mogu

ACOUSTIC

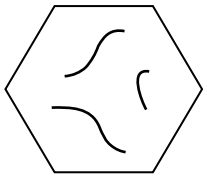
Technical Data Sheet 2026

Technical Data Sheet

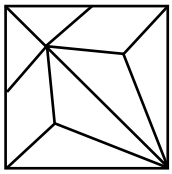
Acoustic mycelium-based products

Mogu Acoustic redefines interior comfort with innovative panels made from soft, foam-like mycelium and upcycled textile residues. Thanks to their organic 3D surface, they offer exceptional sound absorption while standing as one of the most sustainable solutions for acoustic design.

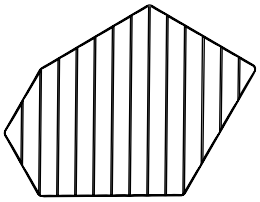
Models



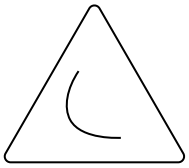
WAVE



KITE



FIELDS



ASPEN / FORESTA

Dimensions & weight

	w [mm]	h [mm]	t [mm]	side [mm]	sqm	n°/sqm	weight [Kg]
WAVE	570	495	25-70	285	0.20	5	1.10
KITE	500	500	35-70	500	0.25	4	1.50
FIELDS	710	530	50	NR	0.25	4	1.50
ASPEN/ FORESTA	455	395	65	465	0.11	9	0.70

Mogu Acoustic panels may present slight dimensional variations as they are subject to the tolerances of the natural production process that characterise and enhace Mogu's products. However Mogu carries out a very strict control to ensure a dimensional variation of maximum +/- 0.4 cm.

Acoustic characteristics - [direct mounting panels]

	t [mm]	α(p) [125 Hz]	α(p) [250 Hz]	α(p) [500 Hz]	α(p) [1000 Hz]	α(p) [2000 Hz]	α(p) [4000 Hz]
WAVE	25-70	0.05	0.07	0.29	0.39	0.37	0.35
KITE	35-70	0.05	0.11	0.35	0.29	0.27	0.25
FIELDS	50	0.07	0.12	0.34	0.35	0.35	0.23
ASPEN/FORESTA	65	0.11	0.31	0.48	0.34	0.42	0.46

Acoustic characteristics - [Panels + Insulation]

	t [mm]	α(p) [125 Hz]	α(p) [250 Hz]	α(p) [500 Hz]	α(p) [1000 Hz]	α(p) [2000 Hz]	α(p) [4000 Hz]
WAVE	25-70	0.66	0.68	0.63	0.47	0.50	0.62
KITE	35-70	0.62	0.52	0.46	0.45	0.40	0.51
FIELDS	50+60	0.65	0.57	0.51	0.42	0.50	0.49
ASPEN/FORESTA	65+60	0.11	0.31	0.48	0.34	0.42	0.46

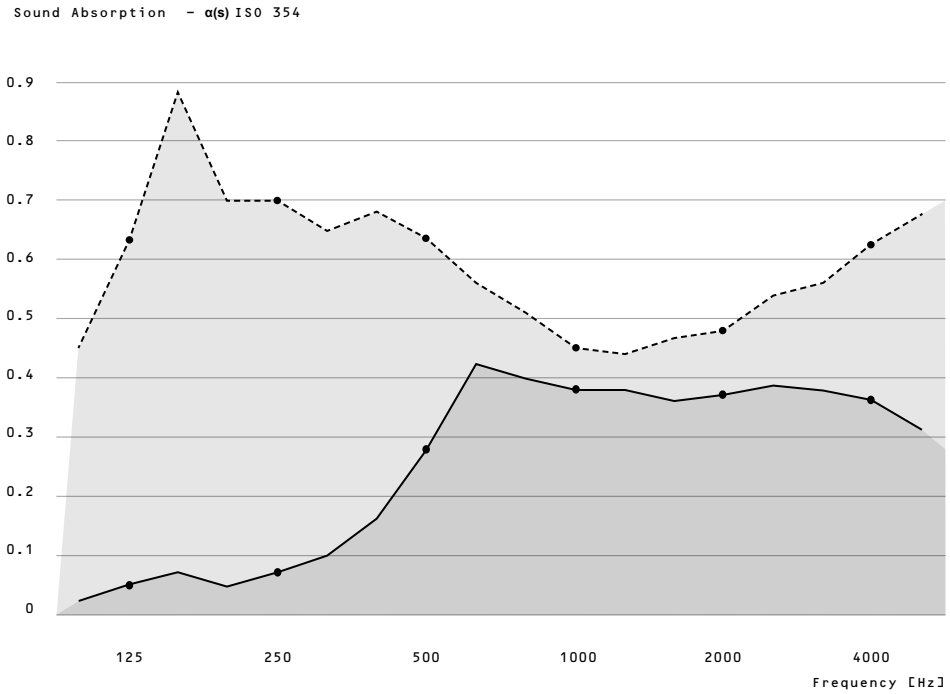
WAVE

WAVE

α(w) rating UNI EN ISO 11654	0,30
α(s) coefficient 2000 Hz	0,37
SAA Rating	0,28
NRC	0,30

WAVE with INSULATION

α(w) rating UNI EN ISO 11654	0,50
α(s) coefficient 2000 Hz	0,48
SAA Rating	0,57
NRC	0,55



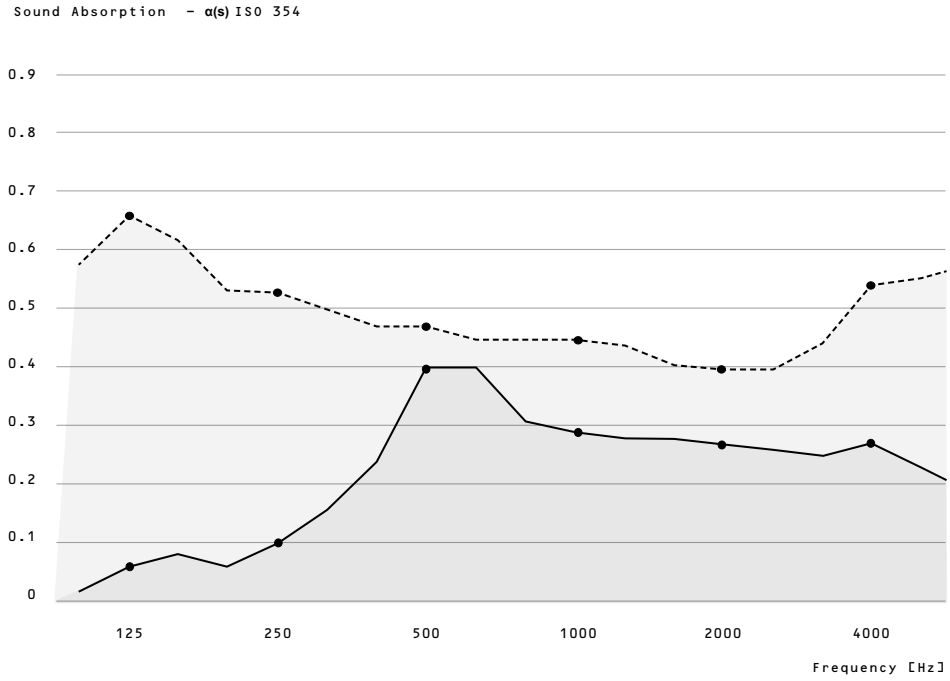
KITE

KITE

α(w) rating UNI EN ISO 11654	0,30
α(s) coefficient 2000 Hz	0,27
SAA Rating	0,25
NRC	0,25

KITE with INSULATION

α(w) rating UNI EN ISO 11654	0,45
α(s) coefficient 2000 Hz	0,40
SAA Rating	0,46
NRC	0,45



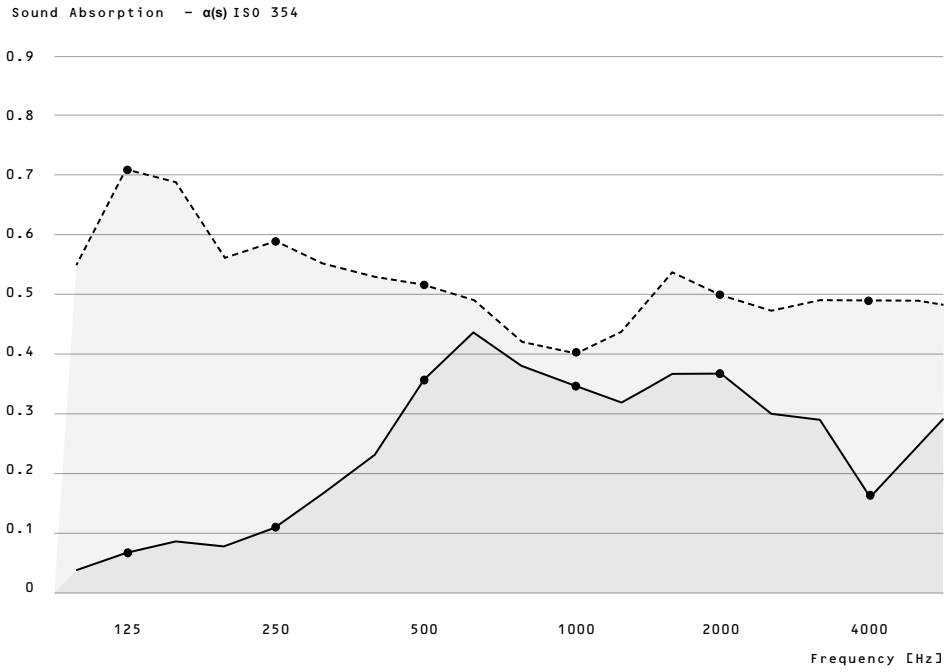
FIELDS

FIELDS

α(w) rating UNI EN ISO 11654	0,35
α(s) coefficient 2000 Hz	0,37
SAA Rating	0,29
NRC	0,30

FIELDS with INSULATION

α(w) rating UNI EN ISO 11654	0,50
α(s) coefficient 2000 Hz	0,50
SAA Rating	0,50
NRC	0,50



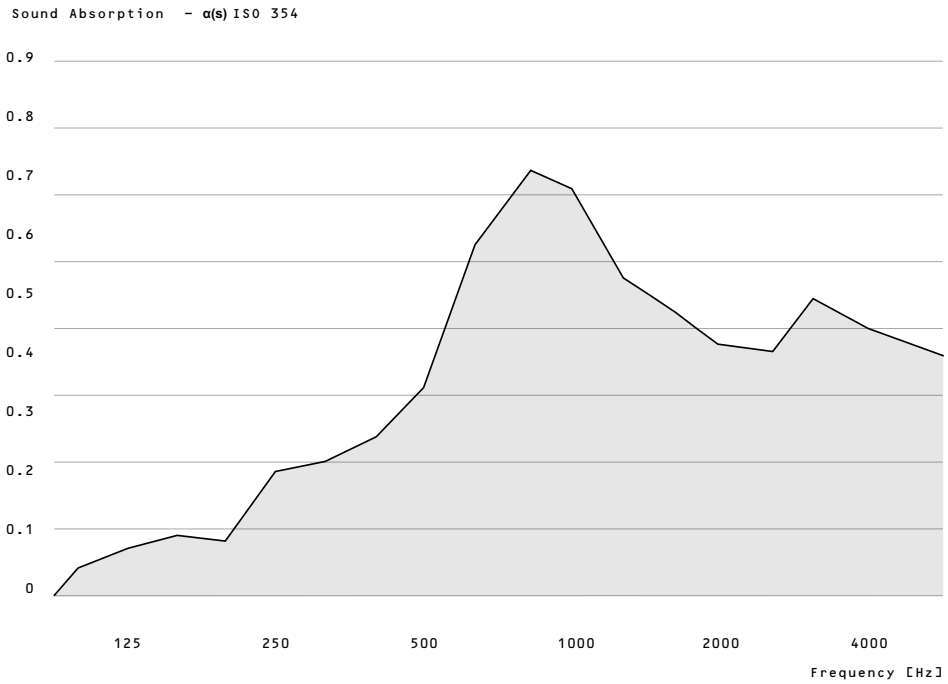
ASPEN

ASPEN

α(w) rating UNI EN ISO 11654	0,30
α(s) coefficient 2000 Hz	0,27
SAA Rating	0,25
NRC	0,25

ASPEN with INSULATION

α(w) rating UNI EN ISO 11654	0,45
α(s) coefficient 2000 Hz	0,40
SAA Rating	0,46
NRC	0,45



Reaction to fire & standards

	Fire-Proof	Coloured
Fire Classification	B-s2-d0 - EN 13501-1 Class A - ASTM E84	D-s2-d0
Finishing	water-based, eco friendly, non-halogenated, heavy-metals free	water-based 2K paint, low VOC
Texture	Compact and slightly soft, available in any NCS colour	Compact and slightly soft, available in any NCS colour
Moisture resistance	RH > 70%	RH > 70%

Physical appearance & performance

Texture	Soft and fibered
Product type	Wall, ceiling/false ceiling panels for interior design
Colour	Any NCS colour from Mogu ACOUSTIC palette or custom colour.
Odor	Neutral, lavender seeds additives, added during mycelium composite fermentation.
Density	120 kg/m3
Flexural Strength	0.05 MPa
Deformation	2.5% before rupture

Compression Strength UNI EN 826	10.72 kPa
Impact Resistance ISO 4211-4	10-200mm: no damage [5/5]; 400 mm: slight sign [4/5]
UV resistance EN 15187	Excellent [grey: 5/5; blue scale: >6]
Dimensional variation EN 1604	< 0.4% (40°C; RH=70%) - 2.0% (70°C; RH=90%)
Thermal Conductivity EN 12664-2	0.050 W/mK (40 mm thickness)
TVOC emission rate (µg/m2h)*	15 - Indoor Air Comfort Gold
VVOC emission rate (µg/m2h)*	none determined
SVOC emission rate (µg/m2h)*	none determined

*Results for VOC emissions based on 28-days chamber testing.
Official results according to Indoor Air Comfort test by Eurofins.

ACOUSTIC Colour Palette

Light Reflectance Value (LRV) – Paint Finishing

Light Reflectance Value (LRV) measures the percentage of visible light reflected by a surface. The scale ranges from **0** (absolute black, completely absorbing) to **100** (perfect white, completely reflective).

(Note: in this palette, colours with the AOxx code correspond to the **NCS system as reported below**).

A001
PINE
S 6010-B70G
LRV:13

A002
MOSS
S 5010-B70G
LRV:20

A003
FERN
S 4010-G10Y
LRV:27

A004
LICHEN
S 2005-G20Y
LRV:51

A005
FALLS
S 5020-B
LRV:15

A006
CREEK
S 3020-B
LRV:30

A007
RAIN
S 2010-B
LRV:47

A008
DROP
S 1005-B
LRV:69

A009
BALOS
S 4020-R
LRV:20

A010
TERRACOTTA
S 3020-Y80R
LRV:29

A011
SAND
S 2010-Y70R
LRV:48

A012
SILT
S 1005-Y50R
LRV:67

A013
BARK
S 4005-Y20R
LRV:29

A014
HUMUS
S 3005-Y20R
LRV:39

A015
MUSHROOM
S 2005-Y30R
LRV:52

A016
MYCELIUM
S 1005-Y20R
LRV:68

A017
SLATE
S 4502-B
LRV:26

A018
ANDESITE
S 3502-R
LRV:35

A019
FOSSIL
S 2002-R50B
LRV:52

A020
DOLOMITE
S 1500-N
LRV:62

A021
MARBLE
S 0500-N
LRV:82

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

Pioneering the use of mycelium – the vegetative part of mushrooms – as a core material technology, Mogu has spent eleven years expanding this knowledge into a broader portfolio of bio-based products, all rooted in organic residues from agro-industrial value chains.

Each product reflects a continuous, iterative R&D process where material science, sustainability, and design converge to redefine what everyday objects can be made of.

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