enamel | Total absence |
| Raft | Total absence or presence of a single raft with a diameter less than 1 mm |
| Pinhole | Total absence or presence of fine pricking in a dispersed manner by the piece |
| Devitrification | Total absence |
| Dotts and Stains | Total absence or presence of a single defect without alteration of the roughness of the enameled surface |
| Press defects | Total absence or presence of a single defect without alteration of the planarity of the enameled surface |
| Serigraphy defects | Total absence or presence of the defect without altering the original design |
| Blunt | Total absence or presence on the surface without observing the sponge cake, and at most up to a distance of 0.5 mm. from the corner of the piece |
| Defects | Total absence or presence only detected by observing the piece by the alteral |
| Burr | Total absence or presence in a single localized area of the side of the piece, as long as this area is not greater than 1 cm, the burr does not protrude from the enameled alteral more than 1 mm. |
| Irregular edge | Total absence or presence without visually affecting the side of the enameled face of the piece |
| Bubbles | Total absence |
| Wave and grating of bell | Total absence |
| Off shade | Total absence |
| Off center | Absence of the defect |
| Grazed | Total absence |
| Serigraphic failure by alternative screens | Total absence |