

ABC Tiles



Data Sheet

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## Wall and Ceiling byssus core products

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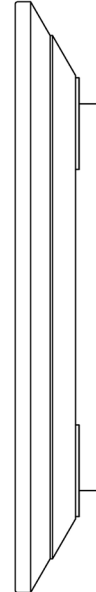
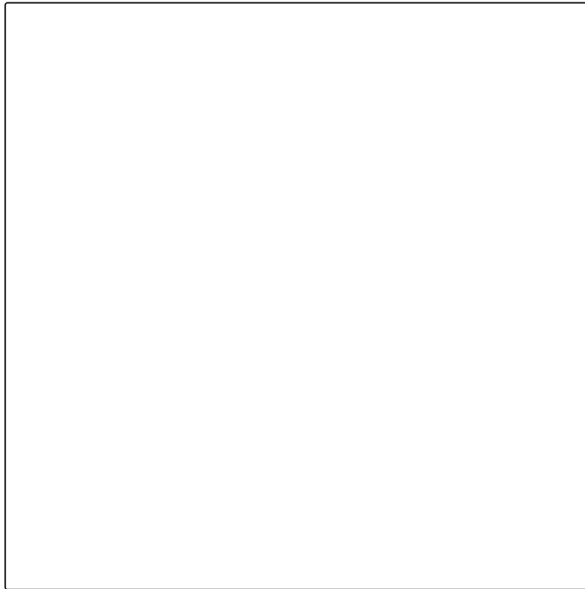
Introducing ABC Tiles, a revolutionary line of acoustic tiles that boasts a cutting-edge novel circular byssus core. This innovative byssus material provides our products with exceptional sound-absorbing capabilities, effectively reducing noise pollution and enhancing acoustic comfort.

Our collection of eco-friendly acoustic products represents a harmonious blend of traditional craftsmanship and novel, in-house developed technologies. We take pride in being pioneers in the production of novel byssus panels, offering a solution that not only meets stringent high-quality acoustic requirements but also addresses the pressing need for sustainability in architectural and interior projects. With our range of eco-friendly and sound-absorbing products, we aim to revolutionize the industry by providing excellent acoustic performance without compromising our commitment to environmental responsibility.

## Dimensions & Weight

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	W (mm)	H (mm)	D (mm)	sqm	Weight (kg/Tile)
ABC Tile	500	500	75	0.25	3.3



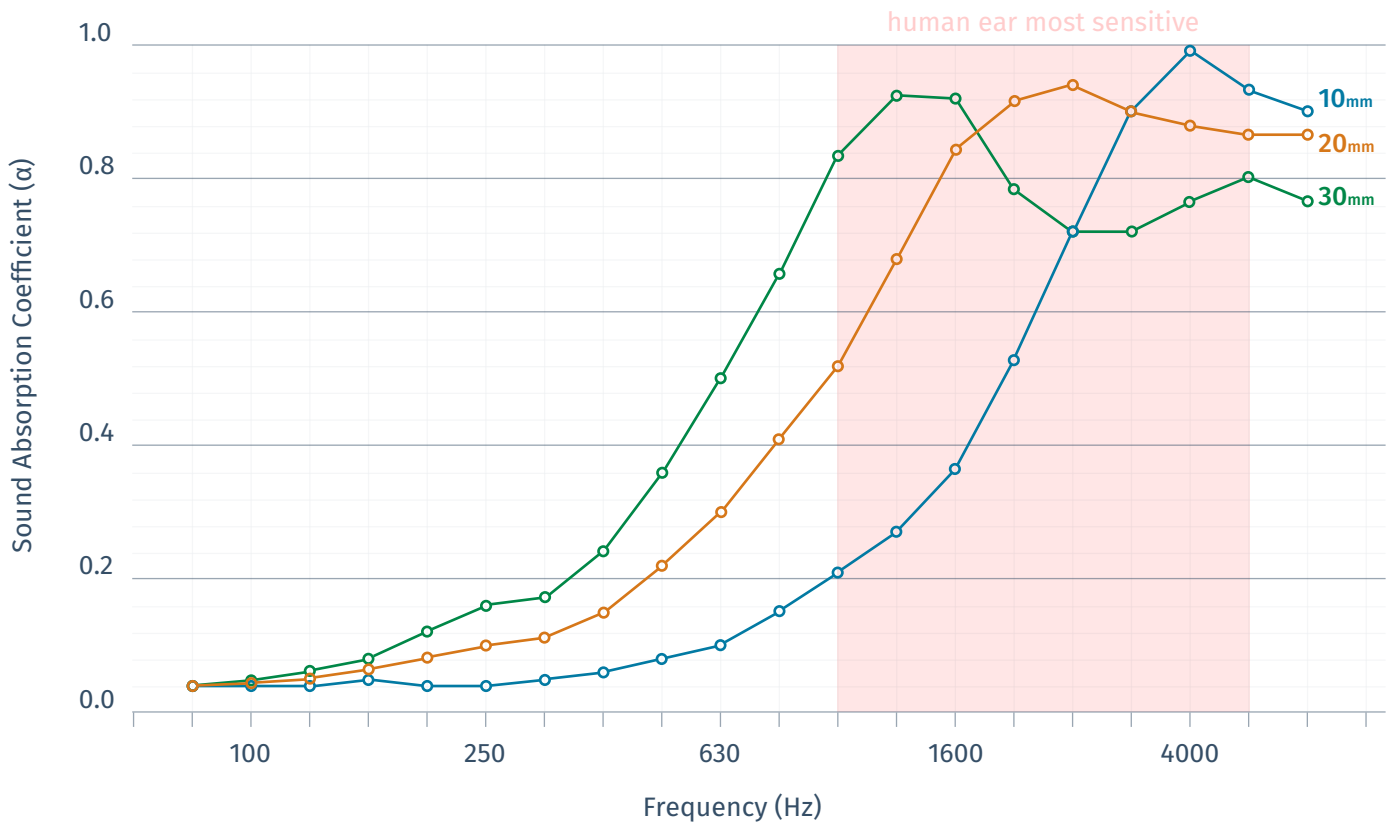
Tiles are available in custom sizes on request.

## Fabrics

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Currently, our panels can be covered in any fabric, ranging from 0.7mm to 1.2mm in thickness. While we suggest utilizing the Main Line Flax collection by Camira fabrics for a perfect blend of acoustic performance and aesthetics, we are open to exploring more options. If you have a different fabric in mind, we welcome you to send us samples so that we can thoroughly test them against our standards for both acoustic and aesthetic quality. We are committed to delivering the best possible solutions to meet your needs.

## Acoustic Performance of the Byssus Core \*\* according to ISO 10534-2



## Acoustic characteristics

Sound absorption coefficient is used to evaluate the sound absorption efficiency of materials. It is the ratio of absorbed energy to incident energy and is represented by  $\alpha$ . If the acoustic energy can be absorbed entirely, then  $\alpha = 1$ .

	t (mm)	$\alpha$ (100Hz)	$\alpha$ (250Hz)	$\alpha$ (630Hz)	$\alpha$ (1000Hz)	$\alpha$ (1600Hz)	$\alpha$ (2000Hz)	$\alpha$ (4000Hz)
<b>Byssus Core</b>	<b>30</b>	0.05	0.16	0.5	0.83	0.92	0.78	0.77
<b>Byssus Core</b>	<b>20</b>	0.04	0.1	0.4	0.52	0.85	0.92	0.88
<b>Byssus Core</b>	<b>10</b>	0.04	0.04	0.1	0.21	0.37	0.53	0.99

## Reaction to fire & standards

	Main Line Flax Fabric (Camira)	Byssus Core
Classification EN 13501-1	B - s1 - d0	B - s1 - d0*
Materials	75% Virgin Wool, 25% Flax	Byssus Fibres
Finishing	No added chemicals or Polymeres	No added chemicals or Polymeres

\* Official fire reaction test results will be available at the end of 2023.

\*\* More acoustic performance results will be available at the end of 2030

## Physical appearance & performance

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Product type	Wall, Ceiling for architecture and interior design.
Fabric	Any fabric between 0.7mm - 1.2mm thick. Preferably all natural fabrics, fabrics with recycled content or with a low polyamide %. Specified fabrics need to be fireproofed. (Crib 5)
Other materials	Stainless Steel Frame Byssus Core
Fire Reaction EN 13501-2	B-s1-d0*
UV Resistance	Depends on specified fabric. Contact preferred textile supplier for fabric properties.
Odor	Non existing. Our unique natural treatment neutralizes the smell of byssus waste.
VOC emissions	Byssus is a natural material and emits no VOC's Our byssus treatment process is done with natural ingredients.  The fabrics used to cover our tiles may emit VOC's. Contact preferred textile supplier for fabric properties.

\* Official fire reaction test results will be available at the end of 2023.