

# Ultragres Fully Vitrified Unglazed

**Product description** Unglazed, single-fired, fully vitrified floor tiles in accordance with EN 14411 Bla manufactured with the two-layer Ultragres-process offering a water absorption of < 0.05% on the surface and ≤ 0.3% on the underside. Optimal size-consistency in formats 10 x 10 up to 60 x 120 cm and various surface designs and structures, varying per range.

**Product advantages** Extremely high resistance to rupture and breaking. Resistant to chemicals. Easy to maintain. Frost proof. Accurate and stable sizing. Special slip-resistance range programme available. Suitable to use in combination with floor heating. Can be installed with pasta adhesives as well as mortars because of the two-layer concept. Durable floor tile for indoor and outdoor applications. In utility and domestic situations. Also suitable for wall and facade cladding. With matching stair-treads and other accessories.

## Advantages Ultragres-process

In the Ultragres-process the top layer and body have slightly different compositions, thus giving both sides optimal properties. The top layer is easy to clean and has very high resistance to rupture and breaking and the body guarantees excellent size-consistency and installation-properties.

## Product specification Dimensions, thicknesses, surface structures and names of ranges

Modular size in cm incl. 3 mm joint	Production size* in mm	Surface structure	Mosa name of range
10 x 10	96 x 96 x 8**	Even, increased slip-resistance	Ceram, Global Collection, Globalgrip
15 x 15	146 x 146 x 8**	Even, increased slip-resistance	Global Collection, Globalgrip, Metrogrip, Metropolis, Softgrip, Softline
	147 x 147 x 10	Even, relief	Terra Maestricht
30 x 30	296 x 296 x 8**	Even, increased slip-resistance	Global Collection, Globalgrip
	296 x 296 x 10**	Even, relief	Greys, Terra Maestricht (Xtreme Ceramics)
	298 x 298 x 10***	Even	Mosa XXS
30 x 60	297 x 597 x 12	Even, relief	Beige & Brown, Terra Maestricht
37,5 x 75	372 x 747 x 12	Even	Size 75
45 x 45	446 x 446 x 10**	Even, relief	Beige & Brown, Global Collection, Terra LED, Terra Maestricht (Xtreme Ceramics)
60 x 60	597 x 597 x 12	Even, relief	Beige & Brown, Greys, Quartz, Terra LED, Terra Maestricht (Xtreme Ceramics)
75 x 75	747 x 747 x 12	Even	Size 75
90 x 90	897 x 897 x 13	Even, relief	Quartz, Terra XXL
5 x 60	47 x 597 x 12	Even, relief	Beige & Brown, Terra Maestricht
10 x 60	97 x 597 x 12	Even, relief	Beige & Brown, Terra Maestricht
	96 x 596 x 12**	Relief	More than white
15 x 60	147 x 597 x 12	Even, relief	Beige & Brown, Terra Maestricht
	146 x 596 x 12**	Relief	More than white
20 x 60	197 x 597 x 12	Even	Beige & Brown
	196 x 596 x 12**	Relief	More than white
20 x 120	197 x 1197 x 13	Even	Terra XXL
30 x 120	297 x 1197 x 13	Even	Terra XXL
40 x 120	397 x 1197 x 13	Even	Terra XXL
60 x 120	597 x 1197 x 13	Even	Terra XXL

\* The production is set on fixed production sizes as mentioned above. Within the production process of ceramic non rectified floor tiles, it's possible that besides the fixed production sizes other sizes (= calibres) are produced. Hence the calibre code on the boxes of the floor tiles. Mosa always delivers one calibre per pallet. Always use only one calibre when fixing one surface.

\*\* Recommended joint of 4 mm for modular system.

\*\*\* Recommended joint of 2 mm for modular system.

• The modular dimensions of unglazed floor tiles match Mosa wall tiles and accessories.

• All tiles (except the sizes 96 x 96, 146 x 146 and 296 x 296 mm) are rectified and can be installed with a minimum joint of 2 mm.

• The tiles from the Beige & Brown, Greys, Quartz, Size 75, Terra LED, Terra Maestricht (Xtreme Ceramics) and Terra XXL ranges have got a linear pattern. Mosa advises to fix all (square) tiles in the same direction.

• Global Collection has modular wall tiles which have been fully attuned to the floor tiles. See also Technical product sheet Glazed Wall Tiles.

• Global Collection and Softline have an extensive slip-resistance programme. See also Technical product sheet Ultragres Slip-resistant.

• There are separate Technical product sheets for the More than white, Terra LED, Terra Maestricht, Terra XXL, Xtreme Glass, Steel, Ceramics and Mosa XXS ranges.

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## Price groups

See price group information under series in the Mosa documentation or [www.mosa.nl](http://www.mosa.nl).

## Shades

Tiles are a natural product. Minor shade differences may occur. Mosa sorts products according shade which is printed on the box.

## Accessories

Several ranges have matching skirtings and stair-treads.

The use of the thin coved skirtings is highly recommended in the following areas:

- bakeries
- fruit and vegetable processing
- catering
- supermarkets
- slaughterhouses and butchers
- processing and trade of fish
- food processing
- dairy production and processing
- breweries
- changing and shower rooms

The Global Collection and Softline ranges also have an extensive slip-resistance programme and specific solutions for sloping wall-floor-transitions and corners.

## Technical data

### Properties according standard EN 14411 Bla and Mosa standard\*

Property	ISO-Test	Standard EN 14411 Bla	Mosa standard
Length and width	10545-2	10 x 10: +/- 1% 15 x 15: +/- 0.75% ≥ 30 x 30: +/- 0.6%	10 x 10: +/- 0.3% 15 x 15: +/- 0.3% (Global Collection / Softline) 15 x 15: +/- 0.14%** 30 x 30: +/- 0.04%** (Mosa XXS) 30 x 30: +/- 0.3% 30 x 60: +/- 0.03%** 37.5 x 75: +/- 0.03%** 45 x 45: +/- 0.2%** (Global Collection) 45 x 45: +/- 0.04%** 60 x 60: +/- 0.03%** 75 x 75: +/- 0.03%** 90 x 90: +/- 0.02%** 60 x 120: +/- 0.03/0.02%**
Thickness	10545-2	+/- 5%	+/- 3%
Straightness of sides	10545-2	+/- 0.5%	15 x 15: +/- 0.05% (Terra Maestricht) 15 x 15: +/- 0.5% 30 x 30: +/- 0.3% 45 x 45: +/- 0.2% - 0.3% 90 x 90: +/- 0.01% 60 x 120: +/- 0.01% other dimensions: +/- 0.02%
Warpage	10545-2	+/- 0.5%	10 x 10: +/- 0.4% 15 x 15: +/- 0.4% other dimensions: +/- 0.2%
Water absorption	10545-3	≤ 0.5%	toplayer: < 0.05% body: ≤ 0.3%
Breaking load	10545-4	< 7.5 mm: 700 N ≥ 7.5 mm: 1300 N	8 mm: 1600 N 10 mm: 2600 N
Bending strength	10545-4	35 N/mm <sup>2</sup>	40 N/mm <sup>2</sup>
Resistance deep abrasion	10545-6	175 mm <sup>3</sup>	120 +/- 30 mm <sup>3</sup>
Coefficient of linear thermal expansion	10545-8	9 x 10 <sup>-6</sup> [K <sup>-1</sup> ]	8 x 10 <sup>-6</sup> [K <sup>-1</sup> ]
Thermal shock resistance	10545-9	required	resistant
Frost resistance	10545-12	required	resistant
Chemical resistance	10545-13		class UA***
Slip-resistance		see Technical product sheet Ultragres Slip-resistant	

\* Non-slip treatment of Mosa floors by third parties: the optical and physical features of floor tiles may be altered by chemical treatment. In that event, Mosa cannot be held liable.

\*\* Tiles with rectified edges (e.g. the series Terra Maestricht).

\*\*\* Chemical resistance to household chemicals, swimming pool salts, acids and alkalis:  
class UA = highest class = no visible effects, not even after pencil test.

<b>Installation instructions</b>	<p><b>For interior floors</b></p> <p>Mosa Ultragres floor tiles can be installed using all conventional mortars, adhesives and grouts for fully vitrified ceramic tiles, according to the conventional application methods.</p> <p>For adequacy and instructions for application the user should inform with the manufacturer of adhesives.</p> <p>If they are to be laid on fresh mortar, tiles of 30 x 30 cm should receive a contact coating. This is essential from 30 x 60 cm tiles upwards.</p> <p>The subfloor should be sufficiently even - from 30 x 60 cm upwards completely even -, form stable, pressure proof, dry and free of dirt, residues and cracks.</p> <p>The modular sizes are including a 4 mm joint and for Terra XXL 3 mm.</p> <p>The sizes from 30 x 60 cm upwards (with rectified edges) can be fixed with a minimal joint of 2 mm.</p> <p>When using an adhesive, the adhesive should cover 90% of the surface.</p> <p>Installing 60 x 60 cm tiles using adhesive: use half-mooned adhesive spreader (10 or 15 mm) in combination with the buttering floating method.</p> <p>Recommended adhesives: Eurocol 705, Omnicol Stabicol PL85 Project, Schönox TT-Midiflex Grey, Laticrete 317 with addition 333, Laticrete Platinum Multipurpose.</p> <p>For Terra XXL see separate installation instructions.</p> <p>Tiles can be cut to size using a tile cutter with Widia-blade or using a water-cooled diamond saw.</p> <p>Dilatation should be made in conformation with instructions of constructor or specifications.</p> <p>Grouting should be done according specifications grout-manufacturer.</p> <p>Recommended grouts for approx. 2 mm joints: Eurocol 698, Omnicol Temo, Schönox SU, Laticrete 1600-serie.</p> <p>The cement haze needs to be removed thoroughly with proper remover.</p> <p>In order to remove possible cementations bloom from the structure of the tile more easily it is advisable to apply a protective coating on the surface, e.g. HMK P23 (Möller Chemie) before grouting. This protective coating together with the cement film will be easily removed by the cement film remover afterwards. The appearance of the structured surface will not change.</p> <p>When used staggered, flatness tolerances in the back wall and the tile may cause some unevenness in the wall or a shadow effect. This effect is accentuated in oblique light.</p>
<b>Relevant Technical product sheets</b>	<p>Ultragres Terra Maestricht</p> <p>Ultragres Terra XXL</p> <p>Ultragres Slip-resistant</p> <p>Terra LED</p> <p>Xtreme Glass, Steel, Ceramics</p> <p>Mosa XXS</p> <p>Thin Coved Skirting</p> <p>Sloping Shower Edge Tile</p> <p>Mosa Matt Collection®</p> <p>More than white</p>
<b>Maintenance</b>	<p>Please consult Mosa documentation or <a href="http://www.mosa.nl">www.mosa.nl</a></p>
<b>Sampling</b>	<p><a href="mailto:showroomservice@mosa.nl">showroomservice@mosa.nl</a>; Tel.: +31 (0)43 368 93 23</p>
<b>General inquiries</b>	<p>Sales Support: <a href="mailto:servicedesk@mosa.nl">servicedesk@mosa.nl</a>; Tel.: +31 (0)43 368 92 29; Fax: +31 (0)43 368 93 56</p>

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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 current state-of-the-art knowledge. This Technical product sheet contains information about Mosa products, properties and applications, and therefore may not to be used as a guarantee for the stated recommendations. Mosa will not be held responsible should this information be used as a guarantee. For warranties and liability we refer to our General Terms and Conditions of Sale. No rights can be derived from the contents of this Technical product sheet. Errors and price alterations excepted. For the most actual version see [www.mosa.nl](http://www.mosa.nl).

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**Royal Mosa**  
Meerssenerweg 358  
P.O. Box 1026  
NL-6201 BA Maastricht  
T +31 (0)43 368 92 29  
F +31 (0)43 368 93 56  
[servicedesk@mosa.nl](mailto:servicedesk@mosa.nl)  
[www.mosa.nl](http://www.mosa.nl)



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