

Floor Tiles



Material Data Sheet

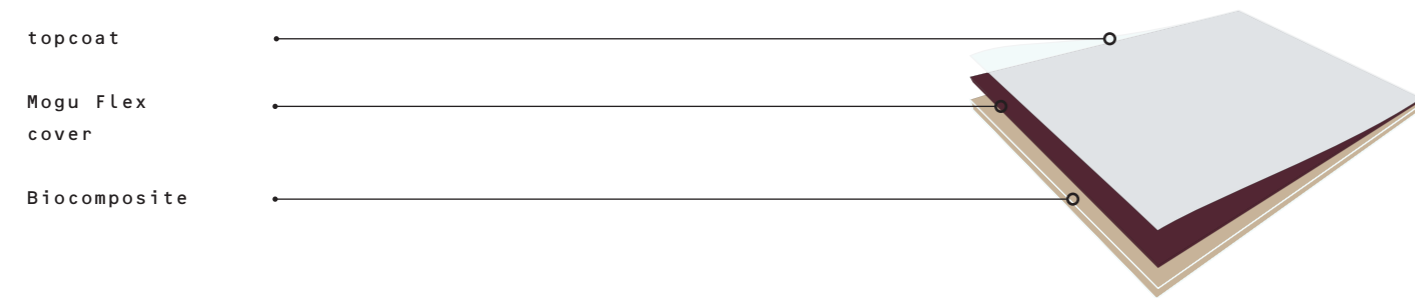
Introduction

Mogu Floor Tiles

MOGU Floor tiles comply to the CE standard EN 14041 for Resilient Floor coverings. Beside the seven attributes required by the standard, MOGU has defined a stringent list of requirements to certify the technical properties of the product. The certifications prove the product's unique resistance to scratches, heels, detergents, UV and its positive contribution to interior design, in terms of air quality (VOC emissions) and acoustic / thermal comfort.

If you have questions, please contact us at support@mogu.bio!

Product composition



Layer	Description	Composition	% on product
1) Topcoat	high-performance wear layer	water-based paint	1%
2) Mogu Flex	1 mm aesthetic layer	67% biobased polyurethane with oyster shells	15%
3) Biocomposite	core layer - 6 mm	100% biobased high density fiberboard	85%

MOGU Floor Tiles consist of a core of high density fiberboard material, derived from the fiber waste of the textile industry and a natural binder. The tile is coated with an exclusively formulated bio-based covering that contributes to ensure the quality of their technical performances as well as long-lasting durability.

The Mogu Flex layer (1 mm) is strongly based on bio-based, solvent-free and recycled content, up to 67% of the formulation. Traditional fillers have been replaced with low-value products, such as waste shells that are currently accumulating on oceanic shores due to global warming.

At the end of product lifespan, the bio-PU layer can be separated from the biocomposite core, enabling the correct biodegradability of the core.

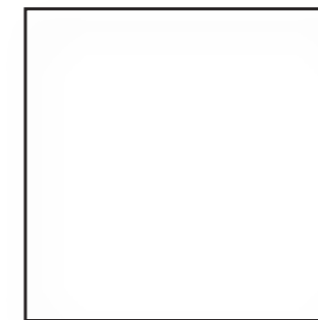
Dimensions & weight

FLOOR TILE



Product sizes

SQUARE M



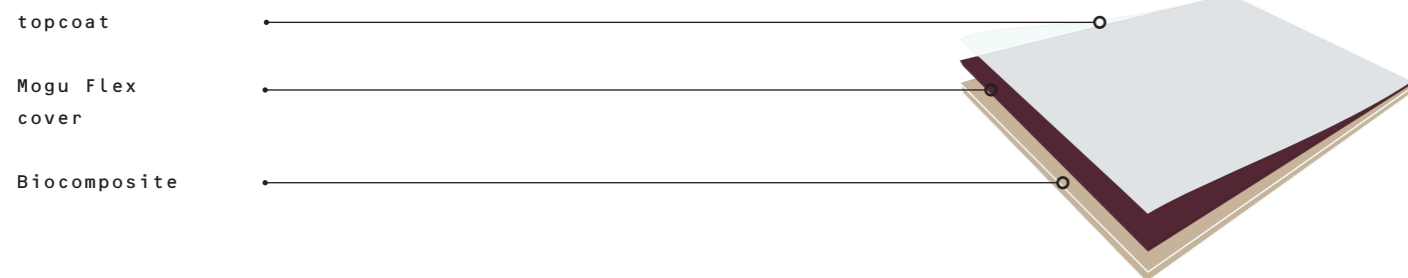
PLANK



Floor TILE to glue

MOGU Floor Flex complies to the CE standard EN 14041 / EN 16776 for Resilient Floor coverings. Beside the essential characteristics required by the standard, MOGU has defined a stringent list of requirements to certify the technical properties of the product. The certifications demonstrate the product's resistance to scratches, heels, detergents, UV and its positive contribution to interior design, in terms of air quality (VOC emissions) and acoustic / thermal comfort.

Product composition

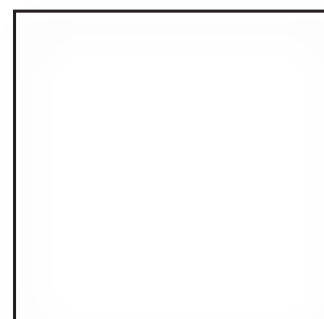


FLOOR TILE - Product sizes

FLOOR TILE



SQUARE M



PLANK



Dimensions & weight

	w [mm]	l [mm]	t [mm]	sqm	weight [Kg]
SQUARE M	500	500	7.0	0.25	1.7
PLANK	250	500	7.0	0.13	0.9

Physical properties & performance

Product characteristics	Property*	Standard
Product type	Resilient Flooring - Laminate floor tile	EN 14041 / EN 16776**
Installation	glue-based	
Thickness	7.0 mm	
Utilization classes	23 / 34 / 41	ISO 10874
Fire Reaction	C _{fl} -s1	EN 13501
Density	990 kg/m ³	
Product weight	6800 g/m ²	
Dimensional Stability	-0.15%	EN ISO 23999
Residual indentation	< 0.10 mm	ISO 24343
Castor chair	No damage after 25.000 cycles (type W wheels)	EN 425
Furniture leg	No change	ISO 16581
Slip resistance	μ ≥ 0.30 (DS class)	EN 13893
Electrical behaviour	R > 10 ⁹ Ω ; ≤ 2 kV	EN 1081 / EN 1815
Thermal conductivity	0.02 (m ² K)/W	EN 12776
Impact sound insulation	-9 dB	ISO 10140
Chemical Resistance***	No damage according to the concentration and residence time	ISO 26987
UV fastness	7 (no visible change)	ISO 105-B02
VOC Emissions	Gold	Indoor Air Comfort by Eurofins
Formaldehyde	E ₀ - no formaldehyde in any component	



* indicative product performances based on preliminary testing. Full test reports will be available in Autumn 2021.
 ** Differing from EN 16776, the binder content of Mogu Flex wear layer was partially substituted by biobased fillers, to enhance the sustainable content of Mogu Flex products.
 *** tested for most common chemicals encountered in everyday environments, such as: ammonia, coffee, wine, artificial urine, citric acid, shoe polish, sodium hydroxide
 More information available at support@mogu.bio

DoP: FS0_002 download at mogu.bio/floor

Mogu was founded on the belief that it is possible to employ Nature's intelligence to radically disrupt the design of everyday products, seeking a finer balance between the man-made and the rhythms of the natural ecosystem.

Mogu products are obtained by growing mycelium, the vegetative part of mushrooms, on organic fibres (low-value residues from agro-industrial value chains).

The products are the result of five years of continuous and iterative R&D on mycelium technology, guided by a strong product-driven approach.

