Mosa.

Glazed wall tiles

Product Description
Glazed, dry-pressed ceramic wall tiles with a white body, in accordance with EN 14411, Annex L, type BIII, with water absorption > 10%, non-frost-resistant, manufactured using the double-firing process. The glazed wall tile collection is divided into series, which may include decorative tiles and strips. For further information about the series, please visit www.mosa.com. Cradle to Cradle Certified® Gold certified; designed for the technosphere and safe for the biosphere.

Product Benefits
Mosa wall tiles exceed the quality requirements of EN 14411, Annex L, type BIII. Nearly all Mosa wall tiles are modular, including a 3 mm joint. Mosa floor tiles are modularly compatible with these wall tiles. Mosa wall tiles generally have at least one fully glazed edge. Tiles with one glazed edge facilitate the creation of external corner joints.

Sustainability and Cradle to Cradle
Mosa wall tiles are Cradle to Cradle Certified® Gold certified. Their composition is pure and free from harmful substances, and Mosa tiles are designed to remain within material cycles. Consequently, no harmful substances are released during or after their long service life.
Mosa tiles are manufactured in the company's own factories in Maastricht (NL). Production makes maximum possible use of sustainable energy and locally sourced raw materials, resulting in a favourable CO_2 balance. Specific environmental data for Mosa tiles are included in the Dutch National Environmental Database (Nationale Milieudatabase) for calculating the environmental performance of buildings in accordance with the Dutch Building Decree. An Environmental Product Declaration (Type III EPD) and an MRPI information sheet are available at www.mosa.com. Mosa tiles have been awarded the Dubokeur certification, making them particularly suitable for use in sustainable buildings. They also contribute towards obtaining building certifications such as LEED and BREEAM. For an up-to-date overview, please visit www.mosa.com.

NEN-EN-ISO 14001
Since 2007, Mosa has managed its environmental activities in accordance with the international ISO 14001 standard.

Recycling
Mosa glazed wall tiles contain 33% recycled material, depending on the product type.

European Construction Products Regulation
Mosa glazed wall tiles manufactured in accordance with EN 14411, type BIII, comply with the requirements of the European Construction Products Regulation (CPR 305/2011). For further information, CE markings and Declarations of Performance (DoP), please visit www.mosa.com.

KOMO Quality Certificate
Mosa glazed wall tiles are KOMO certified (certificate number IKB1466) in accordance with BRL 1010 and therefore meet stricter requirements regarding dimensional accuracy, flatness and crazing resistance than those specified in EN 14411, type BIII. Mosa tiles also comply with the requirements for materials used in accordance with URL35-101, Chapter 4, for obtaining the KOMO process certificate for tile installation (BRL 1017).

Mosa.

Glazed wall tiles

Technical data

Property	Test method	Standard EN 14411 BIII	Standard Mosa[A]
Length and width	ISO 10545-2	L < 15 cm: +/- 0.75 mm L ≥ 15 cm: +/- 0.5 %, max. +/- 2.0 mm	L ≤ 151 mm: +/- 0.3 % L > 151 mm - ≤ 447 mm: +/- 0.2 % L > 447 mm: +/- 0.15 %
Thickness[B]	ISO 10545-2	L < 15 cm: +/- 0.5 mm L ≥ 15 cm: +/- 10 %, max. +/- 0.5 mm	d ≤ 6.3 mm: +/- 4 % d > 6.3 mm: +/- 3 %
Straightness of sides	ISO 10545-2	L < 15 cm: +/- 0.5 mm L ≥ 15 cm: +/- 0.3 %, max. +/- 1.5 mm	+/- 0.2 %
Rectangularity	ISO 10545-2	L < 15 cm: +/- 0.75 mm L ≥ 15 cm: +/- 0.5 %, max. +/- 2.0 mm	L < 447 mm: +/- 0.3 % L ≥ 447 mm: +/- 0.2 %
Edge curvature[B]	ISO 10545-2	L < 15 cm: -0.5 / +0.75 mm L ≥ 15 cm: -0.3 %, max. -1.5 mm / +0.5 %, max. +2.0 mm	-0.2 / +0.3 %, max. +/- 1.3 mm
Centre curvature[B]	ISO 10545-2	L < 15 cm: -0.5 / +0.75 mm L ≥ 15 cm: -0.3 %, max. -1.5 mm / +0.5 %, max. +2.0 mm	-0.2 / +0.4 %, max. +/- 1.5 mm
Warpage[B]	ISO 10545-2	L < 15 cm: +/- 0.75 mm L ≥ 15 cm: +0.5 %, max. +/- 2.0 mm	-0.4 / +0.2 %, max. +/- 1.3 mm
Water absorption	ISO 10545-3	> 10 %	resistant
Breaking strength	ISO 10545-4	d < 7.5 mm: ≥ 200 N d ≥ 7.5 mm: ≥ 600 N	d < 7.5 mm: ≥ 300 N d ≥ 7.5 mm: ≥ 600 N
Bending strength	ISO 10545-4	d < 7.5 mm: individual ≥ 15 N/mm^2 d ≥ 7.5 mm: average ≥ 12 N/mm^2	individual and average ≥ 16 N/mm^2
Coefficient of linear thermal expansion	ISO 10545-8	Specified value	$COE_{25\text{-}400}$: 6-8 x 10^{-6} [K^{-1}]
Thermal shock resistance	ISO 10545-9	resistant	resistant
Hair tear resistance	ISO 10545-11	resistant	resistant
Frost resistance	ISO 10545-12	Specified value	not resistant

Mosa.

Glazed wall tiles

Property	Test method	Standard EN 14411 BIII	Standard Mosa[A]
Chemical resistance against:	ISO 10545-13		
- Acids and alkalis:			
- low concentrations		Specified value	≥ class GLB
- high concentrations		Specified value	≥ class GHB
- Household chemicals and swimming pool salts		≥ class GB	class GA
Stain resistance	ISO 10545-14	≥ class 3	class 5
Bond strength:	EN 12004		
- Cementitious adhesive, type C1			≥ 0.5 N/mm^2
UV resistance	DIN 51094		resistant
Fire reaction	CWT[C]		A1
Cradle to Cradle Certified®			Gold[D]

[A] The 10 x 10 cm format complies with EN 14411. The specifications for the Mosa standard are based on an unaltered tile surface. Any (post-)treatment of Mosa tiles by third parties may adversely affect their visual and physical properties. Mosa cannot accept any liability in this respect.
[B] For determining the thickness and flatness of relief tiles, a flat tile of the same size and colour is used as a reference. For all derived and non-standard sizes and products (manufactured at the customer's request), the dimensions and flatness (ISO 10545-2) must at least comply with the tolerances specified in EN 14411, Annex L, type BIII.
[C] "Classified without testing" in accordance with European Commission Decision 96/603/EC.
[D] With the exception of the 10 x 10 cm format and certain colours in the 10 x 30, 15 x 15 and 15 x 30 cm formats. For detailed information, please refer to the collection overview or the Cradle to Cradle Certified® Gold Wall Tiles certificate at www.mosa.com.

Glazed Edge

On average, 50% of the wall tiles in each box have one fully glazed edge. For rectangular formats, the installation direction recommended by Mosa determines which edge is glazed:

- Wall tiles intended for horizontal installation have one short glazed edge.
- Wall tiles intended for vertical installation have one long glazed edge.
- Deviations from the installation directions specified above are possible. Please consult the Mosa documentation for additional information.

Dimensions

- Modular Sizes versus Manufacturing Sizes

  Production is based on manufacturing sizes in accordance with Mosa's modular system. Modular sizes are expressed in centimetres, while manufacturing sizes are expressed in millimetres. A modular size of 15 x 15 cm corresponds to a manufacturing size of 147 x 147 mm. The tiles can be installed with a 3 mm joint. Manufacturing sizes are measured at the top surface of the tile. Non-rectified tiles are slightly wider towards the bottom.

- Modular Installation

  Modular installation means that wall and floor tiles can be installed with continuous joints in a fixed grid, for example 150 mm or multiples thereof, taking into account the manufacturing sizes (calibres). The manufacturing size determines the joint width.

Shades

Tiles are natural products. Slight colour variations may occur. Mosa sorts its products by shade, which is indicated on the box. Tiles with the same shade designation should be used within a single continuous surface or room. Some wall tile series include decorative tiles. Shade variations may occur between decorative tiles and standard tiles of the same colour When combining different models from the Kho Liang Ie Collection, slight shade variations may occur.

Mosa.

Glazed wall tiles

Product Coding on Packaging
The packaging contains the following information: the article number and an information table specifying the tile thickness, the number of m² per box, the number of pieces per box and the weight per box. In addition, the calibre designation, manufacturing size and shade designation are indicated.

HACCP
Mosa glazed wall tiles have an impermeable glazed surface and are chemically resistant. In combination with the thin coved skirting tile (DP), a smooth, curved transition from floor to wall can be created. This is particularly recommended for areas where the HACCP system applies, such as:
- Bakeries
- Fruit and vegetable processing facilities
- Catering and hospitality establishments
- Supermarkets
- Slaughterhouses and butcher's shops
- Fish processing and trading facilities
- Food processing facilities
- Dairy production and processing facilities
- Breweries
- Changing rooms and shower areas

Light Reflectance Value
The light reflectance value (LRV, measured in accordance with ASTM C609-07) is the ratio of the total amount of incident light to the amount of reflected light. The reflectance value can be used to determine the contrast between different colours. The reflectance value is particularly important when preparing a lighting plan. For indicative reflectance values per colour, please refer to the Mosa Product Details book or www.mosa.com.

Installation Recommendations
Mosa wall tiles can be installed using all appropriate mortars and adhesives (EN 12004, type C1) and grouts (EN 13888) suitable for ceramic wall tiles, applying all conventional installation methods. Please consult the installation guidelines provided by the adhesive manufacturers. For detailed installation recommendations, please also visit www.mosa.com.

Maintenance
For the latest maintenance recommendations, please visit www.mosa.com.

General Enquiries
Customer Service: info@mosa.com Tel.: +31 (0)43 368 92 29.

Mosa.

Royal Mosa
Meerssenerweg 358
P.O. Box 1026
NL-6201 BA Maastricht
T +31 (0)43 368 92 29
info@mosa.com
www.mosa.com

The text for this technical product sheet replaces all preceding versions and has been composed with the utmost care and in cooperation with the leading mortar and adhesive producers. All recommendations are based on the latest research. This technical product sheet contains information about Mosa products, properties, and applications, and should not be construed as a guarantee based on the provided recommendations. Mosa accepts no liability based on the content of this document. For information concerning warranties and liability please refer to our General Conditions of Sales, Delivery and Payment. No rights can be derived from the contents of this technical product sheet. We take no responsibility for typographical errors.
For the latest version, see www.mosa.com.