

# PLUMA acoustics



Technical Datasheet 2024

# Material Data Sheet

## Acoustic mycelium-based products

Mogou PLUMA is a new collection of 100% circular, slim wall-covering panels, with sound-absorbing properties.

A revolutionary new collection of totally eco-friendly panels, which combines astonishing Natural technologies with human ingeniousness and engineering.

A pioneering product capable of providing an innovative and natural look to all interiors, while enhancing the everyday life thanks to its unique aesthetics and acoustic performance.

Mogou PLUMA panels are designed to provide all spaces with an innovative, yet natural look.

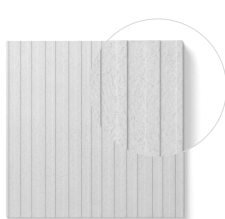
## Texture & dimentions



LEAVES



FLUTED



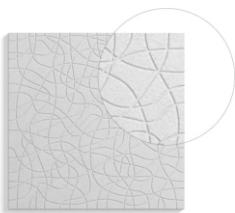
REEDS



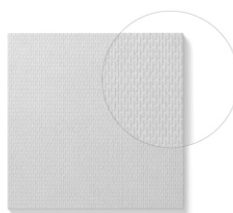
COSMOS



NATURAL



MYCELIUM



NEEDLES



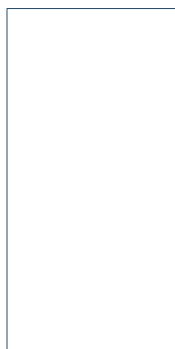
SMALL - S

500 X 500 mm



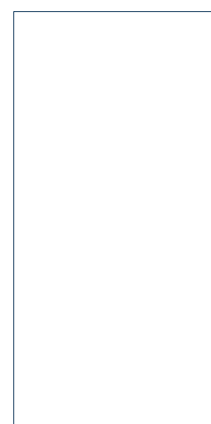
MEDIUM - M

600 X 600 mm



LARGE - L

500 X 1000 mm



EXTRA LARGE - XL

600 X 1200 mm

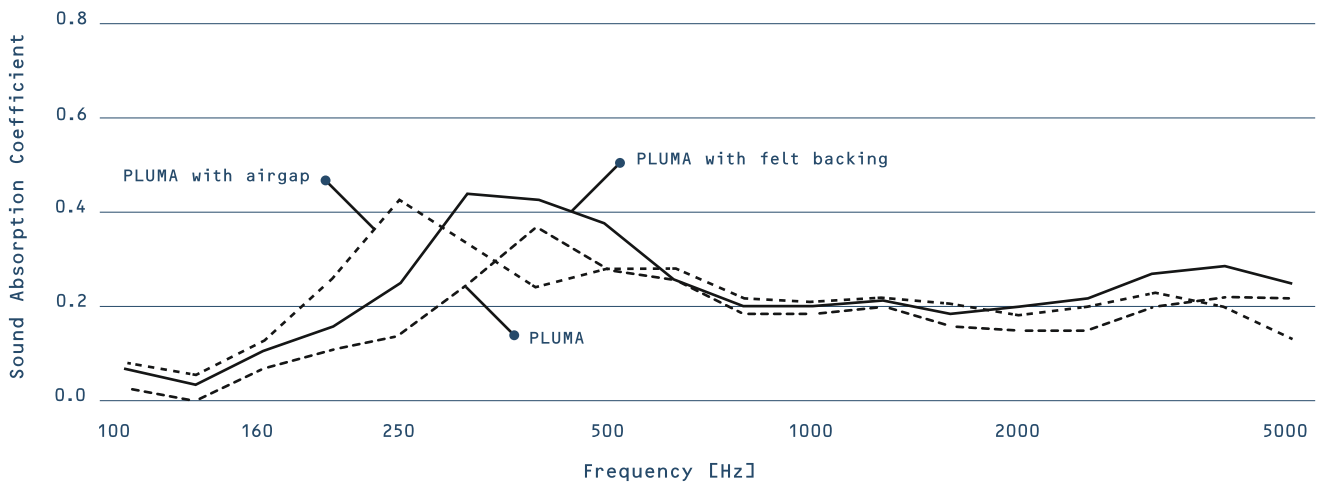
## Dimensions & weight

	w* [mm]	h* [mm]	t* [mm]	sqm	n°/sqm	weight* [Kg/m2]
PLUMA S	500	500	20/30/40	0.25	4	1.0/1.2/1.6
PLUMA M	600	600	20/30/40	0.36	3	1.2/1.5/1.8
PLUMA L	500	1000	20/30/40	0.50	2	2.0/3.0/3.5
PLUMA XL	600	1200	20/30/40	0.72	1.4	3.2/3.6/4.0

Panels are also available in custom sizes.

\* 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 +/- 2.5 mm.

## Acoustic performance



## Acoustic characteristics

	t [mm]	$\alpha$ [125 Hz]	$\alpha$ [250 Hz]	$\alpha$ [500 Hz]	$\alpha$ [1000 Hz]	$\alpha$ [2000 Hz]	$\alpha$ [4000 Hz]
PLUMA	20	0.05	0.1	0.3	0.2	0.2	0.2
PLUMA with airgap (30 cm)	20 + 30	0.1	0.4	0.3	0.2	0.2	0.2
PLUMA with felt backing (2 mm)	20 + 2	0.05	0.3	0.4	0.2	0.2	0.3

Measurements according to ISO 354 - Reverberation Room Measurement Method.

## Reaction to fire & standards

	Fire-proof	Only color	Natural
Classification	B-s2-d0*	C-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 any NCS color	compact and tough, available in any NCS color	white with small tone variations, slightly soft
Moisture sensitivity	RH > 50%	RH > 80%	RH > 80%

## Physical appearance & performance

Product type	wall, ceiling/false ceiling panels for interior design	Thermal Conductivity UNI EN12664-2	0.050 W/mK (34 mm thickness)
Color	any NCS color from Mogu Acoustic palette or custom color	TVOC emission rate ( $\mu\text{g}/\text{m}^2\text{h}$ )**	15
Odor	none with finishing; medium smell with natural touch	VVOC emission rate ( $\mu\text{g}/\text{m}^2\text{h}$ )**	none determined
Density	240 kg/m <sup>3</sup>	SVOC emission rate ( $\mu\text{g}/\text{m}^2\text{h}$ )**	none determined
Fire Reaction UNI EN 13501-2	B-s2-d0*		
UV resistance UNI EN 15187	excellent [grey: 5/5; blue scale: >6]		

\* Official Fire Reaction test results will be available upon request.

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

The text and data originate from Mogu sources, and Interior Elements will not be held responsible for any incorrect or inaccurate information.