

# THE MOSAIC FACTORY

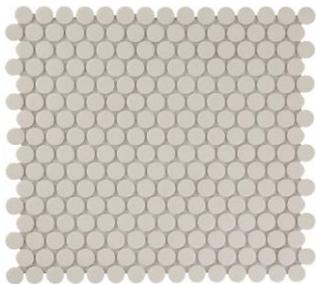
## Certificate of Conformity

**Product:** Unglazed mosaic TMF® London collection, Ø 19mm pennyround  
**Country of Origin:** CN  
**Type designation:** LOPxxxx

**Technical Data:** Dry-pressed ceramic tiles for floorings and wall finishes, interior and exterior, with low water absorption  $E_b < 0.5\%$ , Group B I a, flat, unglazed Ø 19mm

|                       |                 |                  |  |
|-----------------------|-----------------|------------------|--|
| Name of product       | Unglazed Mosaic | Nominal size (N) | Ø 19mm   |
| Nature of the surface | Unglazed (UGL)  | Work size        | Ø 19mm x 5,5mm                                       |
| Group                 | B I a           | Intended use     | Floorings and wall finishes<br>Interior and exterior |

**Image:**



The above product has been tested for CE marking according to:

**EN 14411:2016** *Ceramic tiles – Definition, classification, characteristics, assessment and verification of constancy of performance and marking*

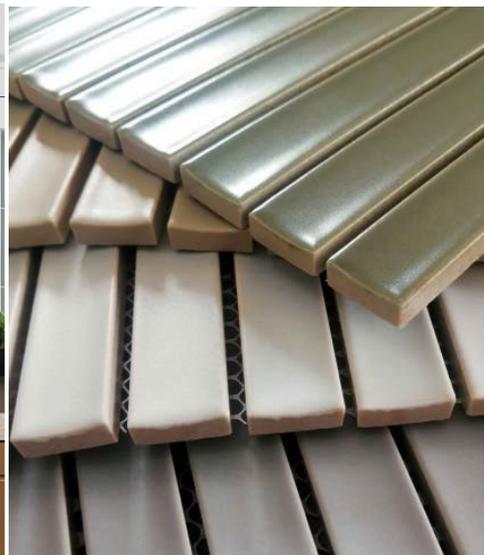
| Clause            | Properties                            | Test Method          | Requirements      | Results          | Verdicts |     |
|-------------------|---------------------------------------|----------------------|-------------------|------------------|----------|-----|
| <b>A</b>          | <b>Dimensions and surface quality</b> |                      |                   |                  |          |     |
|                   | Length                                | EN ISO 10545-2:2018  | ±0,5mm            | -0,1mm - 0       | Pass     |     |
|                   | Width                                 | EN ISO 10545-2:2018  | ±0,5mm            | -0,1mm - 0       | Pass     |     |
|                   | Thickness                             | EN ISO 10545-2:2018  | ±0,5mm            | 0 - 0,2mm        | Pass     |     |
| <b>B</b>          | <b>Physical properties</b>            |                      |                   |                  |          |     |
|                   | Water absorption                      | EN ISO 10545-3:2018  | <0,5%             | <0,11%           | Pass     |     |
|                   | Breaking strength in N                | EN ISO 10545-4:2019  | >700              | 869              | Pass     |     |
|                   | Modulus of rupture, in Mpa            | EN ISO 10545-4: 2019 | Minimum 35        | 57               | Pass     |     |
|                   | Thermal shock resistance              | EN ISO 10545-9:2013  | Pass              | Fully resistance | Pass     |     |
|                   | Crazing resistance Glazed tiles       | EN ISO 10545-11:1996 | Pass              | Fully resistance | Pass     |     |
|                   | Frost resistance                      | EN ISO 10545-12:1997 | Pass              | Fully resistance | Pass     |     |
|                   | Slipperiness                          | DIN 51130            |                   |                  | 20,1 °   | R11 |
|                   |                                       | DIN 51097            |                   |                  | >24°     | C   |
|                   |                                       | BS 7976              | PTV Slider 96 dry |                  | ~62      |     |
| PTV Slider 96 wet |                                       |                      |                   | ~48              |          |     |
|                   |                                       | PTV Slider 55 dry    |                   | ~95              |          |     |
|                   |                                       | PTV Slider 55 wet    |                   | ~42              |          |     |
| <b>C</b>          | <b>Chemical properties</b>            |                      |                   |                  |          |     |
|                   | Resistance to staining                | EN ISO 10545-14:2015 | Minimum Class 3   | Class 5          | Pass     |     |
|                   | Resistance to chemicals               | EN ISO 10545-13:2016 | Minimum Class B   | Class A          | Pass     |     |

# ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14001:2015 and EN14411:2016

**Porcelain Mosaic Tiles**  
**Manufactured for: UCI - The Mosaic Factory**  
**Country of Origin: China**

**Issue date: 15/11/2023**



## **1. General information**

### **1.1 The organization**

The manufacturer is a leading manufacturer for porcelain mosaic tiles in China and produces for The Mosaic Factory in The Netherlands. The company was founded in 1998.

### **1.2 Scope of the declaration**

This document refers to the porcelain mosaic tiles manufactured for The Mosaic Factory.

### **1.3 Declared product / Declared unit**

1 m<sup>2</sup> porcelain mosaic tiles (average)

## **2. Product**

### **2.1 Identification of the product**

This EPD document covers the glazed and unglazed porcelain mosaic tiles pertaining the water absorption group Bla, classification based on EN14411:2016. This is their water absorption is less than 0.5%. The porcelain mosaic tiles included in the study cover different models and different formats. The chip sizes in the scope of this EPD are from Dia 19mm to 28mm, square 23x23mm to 95x95mm, rectangle 10.5x48mm to 72x293mm, hexagon 23x26mm to 95x110mm, and other shapes such as lantern, fanshape, quadrangle. The thickness formats are from 5mm to 10mm, with an average weight of 12.5kg/m<sup>2</sup>.

### **2.2 Intended use of the product**

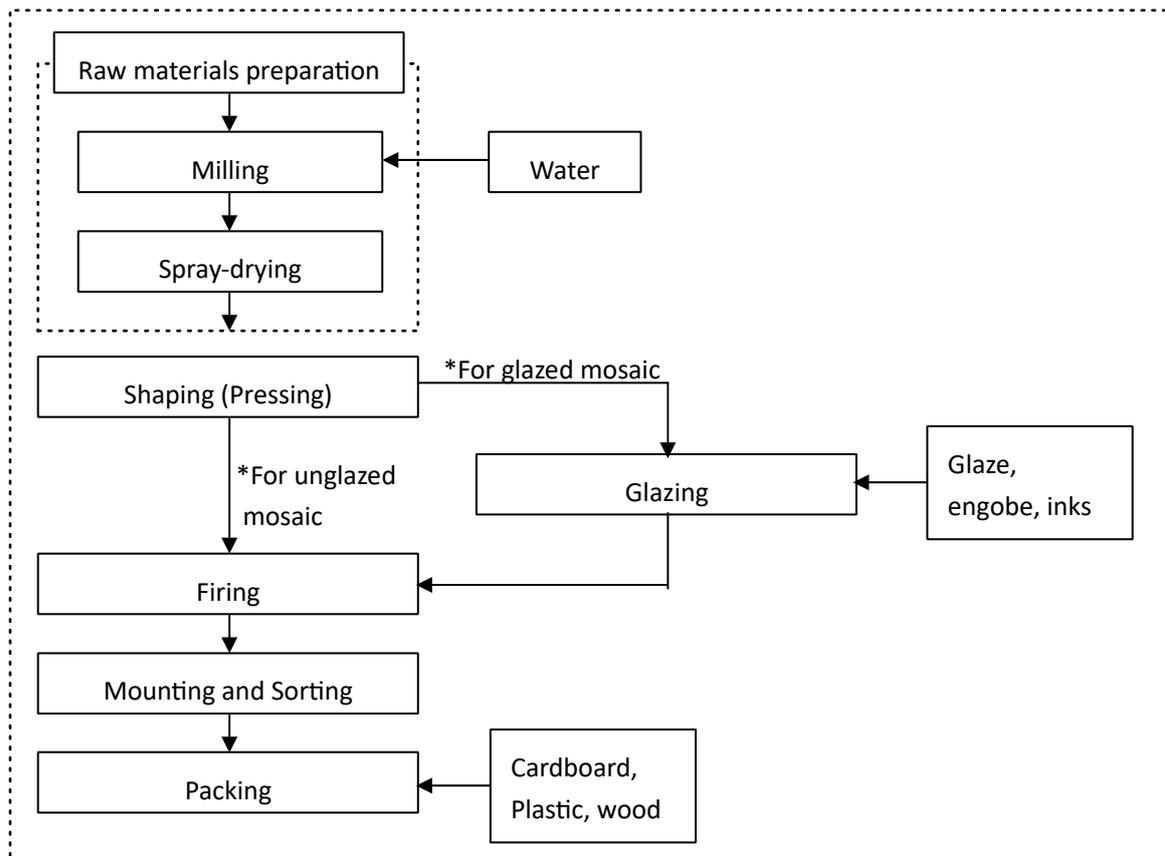
The function of the product is to cover surfaces. In this study the environmental behavior of the porcelain mosaic tiles as indoor house surface covering has been assessed, however, the versatility of these pieces allows them to be installed in other places, such as offices, stores, hospitals, etc, in indoor and outdoor environments, as well as covering walls and other surfaces. The product features are included in the technical datasheets which can be requested from the manufacturer, being them, the ones required by the EN 14411:2016 standard.

### **2.3 Reference service life**

The Service Life of the product is the same as that of the building where it is installed if it is installed correctly, as it is a durable product which does not require substitution. A Reference Service Life of 50 years has been considered.

### **2.4 Product production process**

- A1. Raw material selection and supply
- A2. Transport to the manufacturer
- A3. Manufacturing



The above production processes adhere to the highest environmental standards. From raw material sourcing to the final stages of manufacturing, we prioritize eco-friendly practices that not only ensure the quality of our products but also reduce energy consumption and waste generation.

### 3. Key Environmental Initiatives

#### 3.1 Resource Efficiency

- We optimize resource usage to minimize waste and maximize efficiency in the production process.
- Recycling and reusing materials wherever possible to reduce our reliance on virgin resources.

#### 3.2 Energy Conservation

- Our facilities are equipped with energy-efficient technologies, such as LED lighting and energy-saving machinery.
- We continually explore renewable energy sources to power our operations, reducing our carbon footprint.

#### 3.3 Emission Reduction

- We invest in advanced emission control systems to minimize air and water pollution.

- Regular audits ensure compliance with stringent emission standards, contributing to a cleaner environment.

### 3.4 Water Management

- Implementing water recycling systems to minimize water consumption during production.
- Monitoring and controlling wastewater to ensure it meets or exceeds regulatory standards.

## 4. Declaration of the environmental parameters

| 1 m <sup>2</sup> of porcelain mosaic tiles (group Bla)  | Minimum content |
|---|-----------------|
| Total water content (kg)  | 28.6            |
| Fresh water content (kg)  | 3.63            |
| Pre-consumer recycled water content (kg)  | 24.97           |
| Total solids content (kg)   | 18.56           |
| Virgin solids content (kg)  | 16.6            |
| Pre-consumer recycled solids content (kg)   | 1.96            |
| Total energy save for mounting process (KW)<br>Note: The waste heat of the kiln 100% use for mounting line. | 0.43            |

## 5. Declaration

This Environmental Product Declaration is issued by the manufacturer for The Mosaic Factory. It is a self-declaration based on the production operating data.