

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.

Tolerances:

BAUX Acoustic Pulp is a natural material and the composition will incur small variations in the panels. Inappropriate storage and lack of acclimatisation could alter panel dimension and weight. Tolerans level: +/- 2 mm.

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

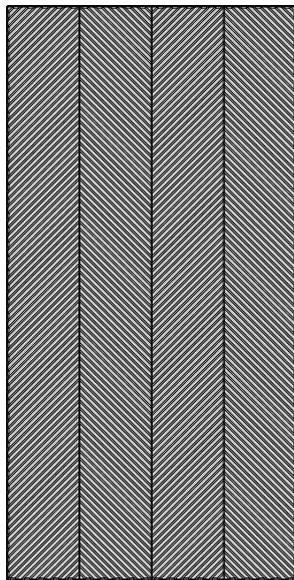
BAUX HQ – Stockholm, Sweden

baux.com/contact, 0046 (8) 21 07 07, info@baux.com

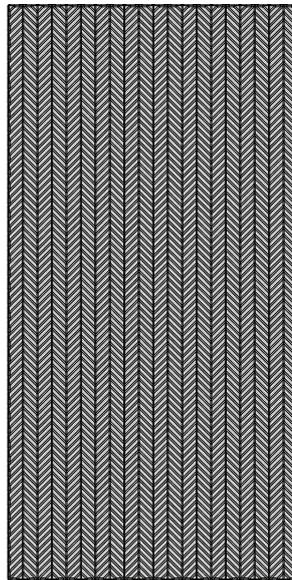
Dimensions & Patterns

Dimensions:	Product:	Width: (mm & inch)	Height: (mm & inch)	Thickness: (mm & inch)	Weight: (kg & lbs)	Pieces per m2 and sq.ft.
	Origami Pulse	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	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	500 mm 19.68"	1000 mm 39.37"	20 mm 0.78"	~1.2 kg ~2.6 lbs	2/m2 ~0.18/sqft

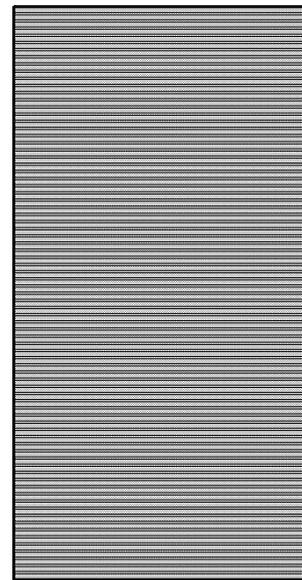
Products:



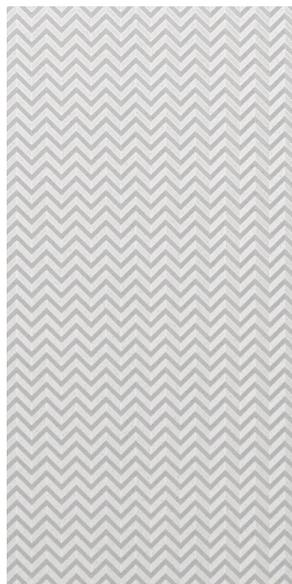
Origami Pulse



Origami Energy



Origami Sense



All panels can be mixed and matched together but observe that the patterns do not fully sync/align if put vertically next to each other.

Material

Material derived from wheat

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



Acoustic Pulp Bio Colour

This biodegradable palette provides Interior Architects and Interior Designers the opportunity to enhance acoustics while also honouring principles of sustainable design. The bio-based colours in our Acoustic Pulp line seamlessly blend functionality, aesthetics, and environmental responsibility. Comprising the colour range of Bio Blue Chalk, Bio Green Soil, Bio Red Mud, Bio Yellow Terra and Bio Rose Clay, the paint originates from plant extracts, natural earth pigments, minerals, and chalk.



Bio Natural Wheat



Bio Blue Chalk



Bio Green Soil



Bio Red Mud



Bio Yellow Terra



Bio Rose Clay

Compositions of Ingredients

Material:	Ingredient:	Painted vs Unpainted:		Function:	Origin:	Certificates/other:
	Cellulose Pine & Spruce	94%	94%	Matrix	Sweden (SE)	FSC and PEFC
	Wheat bran	5%	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%	~1%	Binder	Sweden (SE)	Certified according to ISO9001, ISO14001 and ISO50001. Members of the UN Global Compact Group
	Paint, Bio-based	0%	<1%			Pigments from natural resources. Biodegradable and home compostable

Reaction to fire & Standards

Fire & Standards:	Classification	US - ASTM E84: D-classed, flame spread 190, smoke developed 50 EU - EN 13823 & EN ISO 11925-2: D-s2, d0 AU & NZ - AS 5637.1-2015: Group 3
	Extinguishing media	Water, carbon dioxide, foam or dry chemicals

Physical appearance and performance

Appearance:	Interior wall panels	Recycled content:	None
Colours:	Bio natural Wheat, Bio Blue Chalk, Bio Green Soil, Bio Red Mud, Bio Yellow terra, Bio Rose Clay	Harmful additives:	None
Odor:	None	Light reflection:	35.8%
Solubility in Water:	None	Emissions (VOC):	· TVOC (EN 16516) 28 days: 0.026 mg/m ³ · BREEAM International: Exemplary level · Leed v4.1: Compliant · French VOC Regulation: A+
Asbestos Release:	None	Tolerance	+/- 2 mm
Density:	Product: ~120 kg/m ³ = 7.4 lbs/ft ³ (2.4 kg/m ² = 0.49 lbs/ft ²) Material: ~1019 kg/m ³ = 6.6 lbs/ft ³		

**Collaborations
& Supplier
Certificate:**



BYGGVARUBEDÖMNINGEN



**Harmonised
Standard**

SS-EN 13168:2012+A1:2015 – Thermal insulation products for buildings
SS-EN 13964:2014 – Suspended Ceilings

BAUX Digital Toolkit

BAUX Digital Toolkit is a free resource packed with downloadable files that help working professionals design, sketch and construct sustainable, beautiful and acoustically pleasing environments for spaces of every size.

Download BAUX Digital Toolkit or specific files at baux.com



3D/CAD

For many professionals, computer-aided design is an indispensable tool when it comes to visualising designs for upcoming projects. All of our Acoustic Pulp product files are available in formats compatible with AutoCAD, Sketchup, ArchiCAD, Rhino and more.

[.3ds](#) [.dwg](#) [.dxf](#) [.igs](#) [.skp](#)
[.sldprt](#) [.step](#)



BIM/Revit

Building information modelling is an essential tool used by professionals for virtual construction during the project planning process. All of our Acoustic Pulp product files are available in compatible formats, including detailed elements featuring BAUX colour schemes.

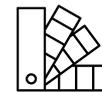
[.rfa](#)



Keynote and PowerPoint

If you need help getting the ideation process rolling, our ready-to-go presentation is an excellent catalyst. Available in both Keynote and PowerPoint formats, it features “drag & drop” objects so you can start designing right away. Great for workshops and client meetings.

[.key](#) [.pptx](#)



BAUX Patterns

BAUX Patterns makes it easier than ever to transform any space with a unique Acoustic Pulp design. Select from over 500 pre-measured 3D patterns, each designed to repeat like wallpaper so you can quickly calculate exactly how many tiles you'll need for your project.

[.png](#) [.tiff](#) [.jpg](#) [.dwg](#) [.txt](#)



Adobe Illustrator

An easy and efficient design tool, a lot of professionals choose Adobe Illustrator to help bring their creative visions to life. All of our Acoustic Pulp product files are ready to go in compatible formats for easy upload so you can start playing with shapes, colours and patterns.

[.ai](#)



Adobe Photoshop

A popular tool for editing photos and graphics. Adobe Photoshop can help you perfect your presentation and exhibit your design at its fullest potential. To make things easier, we supply high-resolution pictures of all Acoustic Pulp products in vectorised PDF format.

[.psd](#)



Texture Files

The next best thing to experiencing it in person. Texture files give you an idea of what a material will bring to a space in terms of colour and feel. All of our Acoustic Pulp product files are available in texture file formats. Great for renderings or as colour samples.

[.ai](#)

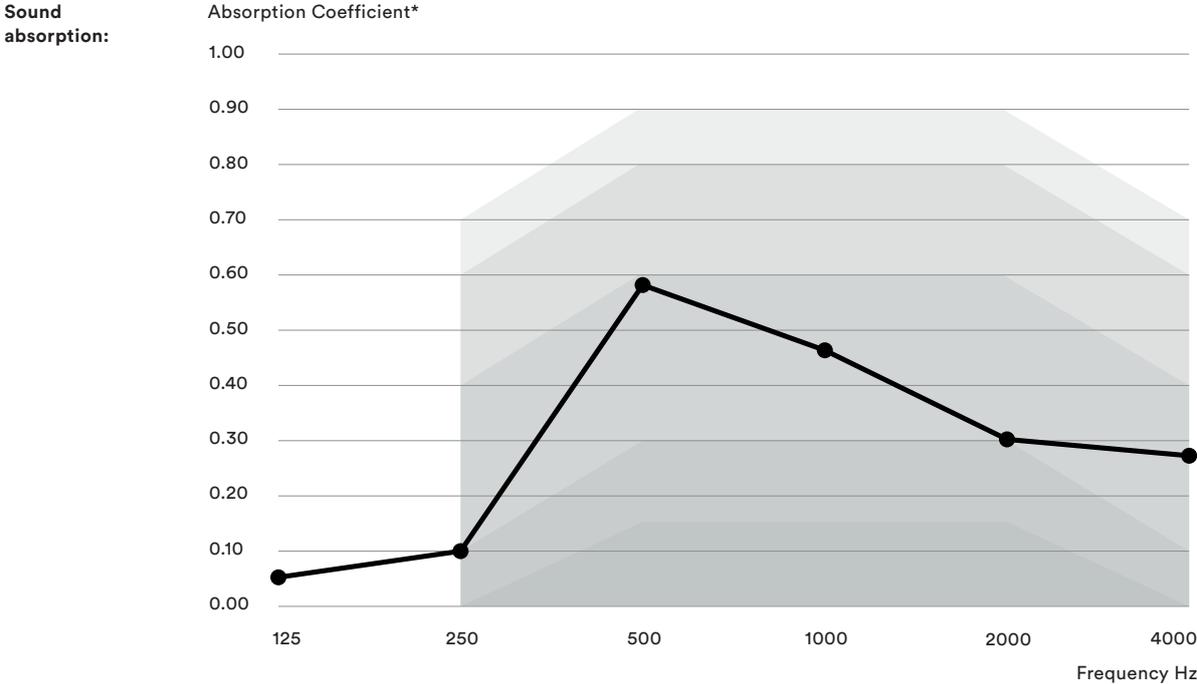


Mounting DWG

When it's time to build, we have the information you'll need to translate your designs from drawings to real life. We provide mounting files in DWG format, which can be attached to drawings, as well as installation instructions for the entire Acoustic Pulp range.

[.dwg](#)

Acoustic Performance

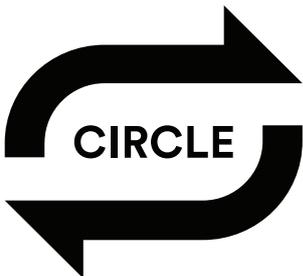


*An absorption coefficient is one of the key efficiency markers for acoustic materials, showing how much sound is absorbed at different frequencies. In the absorption spectrum, 0 indicates perfect reflection, and 1 indicates perfect absorption. Which one is ideal? It really depends on the kind of acoustic landscape you are aiming to build. While some spaces require maximum tranquility, in others, a bit more bustle and ambience may be desired. Our assortment addresses a range of absorption needs to help you achieve your goals.

Installation	α_w	NRC	SAA	Class
● BAUX Acoustic Pulp	0.35	0.35	0.35	D

α_w = 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.

Product lifetime over? We'll take it back.



We approach sustainability in everything we think and everything we do, every day. This commitment does not end even when the acoustic products have reached the end of their useful life. That's why we make it easy for you to have a positive impact on the environment while upgrading your space at the same time. Our Circle will support you all the way.

BAUX
LET'S BUILD!

www.baux.com