BAUX Acoustic Pulp
Material Data Sheet

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Benefits of BAUX Acoustic Pulp
BAUX Acoustic Pulp is made from natural and recyclable materials with functional properties for high performance and durability in all kinds of climates. Design-friendly, with a versatile range of shapes that allow for endless combinations and total creative freedom. Approved for safety indoors, with high fire and moisture resistance, zero harmful chemicals or additives and extremely low emissions. Features superb thermal insulation abilities, contributing to a smaller energy footprint and more comfortable indoor climate.

Sustainable:
100% Bio-Based. 100% Biodegradable. 100% Recyclable. 0% waste and pollution from manufacturing. Resourceful material sourcing

Functional:
Strong. Lightweight. Fire Retardant. Water Repellent. Sound Absorbent

Unpacking and handling:
Handle BAUX Acoustic Pulp with care during unpacking and installation. Be sure to inspect materials upon delivery and do not install products of unacceptable quality. Products waiting to be installed should be stored in a clean and climate controlled environment. BAUX Acoustic Pulp can be cleaned with a vacuum cleaner with a brush attachment without being harmed

Installation:
Read the installation instructions before installing BAUX Pulp. BAUX Acoustic Pulp sustain humid spaces, but panels should be acclimatized in the space 48 hours before attaching them to the wall. BAUX Acoustic Pulp behaves like un-treated wood. Avoid wet environments, dirty environments and exterior applications.

Research:
BAUX Acoustic Pulp is the result of more than 25 years of biomimicry focused research and development.

Biomimicry is a design approach that seeks sustainable solutions based on the idea that the answers already reside within nature itself. The research for our particular product comes from the Royal Institute of Technology in Sweden.

Design:
Carefully designed by Form Us With Love. Inspired by the Origami folding technique. To further amplify strength we looked to bees and the aerospace industry. The backside of the BAUX Acoustic Pulp panels have been carefully designed using a honeycomb structure, often found inside the wings of aircrafts and spaceships. The honeycomb structure allows us to minimise of the amount of material used without compromising the product's strength.

Manufacturing process:
The manufacturing process is 100% green and highly technological. The cellulose mix is formed inside a 3D mold with a powerful vacuum method and dried under high pressure. The surface is nano-perforated using an advanced laser technique. The factory and production process is environmentally friendly. All material waste is recycled back into the production process and re-used again. All water used is built into a closed circular system and recycled. The only emission from production is a tiny amount of pure and clean water vapor as the material dries.

Contact:
If you are interested in BAUX acoustic products, please get in touch. We ship globally through our headquarters and via local partners and representatives.
For more information, visit baux.com or contact us at info@baux.com.

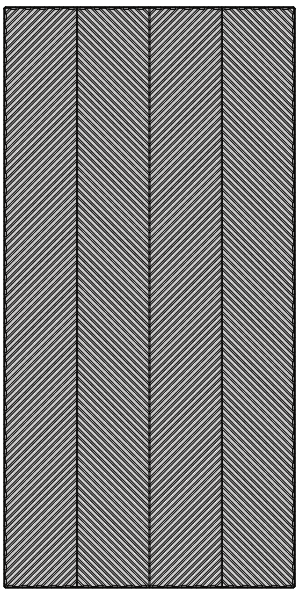
BAUX HQ - Stockholm, Sweden
baux.com/contact, 0046 (8) 21 07 07, info@baux.com

Dimensions & Patterns

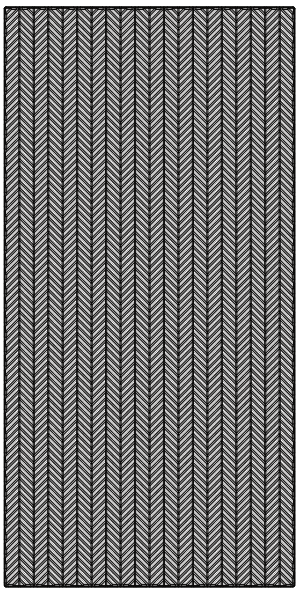
Dimensions:

Product:	Colour:	Width: (mm & inch)	Height: (mm & inch)	Thickness: (mm & inch)	Weight: (kg & lbs)	Pieces per m2 and sq.ft.
Origami Pulse	Wheat 05%	500 mm 19.68″	1000 mm 39.37″	20 mm 0.78″	~1.2 kg ~2.6 lbs	2/m2 ~0.18/sqft
Origami Energy	Wheat 05%	500 mm 19.68″	1000 mm 39.37″	20 mm 0.78″	~1.2 kg ~2.6 lbs	2/m2 ~0.18/sqft
Origami Sense	Wheat 05%	500 mm 19.68″	1000 mm 39.37″	20 mm 0.78″	~1.2 kg ~2.6 lbs	2/m2 ~0.18/sqft

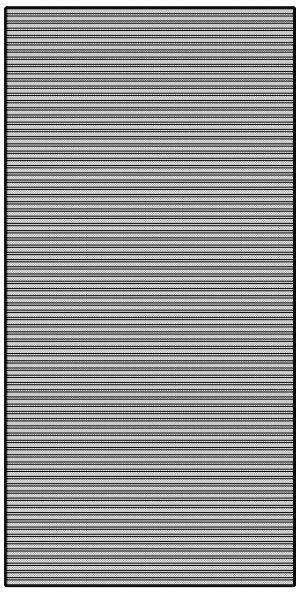
Products:



Origami Pulse



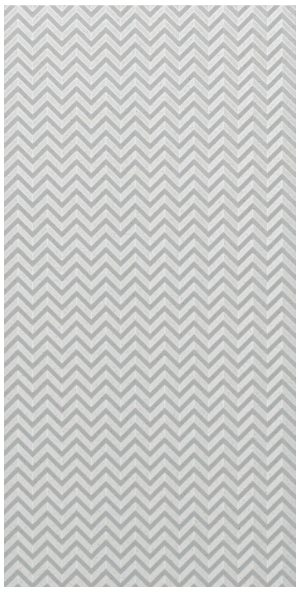
Origami Energy



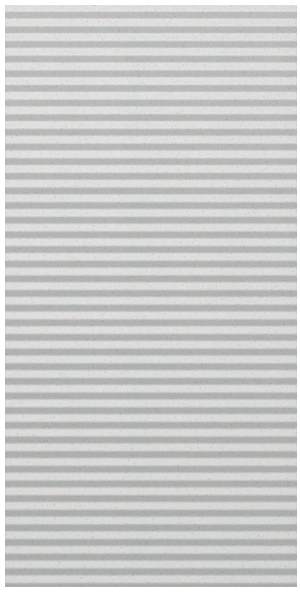
Origami Sense

Colour:

Wheat 05%



Wheat 05%

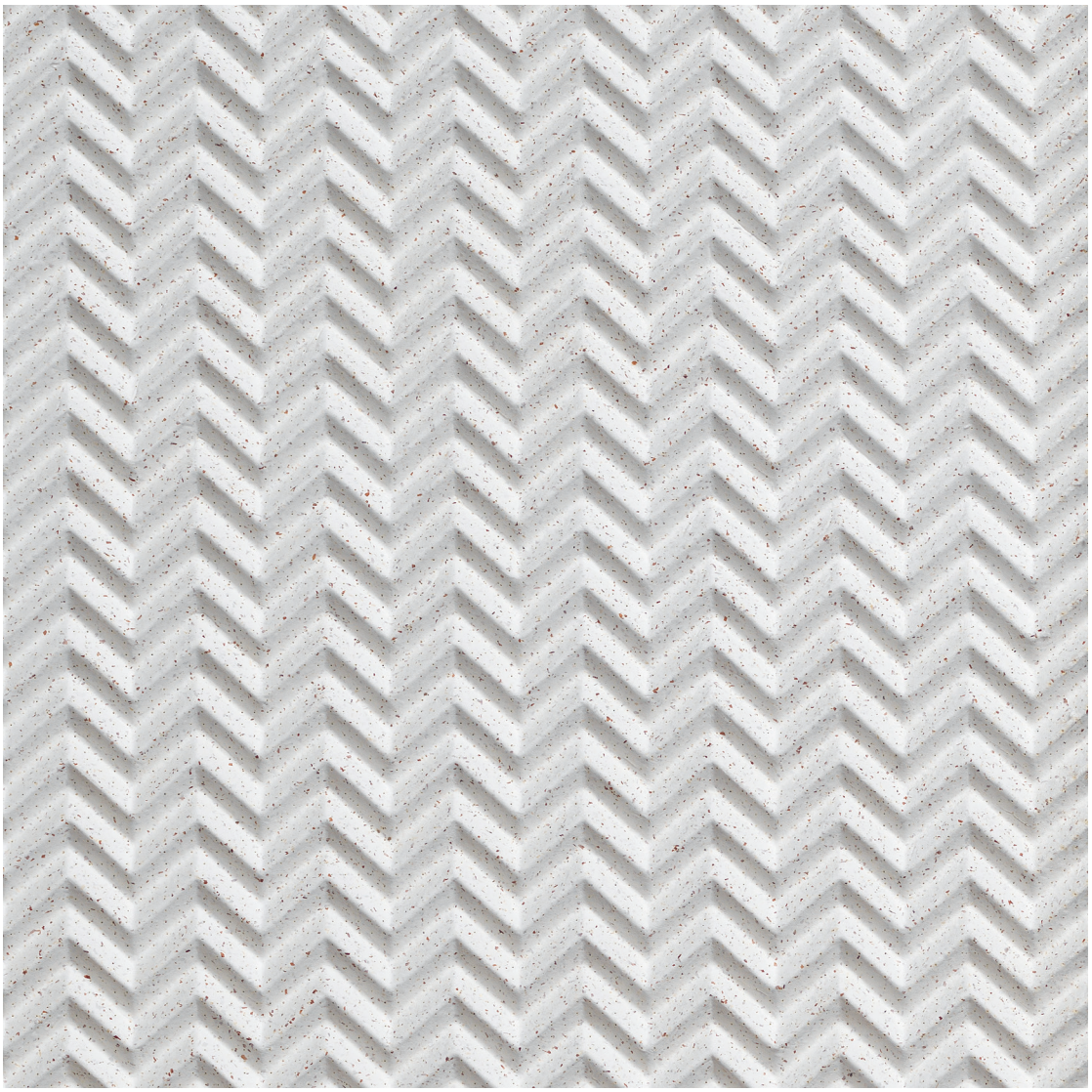


Wheat 05%

Colour

Colour made from wheat

Adding paint would have compromised our vision of creating a 100%-bio-based product. Instead, with BAUX Acoustic Pulp, color is achieved using 5% of wheat bran. Together with the three origami patterns, there are endless possibilities for mixing, matching and harmonizing with different space designs. The final effect is an organic expression of character and color, without any chemicals at all.



Compositions of Ingredients

Material:	Ingredient:	Share (%):	Function:	Origin:	Certificates/other:
	Cellulose Pine & Spruce	94%	Matrix	Sweden (SE)	FSC andPEFC
	Wheat bran	5%	Visual look and strength	Sweden (SE)	EU legislation controlled, non-GMO
	Bio binder 5101 Mixture of citrus fruit peels, potato starch and wax from plants.	~1%	Binder	Sweden (SE)	Certified according to ISO9001, ISO14001 and ISO50001. Members of the UN Global Compact Group.

Reaction to fire & Standards

Fire & standards:

- D-classed, according to EN 13823 EN ISO 11925-2.
- Mimics the natural wood fossilization process
- Built on knowledge of grass roots' built-in natural fire protection and mechanisms
- Designed for wall applications

Physical appearance and performance

Appearance: Interior wall panels

Colors: One color: Wheat 05% - product is unpainted

Odor: None

Solubility in water: None

Asbestos release: None

Density: Product:
~120 kg/m3 = 7.4 lbs/ft3
(2.4 kg/m2 = 0.49 lbs/ft2)

Material:
~1019 kg/m3 = 6.6 lbs/ft3

Recycled content: None

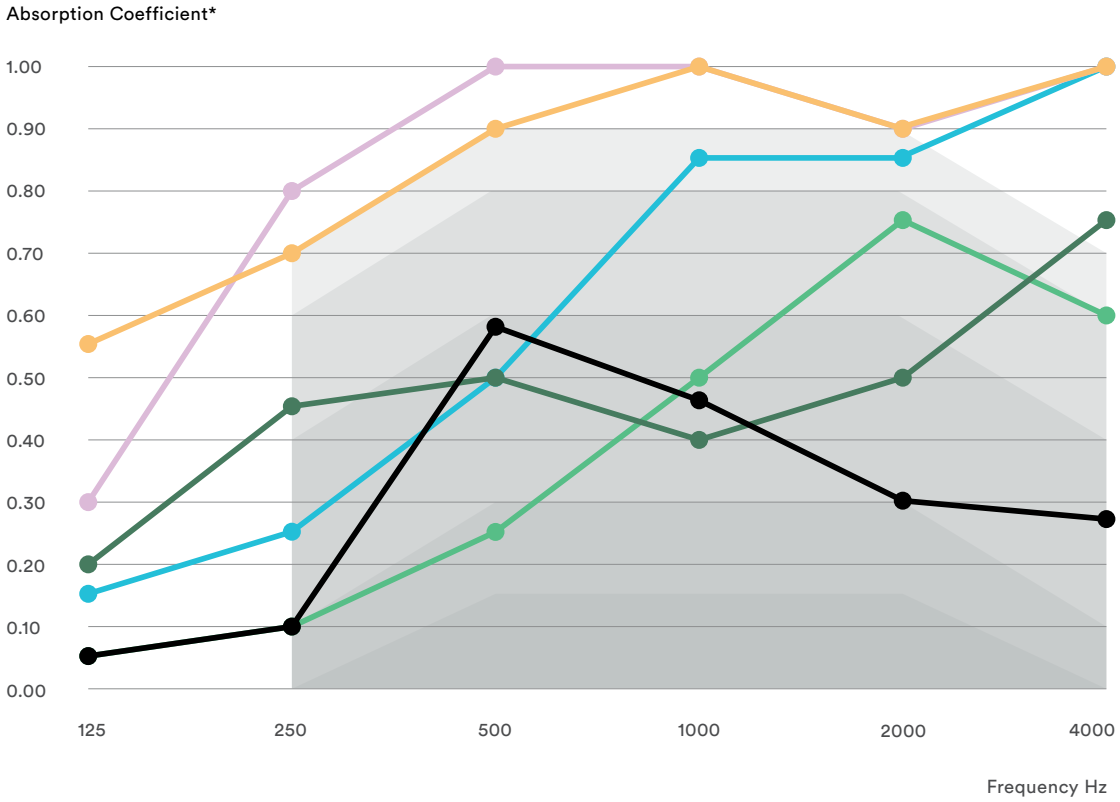
Harmful additives: None

Light reflection: 35.8%

Emissions (VOC):

- TVOC (EN 16516) 28 days: 0.026 mg/m3
- BREEAM International: Exemplary level
- Leed v4.1: Compliant
- French VOC Regulation: A+

Acoustic Performance



	Installation	αw	NRC	SAA	Class
●	BAUX Acoustic Pulp	0.35	0.35	0.35	D
●	BAUX 25 mm	0.30	0.40	0.41	D
●	3D Pixel	0.50 (MH)	0.60	0.62	D
●	BAUX 25 mm +40 mm Stone Wool	1.0 (H)	0.95	0.95	A
●	BAUX 25 mm +200 mm slot	0.50 (H)	0.45	0.46	D
●	BAUX 25 mm +40 mm Stone Wool + 200 mm slot	0.90 (H)	0.90	0.90	A

αw = Weighted sound absorption coefficient. NRC = Noise Reduction Coefficient. SAA = Sound Absorption Average (ASTM C423). Stone Wool in use: 40mm stone wool panel 140 kg/m3. Using Stone Wool as a backing may require screws or a frame around the tiles to fix the tiles appropriately.

BAUX

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