

# ACOUSTIC

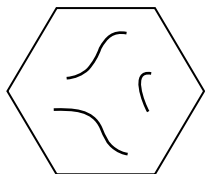


# Technical Data Sheet

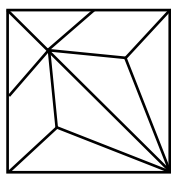
## Acoustic mycelium-based products

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

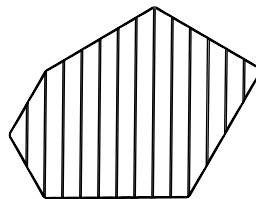
## Models



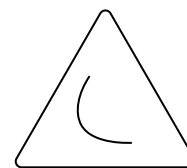
WAVE



KITE



FIELDS



ASPEN / FORESTA

## Dimensions & weight

	w [mm]	h [mm]	t [mm]	side [mm]	sqm	n°/sqm	weight [Kg]
WAVE	570	500	25-75	285	0.20	5	1.10
KITE	500	500	35-75	500	0.25	4	1.50
FIELDS	715	525	45	NR	0.25	4	1.50
ASPEN/ FORESTA	455	395	65	465	0.11	9	0.75

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 control to ensure a dimensional variation of maximum +/- 0.4 cm.

## Acoustic characteristics - direct mounting panels

	t [mm]	$\alpha(p)$ [125 Hz]	$\alpha(p)$ [250 Hz]	$\alpha(p)$ [500 Hz]	$\alpha(p)$ [1000 Hz]	$\alpha(p)$ [2000 Hz]	$\alpha(p)$ [4000 Hz]
WAVE	25-75	0.05	0.07	0.29	0.39	0.37	0.35
KITE	35-75	0.05	0.11	0.35	0.29	0.27	0.25
FIELDS	45	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]	$\alpha(p)$ [125 Hz]	$\alpha(p)$ [250 Hz]	$\alpha(p)$ [500 Hz]	$\alpha(p)$ [1000 Hz]	$\alpha(p)$ [2000 Hz]	$\alpha(p)$ [4000 Hz]
WAVE	25-75	0.66	0.68	0.63	0.47	0.50	0.62
KITE	35-75	0.62	0.52	0.46	0.45	0.40	0.51
FIELDS	45+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

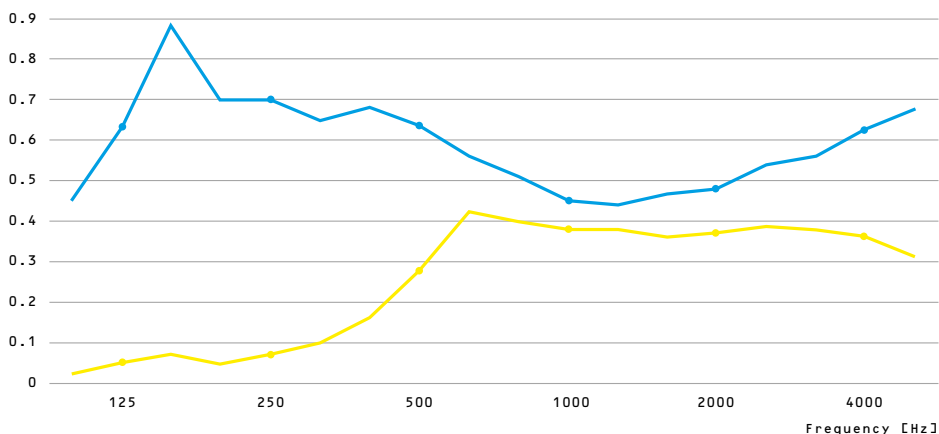
## WAVE

$\alpha(w)$ rating UNI EN ISO 11654	<b>0,30</b>
$\alpha(s)$ coefficient 2000 Hz	<b>0,37</b>
SAA Rating	<b>0,28</b>
<b>NRC</b>	<b>0,30</b>

## WAVE with INSULATION

$\alpha(w)$ rating UNI EN ISO 11654	<b>0,50</b>
$\alpha(s)$ coefficient 2000 Hz	<b>0,48</b>
SAA Rating	<b>0,57</b>
<b>NRC</b>	<b>0,55</b>

Sound Absorption -  $\alpha(s)$  ISO 354



# FIELDS

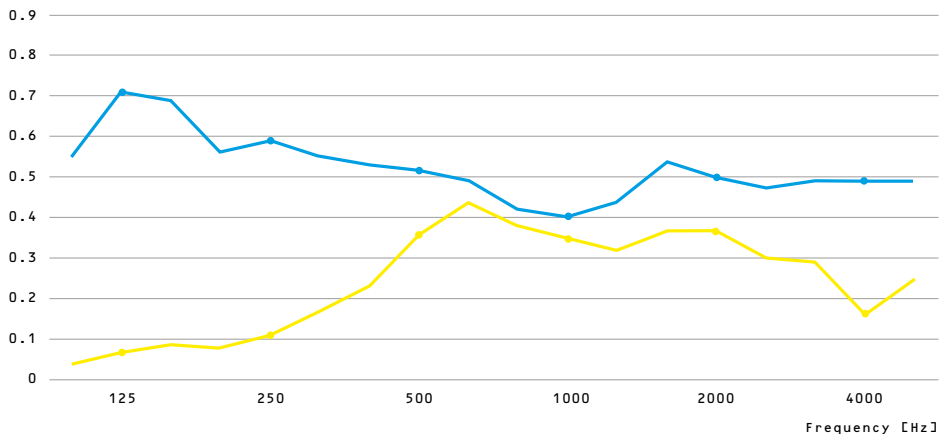
## FIELDS

$\alpha(w)$ rating UNI EN ISO 11654	<b>0,35</b>
$\alpha(s)$ coefficient 2000 Hz	<b>0,37</b>
SAA Rating	<b>0,29</b>
<b>NRC</b>	<b>0,30</b>

## FIELDS with INSULATION

$\alpha(w)$ rating UNI EN ISO 11654	<b>0,50</b>
$\alpha(s)$ coefficient 2000 Hz	<b>0,50</b>
SAA Rating	<b>0,50</b>
<b>NRC</b>	<b>0,50</b>

Sound Absorption -  $\alpha(s)$  ISO 354



# KITE

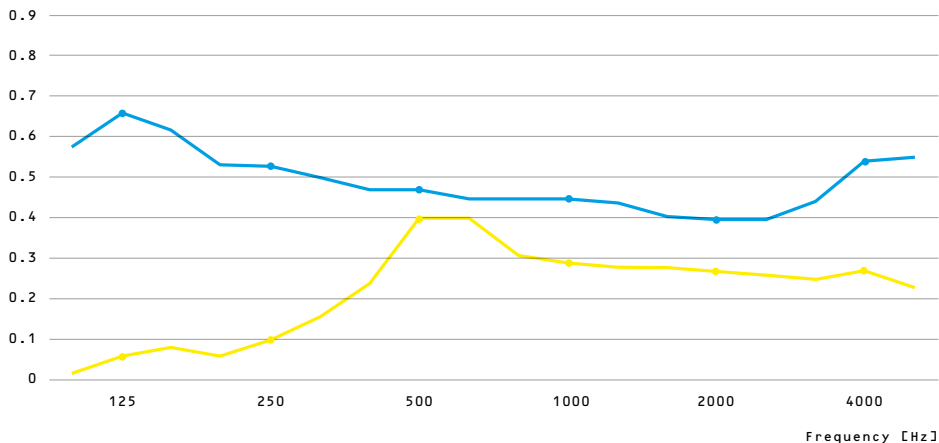
## KITE

$\alpha(w)$ rating UNI EN ISO 11654	<b>0,30</b>
$\alpha(s)$ coefficient 2000 Hz	<b>0,27</b>
SAA Rating	<b>0,25</b>
<b>NRC</b>	<b>0,25</b>

## KITE with INSULATION

$\alpha(w)$ rating UNI EN ISO 11654	<b>0,45</b>
$\alpha(s)$ coefficient 2000 Hz	<b>0,40</b>
SAA Rating	<b>0,46</b>
<b>NRC</b>	<b>0,45</b>

Sound Absorption -  $\alpha(s)$  ISO 354



## Reaction to fire & standards

	Fire-Proof	Coloured
Fire Classification	B-s2-d0 - EN 13501-1	D-s2-d0
	Class A - ASTM E84	
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/m <sup>3</sup>
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/m <sup>2</sup> h)*	15 - Indoor Air Comfort Gold
VVOC emission rate (µg/m <sup>2</sup> h)*	none determined
SVOC emission rate (µg/m <sup>2</sup> h)*	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 A0xx code correspond to the **NCS system as reported below**).

 <b>A001</b> <b>PINE</b> S 6010-B70G LRV:13	 <b>A002</b> <b>MOSS</b> S 5010-B70G LRV:20	 <b>A003</b> <b>FERN</b> S 4010-G10Y LRV:27	 <b>A004</b> <b>LICHEN</b> S 2005-G20Y LRV:51	
 <b>A005</b> <b>FALLS</b> S 5020-B LRV:15	 <b>A006</b> <b>CREEK</b> S 3020-B LRV:30	 <b>A007</b> <b>RAIN</b> S 2010-B LRV:47	 <b>A008</b> <b>DROP</b> S 1005-B LRV:69	
 <b>A009</b> <b>BALOS</b> S 4020-R LRV:20	 <b>A010</b> <b>TERRACOTTA</b> S 3020-Y80R LRV:29	 <b>A011</b> <b>SAND</b> S 2010-Y70R LRV:48	 <b>A012</b> <b>SILT</b> S 1005-Y50R LRV:67	
 <b>A013</b> <b>BARK</b> S 4005-Y20R LRV:29	 <b>A014</b> <b>HUMUS</b> S 3005-Y20R LRV:39	 <b>A015</b> <b>MUSHROOM</b> S 2005-Y30R LRV:52	 <b>A016</b> <b>MYCELIUM</b> S 1005-Y20R LRV:68	
 <b>A017</b> <b>SLATE</b> S 4502-B LRV:26	 <b>A018</b> <b>ANDESITE</b> S 3502-R LRV:35	 <b>A019</b> <b>FOSSIL</b> S 2002-R50B LRV:52	 <b>A020</b> <b>DOLOMITE</b> S 1500-N LRV:62	 <b>A021</b> <b>MARBLE</b> 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.



Issued and reviewed in March 2026