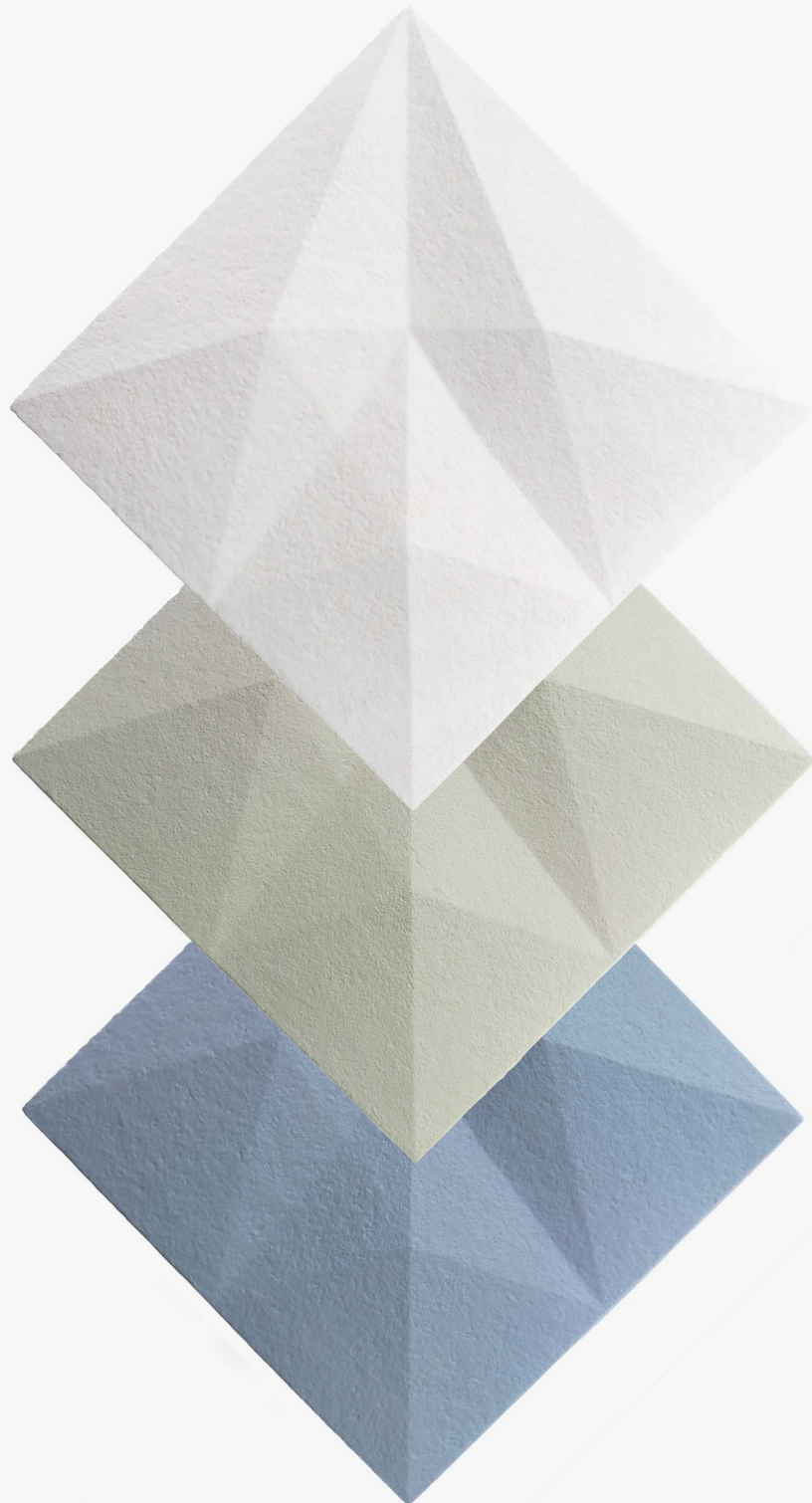


Acoustic



Material Data Sheet

Material Data Sheet

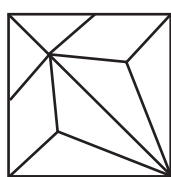
Acoustic mycelium-based products

Mogu Acoustic collection marks an unprecedented revolution for interior design comfort. Mogu Acoustic are the first commercially available products of their kind, entirely made of fungal mycelium and of upcycled textile residues. Thanks to the unique technology, Mogu Acoustic panels represent today the most sustainable solution dedicated to acoustic comfort.

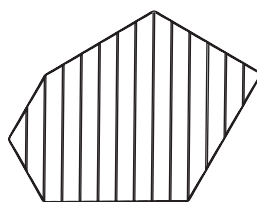
Models



WAVE HEX



KITE



FIELDS



ASPEN / FORESTA



PLAIN - 50



PLAIN - 60



PLAIN - 6040

Dimensions & weight

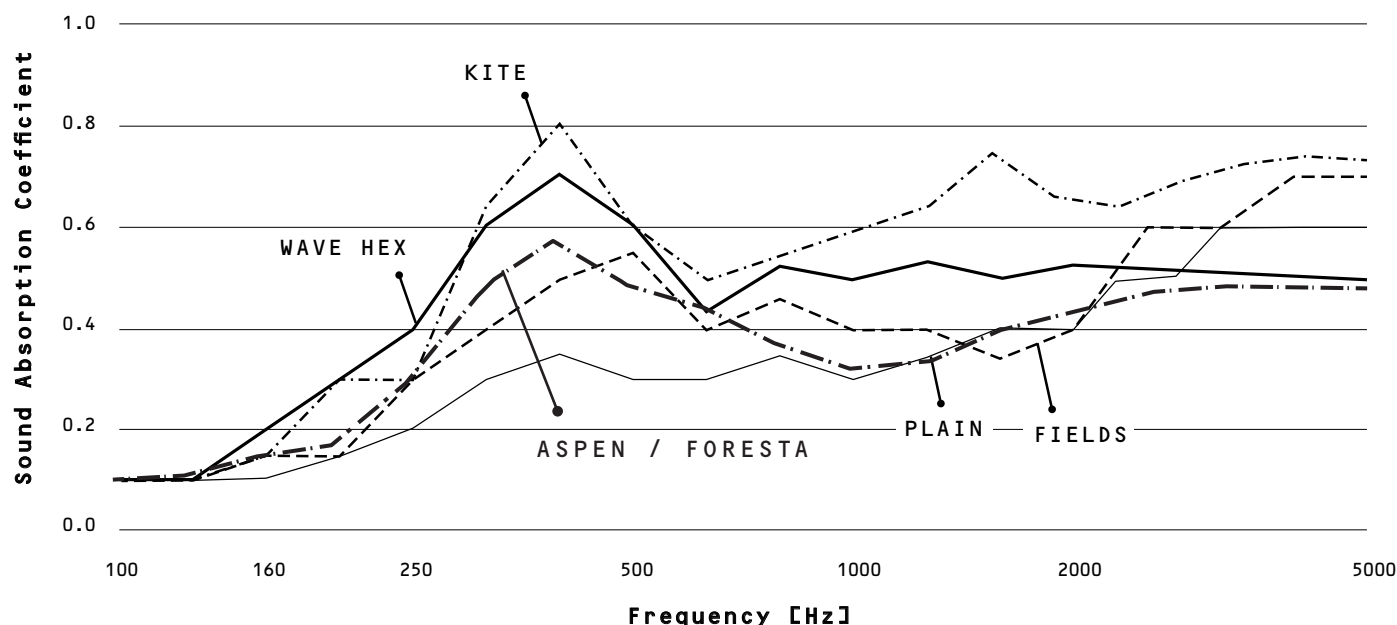
	w* [mm]	h* [mm]	t* [mm]	side* [mm]	sqm	n°/sqm	weight* [Kg]
WAVE HEX	560	505	25-75	280	0.2	5	1.1
KITE	500	500	35-75	500	0.25	4	1.5
FIELDS	760	535	45	210	0.25	4	1.5
ASPEN / FORESTA	455	398	65	455	0.11	9	0.6
PLAIN - 50	500	500	40	500	0.25	4	1.0
PLAIN - 60	600	600	40	600	0.36	2.78	1.4
PLAIN - 6040	600	400	40	600	0.24	4.17	1.2

Reaction to fire & standards

	Fire-proof	Colored	Natural
Classification	B-s2-d0	D-s2-d0	D-s2-d0
Finishing	water-based, eco-friendly, non-halogenated, heavy-metals free	water-based 2K paint, low VOC	none
Texture	compact and tough, available in white	compact and slightly soft, available in any NCS color	white with small tone variations, velvety and soft
Moisture sensitivity	RH > 50% (small tone variations may appear on surface)	RH > 80%	RH > 80%

* Mogu Acoustic panels may present slight dimensional variations as they are subject to the tolerances of the natural production process that characterise and enhance Mogu's products. However Mogu carries out a very strict dimensional control to ensure a dimensional variation of maximum +/- 0.25 cm.

Acoustic performance



Acoustic characteristics (NRC)

	t [mm]	α [125 Hz]	α [250 Hz]	α [500 Hz]	α [1000 Hz]	α [2000 Hz]	α [4000 Hz]	NRC
WAVE HEX	25-75	0.1	0.4	0.6	0.5	0.5	0.5	0.53
KITE	40-75	0.15	0.3	0.6	0.6	0.6	0.6	0.53
FIELDS	45	0.1	0.3	0.5	0.4	0.4	0.6	0.40
PLAIN	40	0.1	0.3	0.5	0.4	0.4	0.4	0.40
ASPEN / FORESTA	65	0.11	0.31	0.48	0.34	0.42	0.46	0.39

Measurements according to ISO 354 – Reverberation Room Measurement Method, with no distance between panels and floor. Aspen panels were measured with Foresta system setup, involving 13.5 sqm, with and without backing, with sealed wooden beams covering the full perimeter of the system. For specific info, please consult Foresta Technical Datasheet.

Physical appearance & performance

Product type	Wall / ceiling panels for interior design	Fire Reaction UNI EN 13501-2	B-s2-d0 / D-s2-d0
Color	Any NCS color from Mogu Acoustic palette or custom color	UV resistance UNI EN 15187	Excellent [grey: 5/5; blue scale: >6]
Odor	none with finishing; medium smell with natural touch	Dimensional variation UNI EN 1604	< 0.4% (40°C; RH=70%) -2.0% (70°C; RH=90%)
Density	100 kg/m ³	Thermal Conductivity UNI EN12664-2	0.050 W/mK (34 mm thickness)
Flexural Strength	0.05 MPa	TVOC emission rate (µg/m ² h)*	15
Compression Strength UNI EN 826	10.72 kPa	VVOC emission rate (µg/m ² h)*	none determined
Impact Resistance ISO 4211-4	10-200mm: no damage [5/5]; 400 mm: slight sign [4/5]	SVOC emission rate (µg/m ² h)*	none determined
Deformation	2.5% before rupture	*Results for VOC emissions based on 28-days chamber testing. Official results according to Indoor Air Comfort test by Eurofins.	

Declaration of Performance can be downloaded on www.mogu.bio/download/dop-A001

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.

