

Texaa® Breathing ceiling strato

textile / acoustics / aerated

Strato

Why?

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The design of Strato ceilings is the fruitful result of trial and error, discussion and debate and successive project implementation.

left:

Testing a prototype.

below:

The various components of our **Strato** ceilings are built one by one in our workshop in Gradignan, near Bordeaux.

(ceiling = the upper interior surface of a closed space)

Why?

Our new **Strato** range offers a number of efficient solutions for dealing with the complex questions posed by ceiling design in buildings today. How may their acoustic comfort be improved? How may room be found to freely position cables and network ducts? How may disparate technical installations be brought into visual harmony without amputating the given volume, and how may such unsightly elements be concealed while still maintaining access to the plenum¹? etc.

Born from **Texaa**®'s expertise in the field of transparent textiles and acoustic object solutions, **Strato** provides a coherent, innovative system which may be used to build ceilings of varying configurations to suit a wide range of spaces.

Strato is composed of modules which may be fitted together in combination or made to measure to offer effective interior design solutions or enhance the acoustic comfort of any given space.

Reasonably priced.

Easy to fit.

1. The plenum refers to the space lying above the ceiling but beneath the next floor.

A floating ceiling

Strato modules comprise a metal frame, guaranteeing their strict geometric shape and thereby making it possible to hang them from the upper slab by means of vertical cables.

They may be attached together by means of an ingenious fixation system, ensuring that they are perfectly level and making it very simple to assemble them either in a continuous layer or as floating modules positioned within the space – the plenum remains accessible and its visibility depends on the configuration of modules used.

Unlike stretch ceilings or ceiling tiles attached to a frame, **Strato** ceilings are totally independent from the walls – it is not therefore necessary to fit them from wall to wall. This gives designers total freedom in dealing with the complex constraints of their implementation within a given volume and paves the way for high quality architectural responses.

Simple, straightforward, light, practical.





The various components of **Strato** ceilings are suspended using simple vertical cables and are attached together by means of an ingenious fixation system, ensuring that they are perfectly level.

above and page 3:
London, 'Towergate Insurance' restaurant, 2017
Architect: Hutchison Kivotos architects, London



A breathing ceiling

Two additional components may be integrated into **Strato** floating ceilings, in intelligent combination.

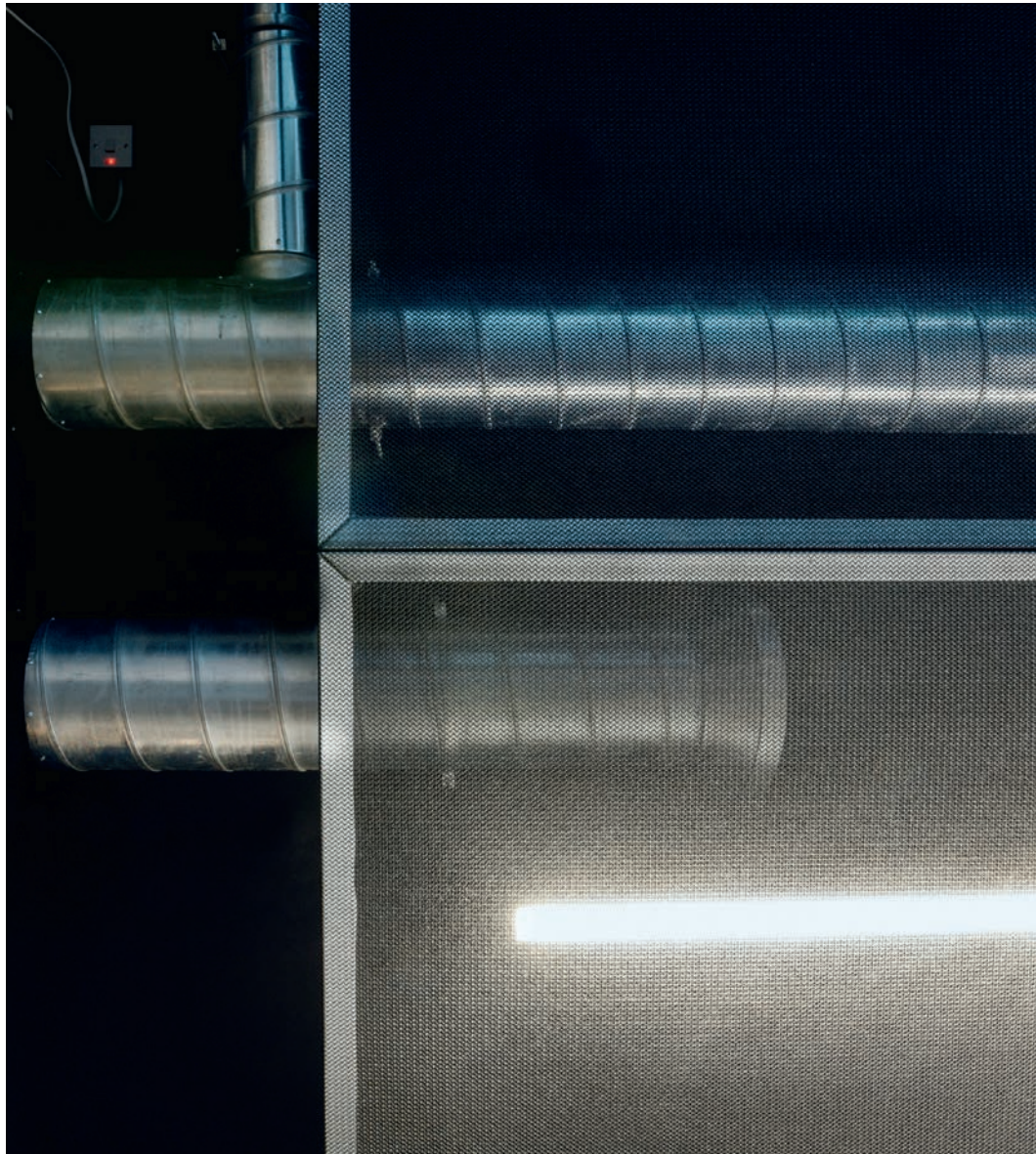
Filters are aerated panels over which a piece of *large knit*¹ **Aeria**² textile membrane is stretched, masking what lies behind without forasmuch completing concealing it from view. These are breathing components, forming a filter which may be used not only to soften light sources, but also allow heating or air conditioning to circulate freely.

Absorbers are designed to offer optimum acoustic efficiency and include a layer of white AF1 felt within a textile cover of *round knit*³ **Aeria**. They are therefore totally opaque.

By using these two components in creative combination, the effect is transparent to a greater or lesser extent, thereby offering a dynamic interpretation of any given volume – the plenum remains partly visible leaving the sense of space intact.

-
1. *Large knit* (GMR) available in 'nacre' and 'gris brun'.
 2. **Aeria**, our sound transparent textile with an exclusive **Texaa**® patent.
 3. *Round knit* (MR) available in our standard range of 22 colours as an option.

Used in free combination, the *filters* allow air and light to pass through and entice the gaze, while *absorbers* enhance acoustic comfort and hide technical apparatus.



Depending on design choices, the floating ceiling may be used to conceal elements placed above it to a greater or lesser extent, thereby modifying their significance.

 London, Open space at 'Bedford Road', 2017
 Architect: EERO Design and Build LTD



A multifunction acoustic ceiling

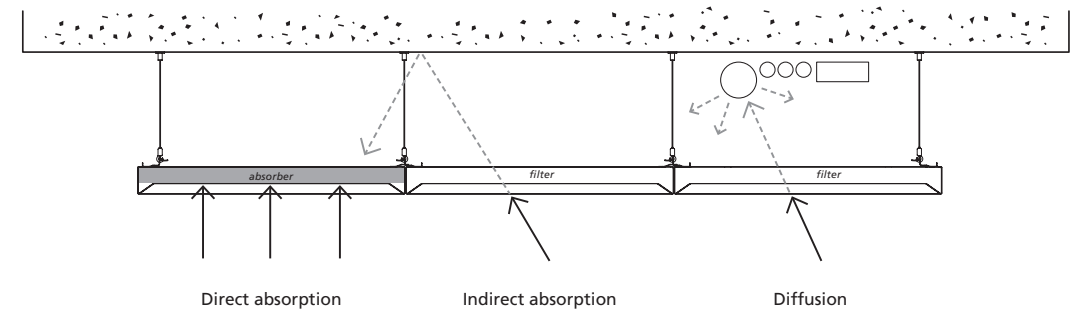
Born from **Texaa**®'s expertise in the field of transparent textiles and acoustic object solutions, **Strato** floating ceilings absorb sound waves and lower the reverberation time in the spaces in which they are fitted. They also provide far greater sound clarity for the transmission of words or music.

As they offer the possibility of adding simple filters or more powerful sound absorbers, fitting a **Strato** ceiling means that the desired sound atmosphere may be created and modelled with the utmost precision. The filters increase the level of acoustic comfort and allow light, ventilation and heating to pass freely around the building. The absorbers offer a high level of acoustic performance and correct even the most troublesome echoes with great efficiency.

The knit of the **Aeria** fabric cover brings a softness of touch and particularly appreciable warmth. The *round knit* used to clad the absorbers has a textile mesh design, at once technical in feel and discreet. The mesh of the *large knit* fabric is more sensual, and the ample stitch with which it is produced offers a transparency which diminishes as one moves away.

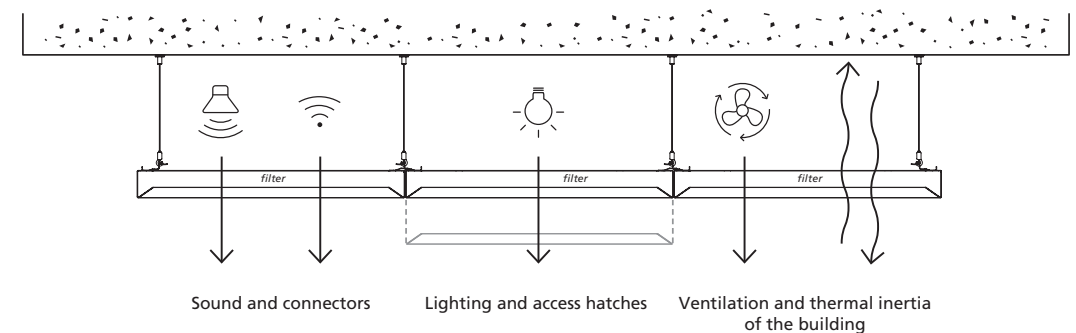
Acoustic functioning of the Strato ceiling

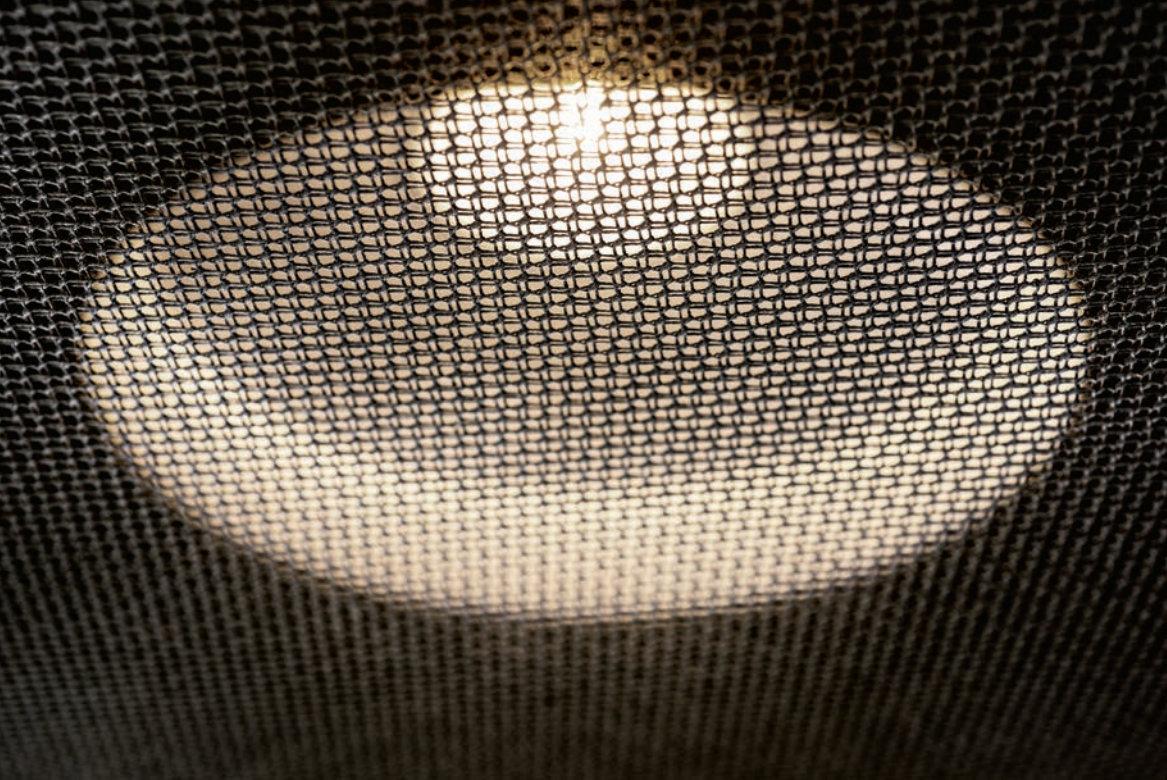
The acoustic efficiency of the filters is far from negligible, thanks not only to their own sound absorbing capacity (roughly equivalent to that of carpet), but also the synergy their sound transparency creates with the absorbers potentially used in combination – the sound waves passing through them reflect off the slab above and are absorbed by the upper side of the absorbers, operating in partially double-sided fashion, according to the principles of object acoustics. This greatly increases their efficiency.



Accessibility and integrating additional services

Numerous services may be concealed behind the textile mesh of **Strato** ceilings without in the least diminishing their efficiency. Each panel – be it filter or absorber – may be used as a hatch, offering easy access to the plenum. These invisible access hatches fit seamlessly into the overall design of the ceiling.

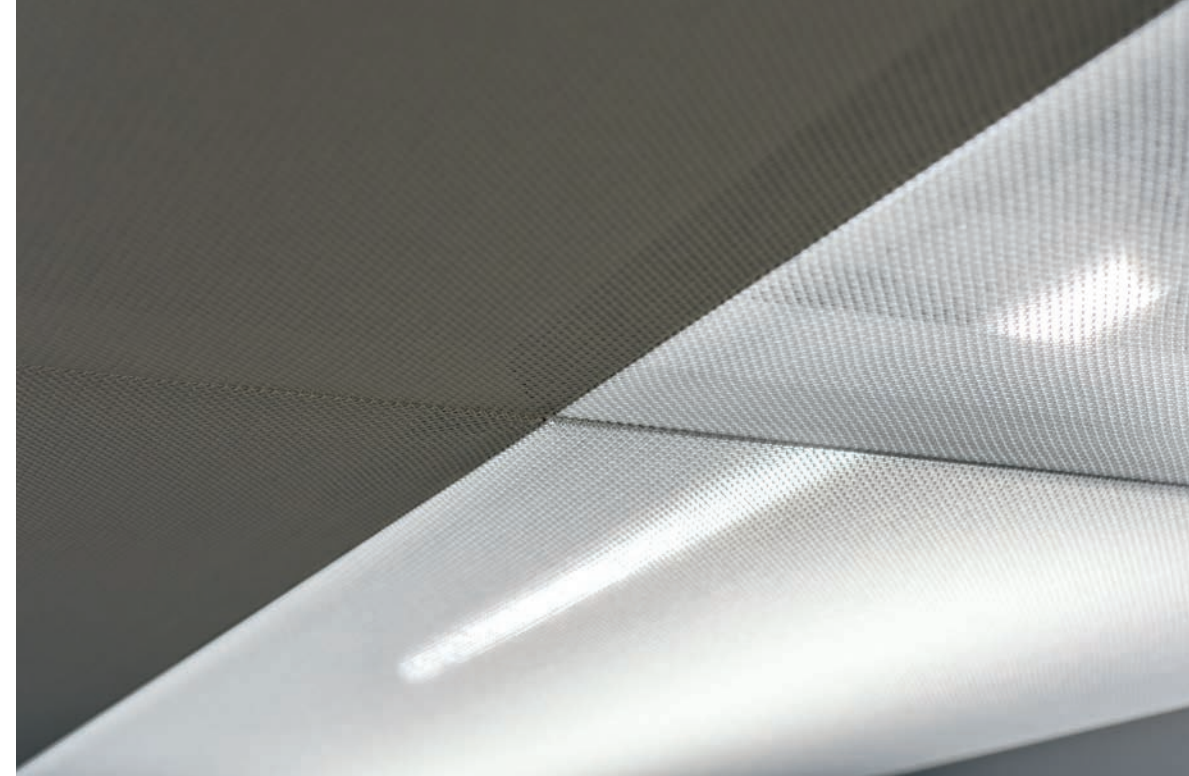
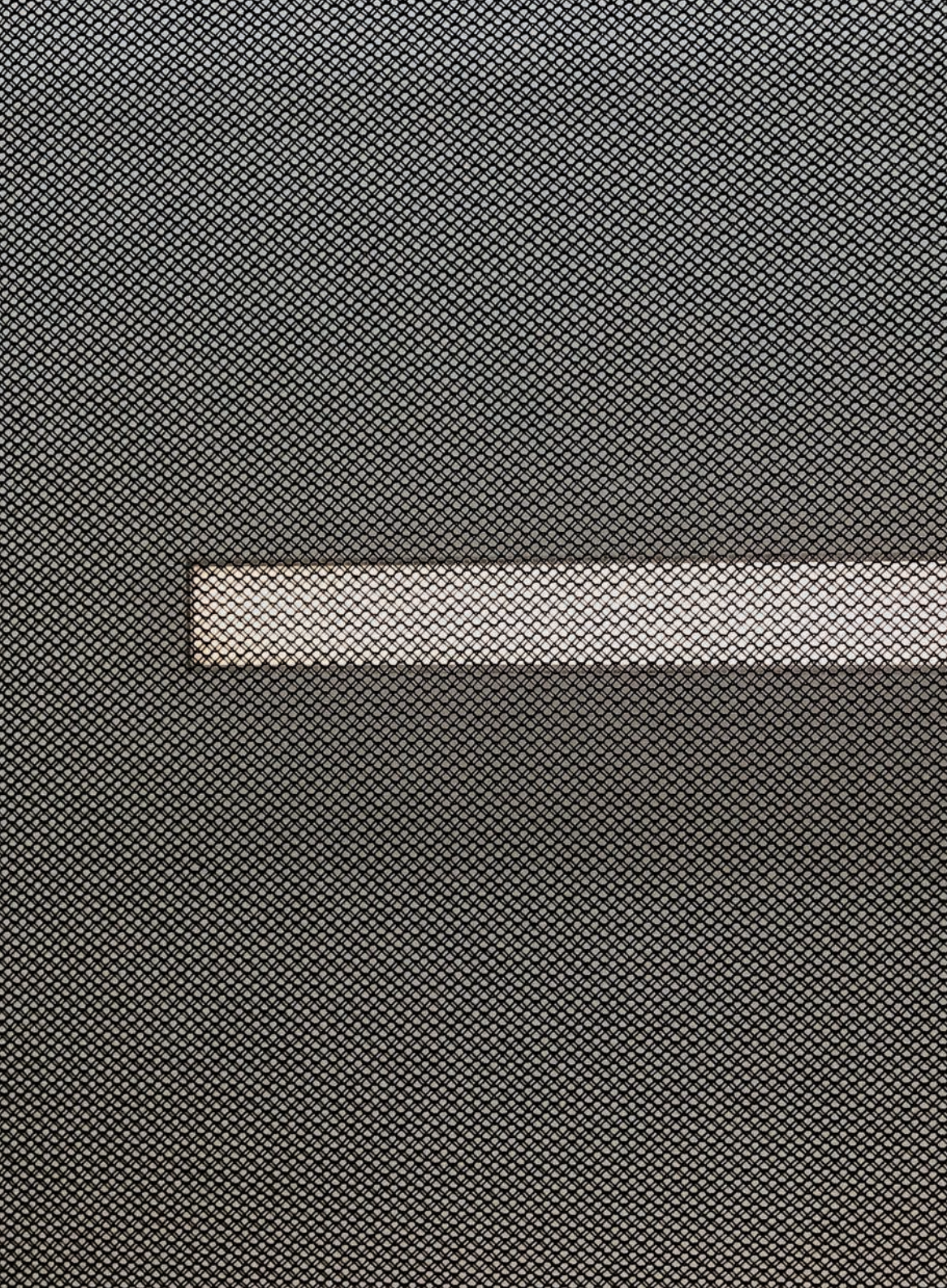




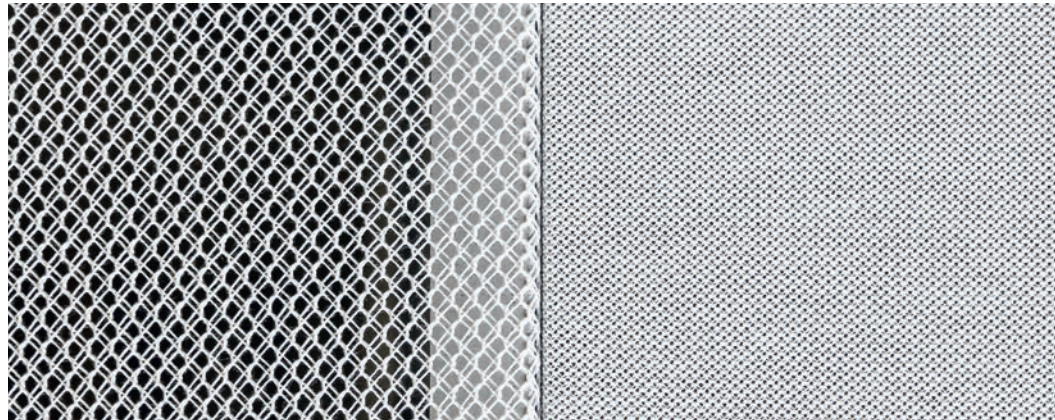
As one moves around, the open large knit fabric offers glimpses of the plenum and light sources, causing the technical installations concealed behind it to move in and out of view. The delicate, matte finish of the **Aeria** textile captures light and transforms it into a soft, hazy veil.

London, Entrance hall of an Office Building, 2017
Architect: Denton associates





The *filters* which may be included in **Strato** ceilings provide an effective means of softening light sources positioned behind them. Ordinary strip lighting becomes a far more appreciable source of light.



Nacre GMR640

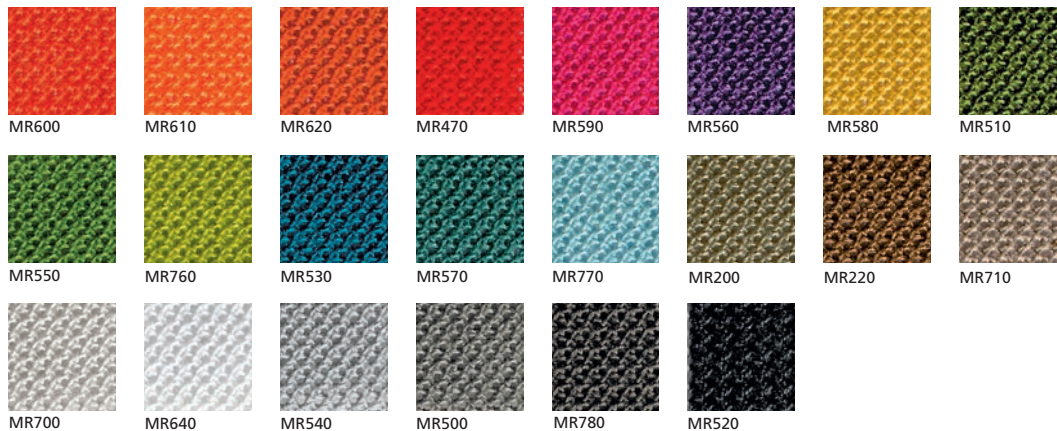
Nacre MR640



Gris brun GMR780

Gris brun MR780

Large knit **Aeria** (GMR) on a *filter* (left) and round knit **Aeria** (MR) on an *absorber* (right).
Available in standard colours 'nacre' (top) and 'gris brun' (below).



The full range of 22 colours for round knit **Aeria**, for use in *absorbers* alone.
Colour chart available on demand.

Characteristics

Strato floating ceilings are designed from two components used in combination – *filters* and *absorbers*.

The *filters* are composed of:

- an aluzinc® steel frame,
- a sound transparent fabric cover with Large Round Knit **Aeria** (GMR) on one side.

The *absorbers* are composed of:

- an aluzinc® steel frame,
- a layer of white AF1 felt,
- an inner grey or black microporous cloth cladding,
- a sound transparent fabric cover with Round Knit **Aeria** (MR) on one side.

Filters and *absorbers* are available in four sizes:

1,200 x 600 mm, 1,200 x 1,200 mm, 2,400 x 600 mm and 2,400 x 1,200 mm, 55 mm thick, and two standard colours: 'nacre' and 'gris brun'.

Optional extras

- hatches, see page 11
- choice of 22 colours for **Aeria** MR available for the *absorbers* only.

Reaction to fire classification for complete product

Europa

- Absorber panels: B-s2, d0 - Equivalent Class 0 / No flaming droplets or particles

- Filter panels: B-s1, d0 - Equivalent Class 0 / No flaming droplets or particles

USA

- Absorber and filter panels : Class A

Environmental characteristics

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)

Performance indicators for **Aeria** (MR)

Hydro / Oleo-phobic ≥ 5 (AATCC118 et AATCC193)

Antistatic properties: $710^{10} \Omega$ (EN1149-1)

Cleaning

Vacuum cleaning, machine washable cover. The water and dirt repellent coating on our **Aeria** fabric makes our products extremely durable and means that they may be easily cleaned with a vacuum cleaner as and when required.

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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