# Texaa®
# acoustic material
# Vibrasto
# "evolution

for walls and ceilings

SUMMARY



**Vibrasto** used in its original version, stretched and glued
across the walls of the commission rooms at the Palace of Europe, Strasbourg,
architect Henri Bernard, 1977.
These were the first ‘acoustic hangings’ ever produced by **Texaa®**,
offering acoustic solutions on a large scale and full of future promise …

Some forty years ago, **Texaa®** designed an acoustic material which could be ‘stretched and glued’ over walls and ceilings. We called it **Vibrasto** and it comprised a sound absorbent foam within an envelope of **Aeria**, our open knit, sound transparent fabric. It provided an excellent solution for improving the acoustic comfort of a wide variety of spaces in which sound reverberation was a problem.

Born from our technical expertise in the field of fabric design, **Vibrasto** was perfected down the years, notably interms of the flame resistant properties of the foam used, in accordance with new health and safety norms for buildings open to the public.

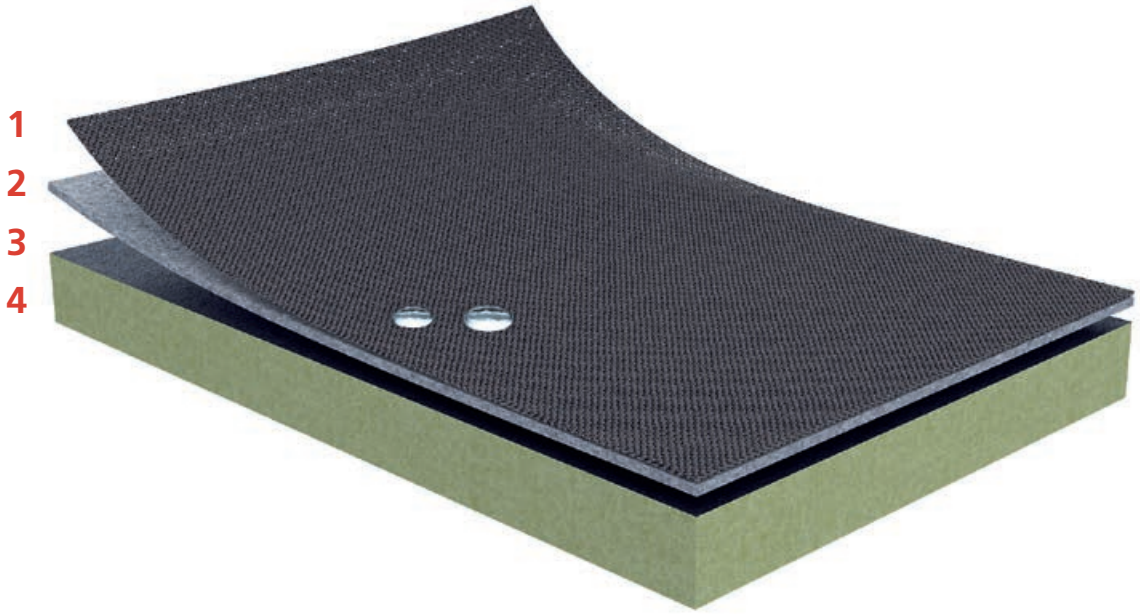
Unfortunately, these changes brought with them a greater environmental impact, especially as far as the end stage of the product’s lifecycle was concerned.

As no satisfactory alternative is available enabling us to sustainably reconcile the fire resistance of the foam with a respect for the environment, **Texaa®** has decided to phase out the ‘stretch and glue’ version of **Vibrasto**.

It will be replaced by a newly improved version of our ‘stretch and fix’ **Vibrasto**, now called **“evolution** and whose qualities by far surpass those of its venerable forbear, both in terms of ease of fitting and finishing, increased acoustic performance and reduced environmental impact.

Our decision to sever our collection of one of its most emblematic products is motivated by a desire to encourage, however humbly, new forms of environmentally friendly behaviour, in the greater interest of all.

Matthieu Demptos, President




**1.** Aeria fabric
**2.** opaque wadding
**3.** layer of air
**4.** sound absorber

- - -

Once knitted, **Aeria** is sized with a dirt repellent coating which makes it very durable and easy to clean.



# an architectural material

Just like the human skin, **Texaa®**'s Vibrasto is a composite material made up of three successive layers, with each playing their own specific role.

- The epidermis, or outer layer, is formed by our sound transparent fabric **Aeria***, so easy on the eye and available in a range of vibrant colours.

- The dermis, or middle layer, is a thin layer of 3 mm wadding ensuring that the **Aeria** is totally opaque and therefore capable of hiding anything positioned behind.

- The hypodermis, or lower layer, comprises the sound absorbers which make **Vibrasto** so efficient in terms of acoustic performance. The sound absorbers are either RI panels (impregnated glass wool) or AP foam, depending on specific situations.

Depending on the level of acoustic performance required, the thickness of the sound absorbers used in the **Vibrasto** varies. A thickness of either 10 mm, 25 mm or 50 mm normally suffices in ordinary situations, but greater depths are also available. It is also possible to use other sound absorbing materials if desired, such as vegetable fibre wools or recycled textiles, for example.

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The hypodermis also serves as a useful technical solution for concealing electric cables.

* Our sound transparent fabric with an exclusive **Texaa®** patent.

# a sensitive skin

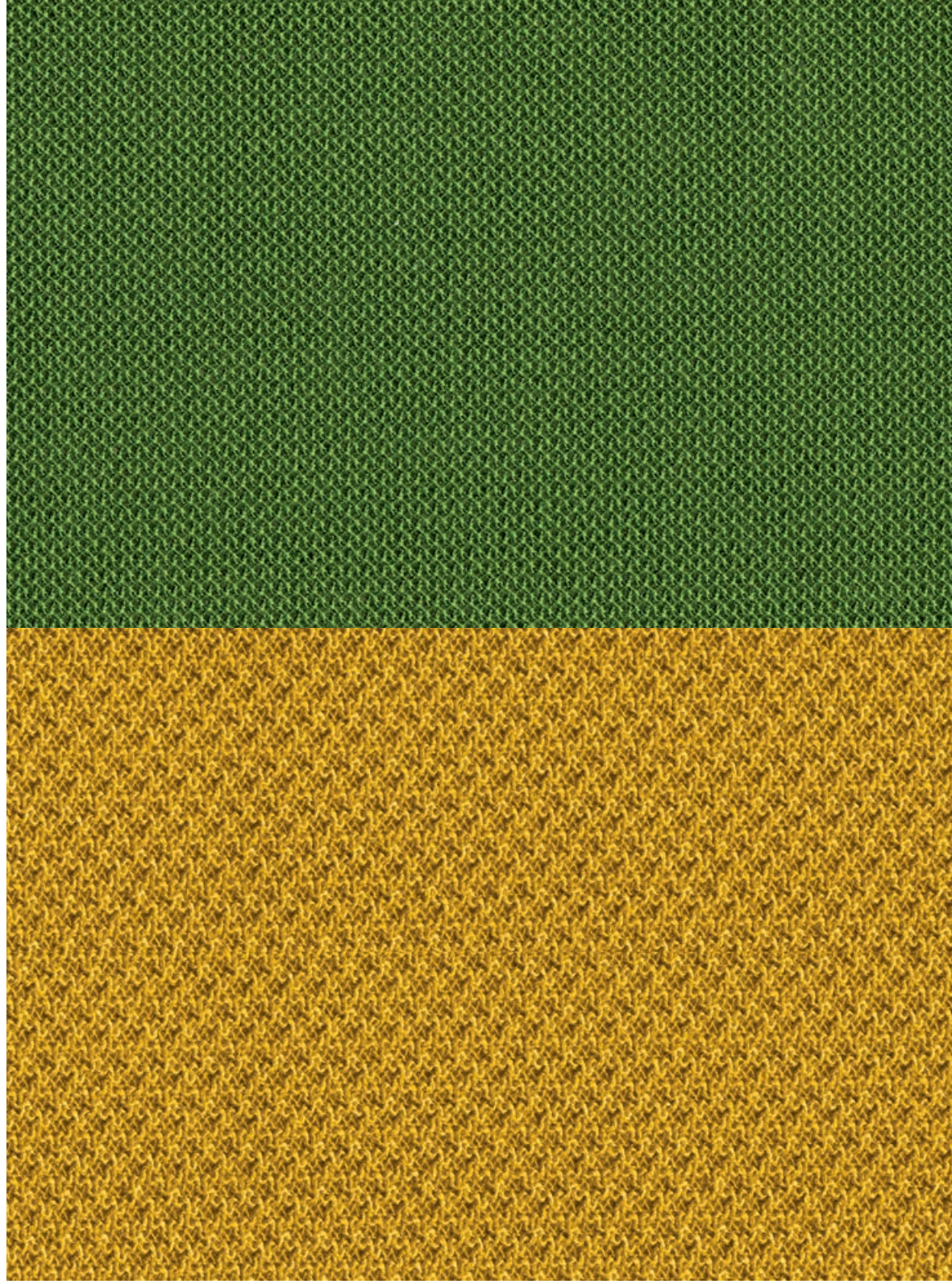
The textile envelope used to clad the **Vibrasto** is made from **Aeria**, a fabric with an exclusive **Texaa®** patent knitted in our workshops in Gradignan, near Bordeaux.

Two types of knit are available, and the feel of the fabric changes with each. The ‘round’ knit (MR) version is at once warm and discreet, while the new ‘Grain de Riz’ knit (MGR) is somewhat bolder, making its presence more clearly felt, even from a distance.

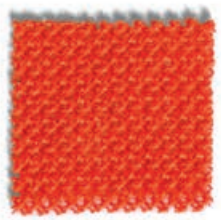
**Aeria** is also synonymous with colour, to be chosen and worked with as such, in harmony with a wide range of situations. Colour greatly influences our sense of space, giving depth to a flat surface or, on the contrary, smoothing away rises and falls. Proof if any were needed of colour’s extraordinary *spatial* power. Colour is also a key element in our sensorial existence, intuitions, emotions or desires. Some colours are tranquil, others energetic. Colour is all about aesthetic beauty.

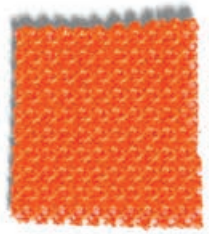
The current colour range, regularly redesigned by architect and colourist Christine Bernos, unfolds in a long series of greys, beiges and browns, reds, greens and blues. The sensitivity, sustainability and technicality of her approach makes it possible to assemble **Texaa®**’s different acoustic products and materials in meaningful exuberance, or, on the contrary, measured restraint.

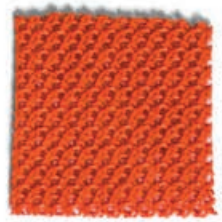


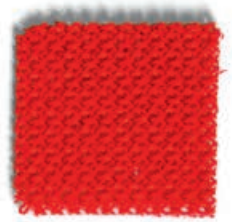


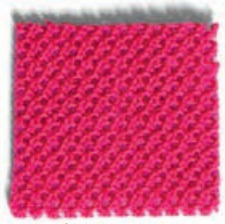
top: **Aeria** in ‘round’ knit (MR)
bottom: **Aeria** in ‘Grain de Riz’ knit (MGR)


Corail MR600

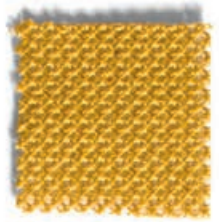

Orange vif MR610

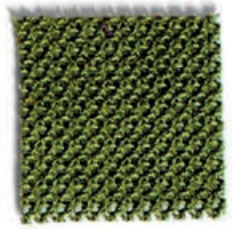

Brique MR620

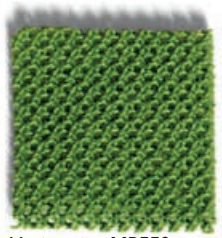

Rouge MR470

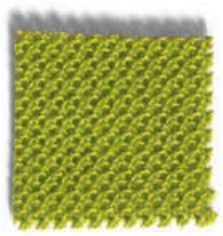

Rose fuchsia MR590

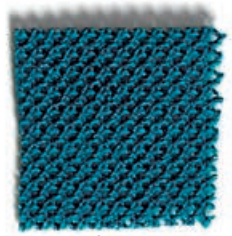

Violet profond MR560

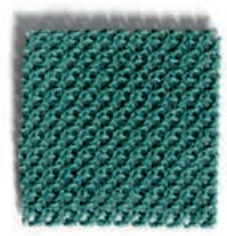

Moutarde MR580

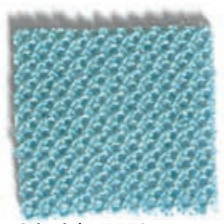

Vert alpin MR510

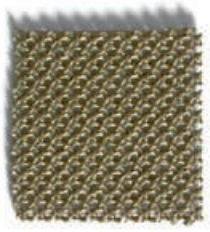

Vert cactus MR550

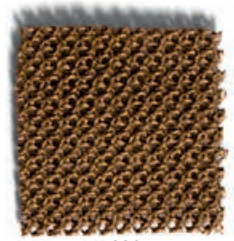

Vert kiwi MR760


Bleu Pacifique MR530

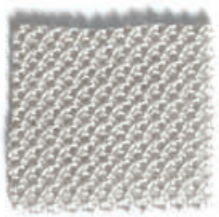

Bleu lac MR570

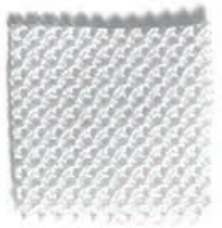

Gris ciel MR770

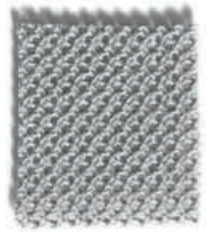

Olivier MR200


Bronze MR220


Grège MR710


Ciment MR700


Nacre MR640

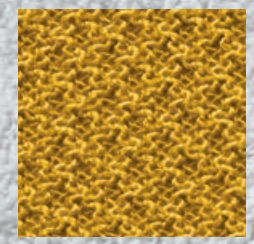

Gris argent MR540

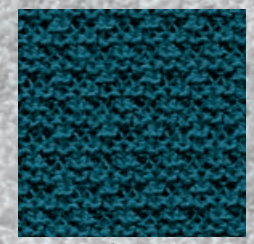

Gris béton MR500

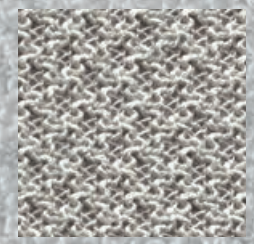

Gris brun MR780


Graphite MR520

**Vibrasto "evolution** is available
in a range of 22 colours for **Aeria** in 'round' knit (MR),
and in three colours for **Aeria** in 'Grain de Riz' knit (MGR).
Colours may be personalised on request.


Moutarde MGR580


Bleu pacifique MGR530


Ciment MGR700

For optimum acoustic comfort, all opaque surfaces available
in this meeting room have been entirely clad in **Vibrasto**.
Swiss Life Tower (renovation) in Lyons / arch. Batton and Bergmann
/ photo: Erick Saillet.

# a coherent system

**Texaa®'s Vibrasto** provides acoustic performances of the highest level, to meet the most demanding specifications. It also offers a simple and particularly efficient solution for implementing made-to-measure sound absorbing surfaces in a variety of situations, whatever the constraints.

It is fitted using simple L-shaped or T-shaped battens, making it possible to cover large areas while guaranteeing a perfect finish. It is also possible to request the design of complex and colourful geometric layouts, or to clad curved surfaces and underscore relief by cladding facetted shapes. And all for a very reasonable cost.

The architect defines the aesthetics of the overall composition, leaving the acoustician free to use the sound absorbers of his or her choice for the lowermost layer, as required. As the absorber and textile envelope are fitted independently from each other, **Vibrasto** is a highly flexible product, making it possible to change your mind or renew a colour with utmost ease, and also facilitating cleaning operations or removal.

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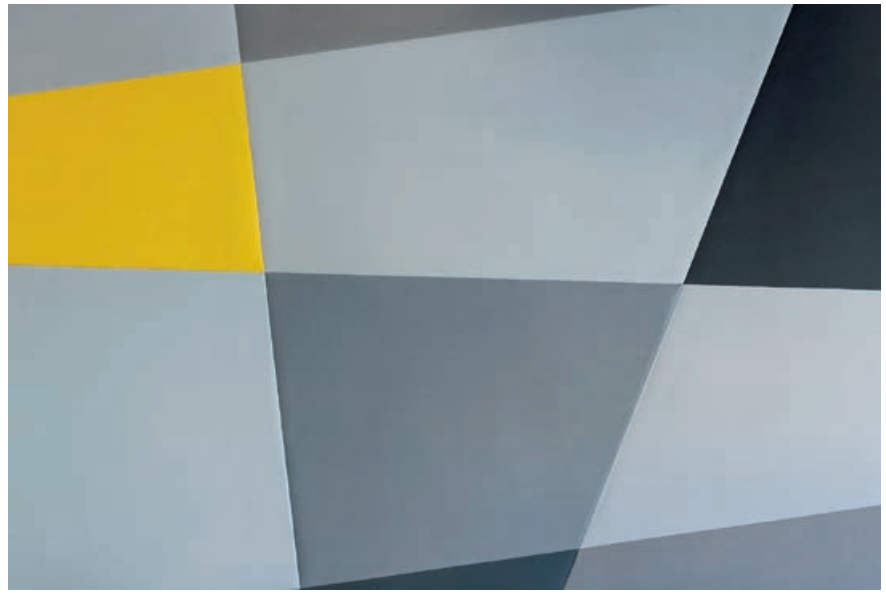
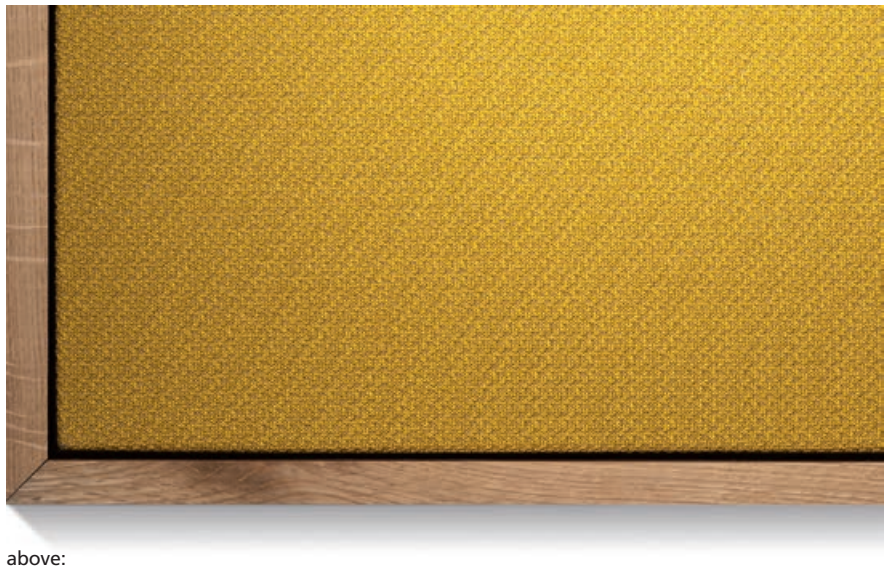
Fitting Vibrasto requires only the simplest of tools :
a mitre box, handsaw, glue gun, rounded knife
(or a bent-headed spatula for inside angles) and an electric drill,
if the fitting surface is made of concrete.

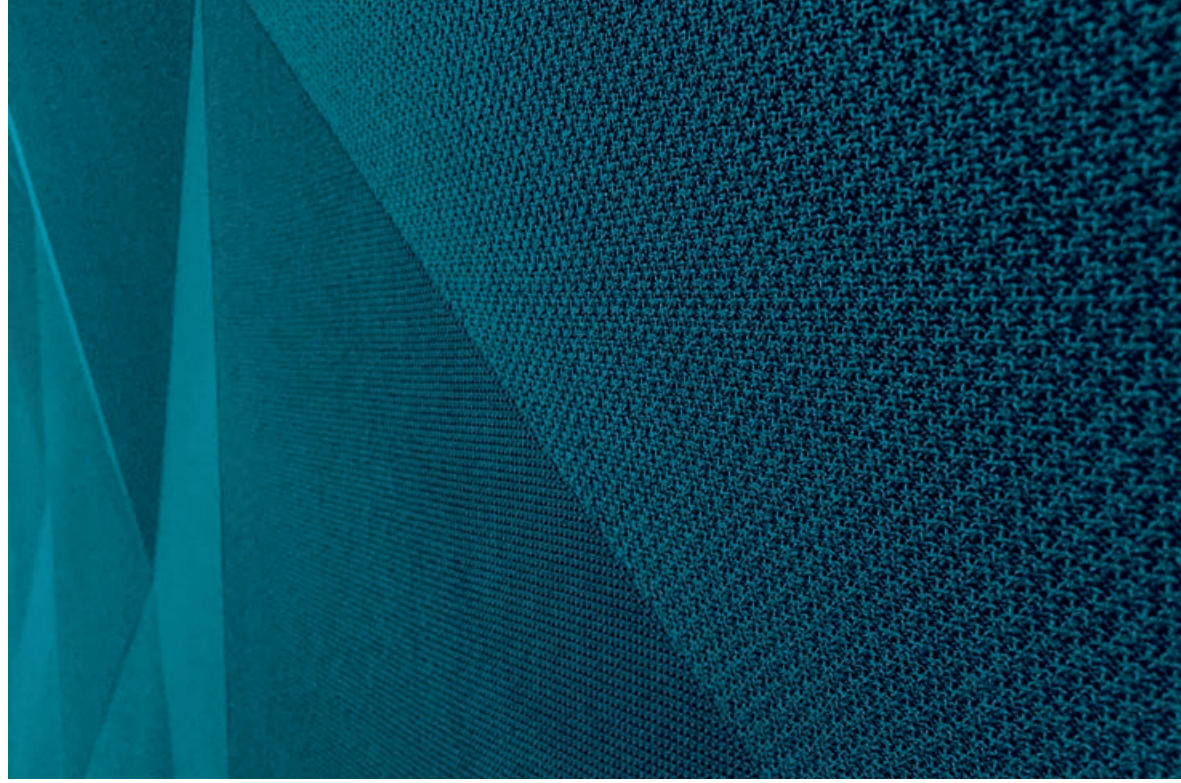


**Vibrasto** cladding a wall, using different colours in geometric arrangement.
_above:
town council meeting hall, Bormes-les-Mimoses
(with Stereo panels by **Texaa**® suspended from the ceiling).
arch. Jean-Paul Mathieu / photo: Serge Demailly.
- - -
_page opposite:
entrance hall of Snecma Comité d'établissement, in Villaroche.
arch. Isabelle Genyk / photo: Herbé Abbadie.



above:
**Vibrasto** 55 mm framed in oak, bringing the noble wood
into meaningful harmony with the warm fabric, while also providing
acoustic perfection thanks to almost 100% sound absorption.
- - -
right:
**Vibrasto** 55 mm cladding a ceiling,
private home, Bordeaux 2017.





above:
**Texaa®** stand at the 100% Design trade fair, London 2016.
Detail showing how **Vibrasto** is fitted to a facetted surface.
design: Guillaume Martin and Michaël Damen.
- - -
left:
1500 m² of **Vibrasto** in a complex, seemingly random layout, fitted by Delhoume,
Kinémax projection hall, Futuroscope, Poitiers, 2016,
arch. atelier David Joulin / photo: Thierry Seldubuisson.

# a philosophy

Visual and acoustic comfort are specified as part of objective 2 of the French HQE 2016 standard (pleasant, practical and comfortable living spaces) which aims to improve the comfort and well-being of all those who live or work in a given building.

Fitted amply across walls and ceilings or as a simple panel (of greater thickness), **Vibrasto "evolution** by **Texaa®** absorbs sound waves and lowers reverberation time, making sounds, be they words or music, much easier to comprehend.

Colour speaks volumes about the atmosphere of a period. Just remember the furore concerning the relationship between colour and architecture in the early years of the 20th century, opposing history, tradition and convention with fashion, design and the spirit of the age.

By rethinking questions concerning the colour and acoustic comfort of our homes and workplaces, **Texaa®** also has a role to play in this story, at the service of creative minds, by providing them with a coherent system and inviting them to design the sound of silence.

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In response to the specifications of environmental standards for the architecture of tomorrow (HQE, LEED, BREEAM), we are constantly striving to reduce the environmental and health impact of our products.



**Vibrasto** 30 mm fitted as a panel,
private home, Bordeaux (renovation), 2017,
arch. Christine Bernos.

# Technical characteristics

**Vibrasto** 15 mm may be used to clad both convex and concave curves, with a minimum radius of 1.2 m

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opposite, right

**Joins**

Centre-to-centre distance: 1,500 mm
Pencil-line joints are produced at the joins between adjacent lengths.
The overhanging edges of the **Vibrasto** fabric are inserted into U-section battens running the length of the join.

**Angles**

Pencil line joins are used for inside angles.
Outside angles are fitted using a block provided by **Texaa®**

**Edging**

L-shaped battens are fitted around all edges (and door or window frames).
Battens used for visible edges are fitted with cladding.

**Curvature**

Minimum radius = 1.20 m for **Vibrasto** 15 mm

**Electrical fittings**

Plug sockets and switches should stand proud, to make room for the absorbent backing.

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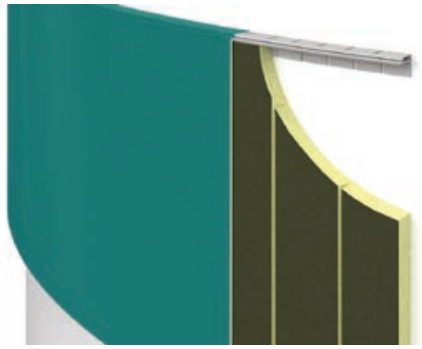
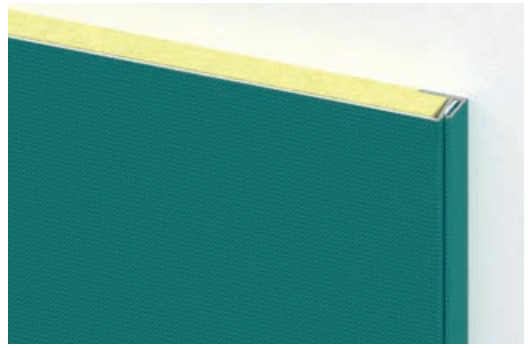
/ sketches: Guillaume Martin and Michaël Damen
/ photo: Ivan Mathie

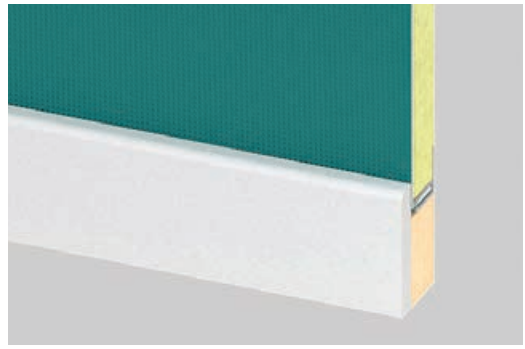


convex surface

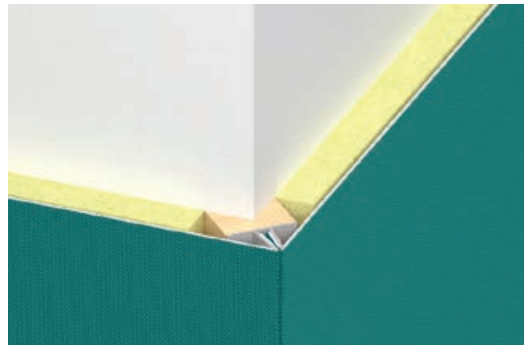
concave surface



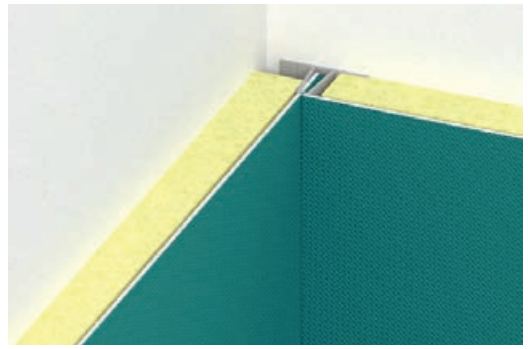
ceiling



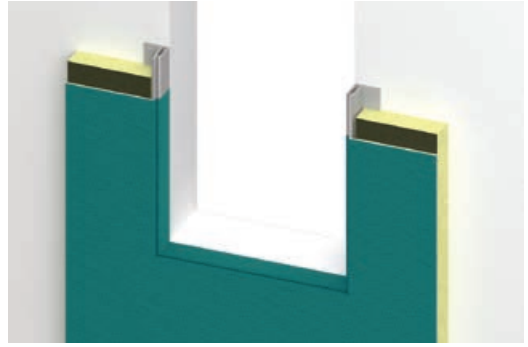
skirting



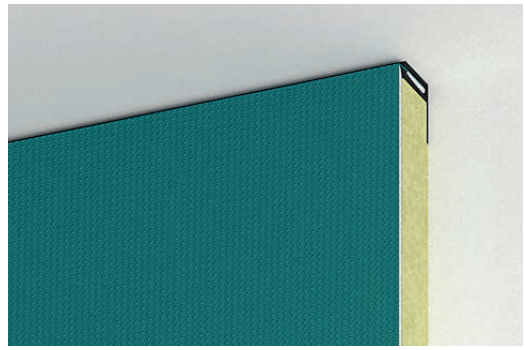
outside angle



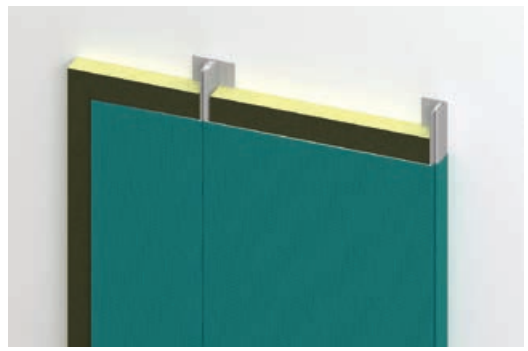
internal angle



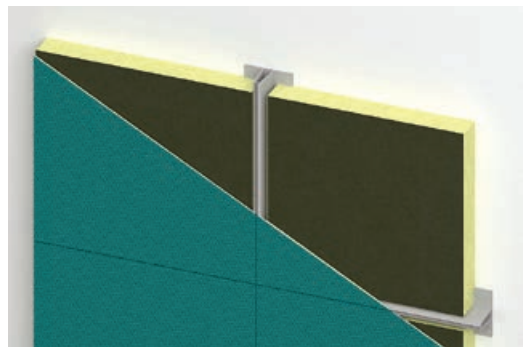
fitting around openings



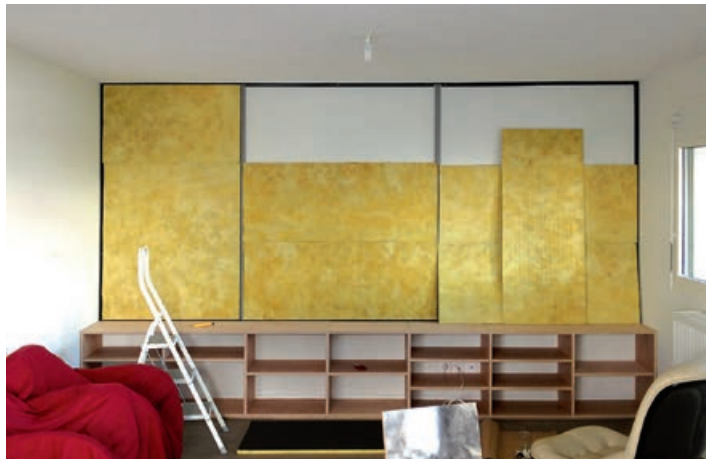
fitting along edges

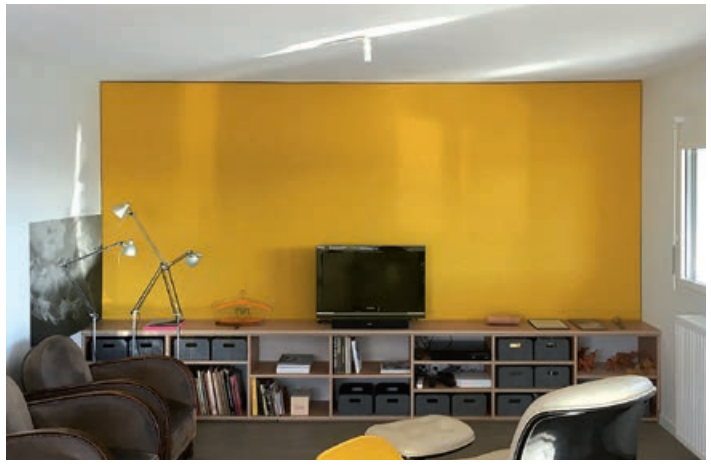


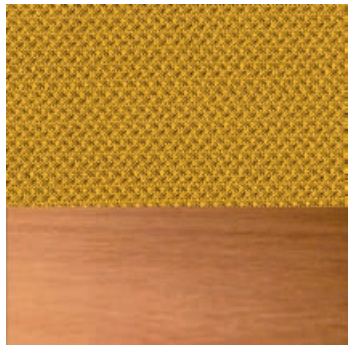
joins between adjacent lengths



intersections









**Vibrasto "evolution** by **Texaa®** provides a comprehensive system for solving acoustic problems in echoing spaces, for use on walls and ceilings.
It comprises a highly flame resistant, non-dripping envelope made of sound transparent **Aeria** fabric laminated onto wadding and fitted in front of RI panels (30 and 55 mm) or AP foam (15 mm).

Dimensions
Width: 1,500 mm / Thickness: 15, 30 or 55 mm.

Absorption coefficients $\alpha_W$ fitted over concrete
**Vibrasto 15**: 0.35 (H) / **Vibrasto 30**: 0.50 (MH) / **Vibrasto 55**: 0.95

Reaction to fire classification
**Vibrasto 15**
– covering: class A (USA) / equivalent class 0 (UK)
– complete product: B-s2, d0 – no flaming droplets (Europe)

**Vibrasto 30**
– covering: class A (USA) / equivalent class 0 (UK)
B-s1, d0 – no flaming droplets or particles (Europe)
– panel RI: A2-s1, d0 – no flaming droplets or particles (Europe)

**Vibrasto 55**
– covering: class A (USA) / equivalent class 0 (UK)
B-s1, d0 – no flaming droplets or particles (Europe)
– double panel RI: A2-s1, d0 - no flaming droplets or particles (Europe)

Environmental standards
HQE: FDES (EN 15804) – Environmental and Health Product Declaration Forms certified by AFNOR
LEED / BREEAM:
4 points for:
– acoustic contribution
– very low emissions of VOCs (Volatile Organic Compounds) and formaldehyde
– certified Environmental and Health Product Declaration Forms (EN 15804)

Tensioning battens made of a 100% recycled material

Performance indicators for **Aeria**
Hydro/Oleo-phobia ≥ 5 (AATCC118 and AATCC193)
Antistatic properties $7.10^{10}$ Ω (EN1149-1)

Colors
**Vibrasto "evolution** is available in a range of 22 colours for Aeria in 'round' knit (MR), and in 3 colours for Aeria in 'Grain de Riz' knit (MGR).
Colours may be personalised on request.
Colour fastness is above 5, on a scale of 0 to 8.

Cleaning
Vacuum cleaning. The antistatic and dirt repellent coating on **Aeria** makes the fabric hard-wearing and easy to clean.

Guarantee
**10 years**

Specifications and data sheets on **texaa.com/documentation**

For some forty years, **Texaa®** has designed, developed and manufactured panels and objects which greatly enhance the acoustic comfort of a wide variety of spaces. They are composed of sound absorbers behind a textile cover of **Aeria*** and all **Texaa®** products are knitted and assembled in our workshops near Bordeaux.

*our sound transparent textile, with an exclusive **Texaa®** patent.

## News, technical data sheets and updates available at www.texaa.com

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**textiles, acoustics, architecture**

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