

**Texaa<sup>®</sup>**

Specification and data sheets

**Strato**

breathing ceiling

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### **Production time**

4 weeks

Options: please contact us

### **Professionals to be consulted for fitting**

General fitters and carpenters

# Strato breathing ceiling

**Texaa**® is known for its expertise in devising architectural solutions with its run-resistant fabrics. **Strato** breathing ceiling is one example.

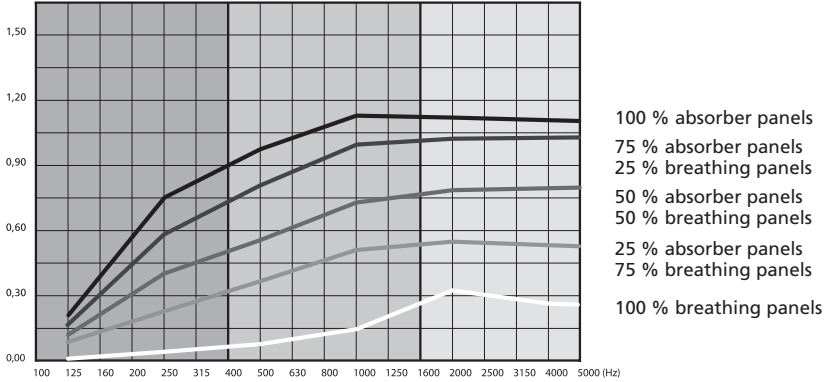
With this system architects can design ceilings in a truly architectural way with both creative freedom and technical rigour. They can combine absorber and breathing panels, juxtaposing them or separating them to achieve the specified performance and appearance.

The **Aeria** knit gives the ceiling a cosy, comfortable appeal, making it light, robust and easy to install and maintain.

# Acoustic performance

For 1,199 x 1,199 x 55 mm panels

$\alpha_{\text{Sabine}}$  – hanging in a cluster, 300 mm below the ceiling



Frequencies (Hz)	125	250	500	1,000	2,000	4,000	$\alpha_w$	Class	NRC
$\alpha_{\text{Sabine}}$ – hanging in a cluster, 300 mm below the ceiling									
100 % absorber panels	0.23	0.76	0.97	1.13	1.12	1.11	1	A	1
75 % absorber panels – 25 % breathing panels	0.17	0.59	0.80	0.95	0.98	0.98	0.85	B	0.85
50 % absorber panels – 50 % breathing panels	0.12	0.42	0.58	0.73	0.78	0.79	0.65	C	0.65
25 % absorber panels – 75 % breathing panels	0.08	0.24	0.34	0.50	0.55	0.52	0.45	D	0.40
100 % breathing panels	0.01	0.04	0.07	0.15	0.33	0.26	0.15	E	0.15

Test reports available on request – Standard NF EN 20354 / ISO 354

Inserting light fittings into the panel may affect acoustic performance.

Please contact us for further details.

# Specification

Strato breathing ceilings, made by Texaa®, consist of **absorber panels** made up of:

- an Aluzinc® steel frame, treated to improve its resistance to corrosion
- a layer of white AF1 felt
- a grey or black microporous cloth cladding
- a removable cover made of sound transparent, **round knit Aeria fabric (330 g/m<sup>2</sup>)** which provides a run-resistant, antistatic and dirt-repellent covering on five faces

and **breathing panels** made of:

- an Aluzinc® steel frame, treated to improve its resistance to corrosion
- a cover made of sound transparent, **large round knit Aeria fabric (190 g/m<sup>2</sup>)** which provides a run-resistant, antistatic and dirt-repellent covering on five faces

## Durability of the fabric cover

Performance of **Aeria fabric**:

**330 g/m<sup>2</sup> (absorber panel) / 190 g/m<sup>2</sup> (breathing panel) / Run-resistant**

Protection against soiling:

**Hydro/Oleophobic**  $\geq 5$  (AATCC118 and AATCC193)

**Electrostatic properties**  $7.10^{10} \Omega$  (EN 1149-1)

## Acoustic performance

**Absorber panel**  $\alpha_w = 1$ , NRC = 1, class A / **Breathing panel**  $\alpha_w = 0.15$ , NRC = 0.15, class E

## European reaction to fire classification

**Absorber panel** complete product B-s2, d0 / **Breathing panel** complete product B-s1, d0

## Other characteristics of the breathing panel

- Air permeability (ISO 9237): 6596 l/m<sup>2</sup>/s
- Porosity: 54%
- Light transmission, Granit colour:
  - 52% for a spotlight located between 50 and 1,600 mm from the panel
  - 55% for a light panel located between 50 and 1,600 mm from the panel
- Light transmission, Nacre colour:
  - 52% for a spotlight located between 50 and 1,600 mm from the panel
  - 86% for a light panel located 50 mm from the panel and 65% for a light panel located 1,600 mm from the panel.

## Environmental characteristics

HQE: EPD (EN 15804) – Environmental and Health Product Declarations certified by AFNOR LEED / BREEAM:

4 points for  $\left\{ \begin{array}{l} \text{acoustic contribution} \\ \text{– EPD (EN 15804) certified} \\ \text{very low VOC (Volatile Organic Compounds) and formaldehyde emissions.} \end{array} \right.$

Impact on climate change: 14.2 kg CO<sub>2</sub> eq / m<sup>2</sup> (**Absorber panel**) / 26.4 kg CO<sub>2</sub> eq / m<sup>2</sup> (**Breathing panel**)

## Cleaning

Vacuum cleaning, may be removed and refitted. Cover is removable and machine washable

## Guarantee

10 years

## Colours

**Absorber panel**: select from the 30 colours in the round knit (MR) palette, special colours available on request

**Breathing panel**: select from the 2 colours in the large round knit (GMR) palette

# Sizes

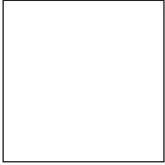
## Breathing panels



599 x 1,199 x 55 mm



599 x 2,399 x 55 mm



1,199 x 1,199 x 55 mm

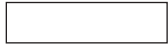


1,199 x 2,399 x 55 mm

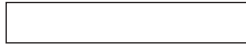
## Dimensions / weight / acoustic performance [specify]

Dimensions (mm)	Weight (kg)	Sound absorption coefficient $\alpha_w$
<input type="checkbox"/> 599 x 1,199 x 55-mm breathing panel	3.5	-
<input type="checkbox"/> 599 x 2,399 x 55-mm breathing panel	5.2	-
<input type="checkbox"/> 1,199 x 1,199 x 55-mm breathing panel	4.4	0.15
<input type="checkbox"/> 1,199 x 2,399 x 55-mm breathing panel	6.3	-

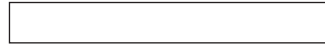
## Absorber panels



299 x 1,199 x 55 mm



299 x 1,799 x 55 mm



299 x 2,399 x 55 mm



599 x 1,199 x 55 mm



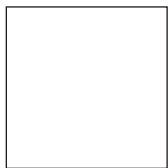
599 x 1,799 x 55 mm



599 x 2,399 x 55 mm



599 x 599 x 55 mm



1,199 x 1,199 x 55 mm



1,199 x 1,799 x 55 mm



1,199 x 2,399 x 55 mm

## Dimensions / weight / acoustic performance [specify]

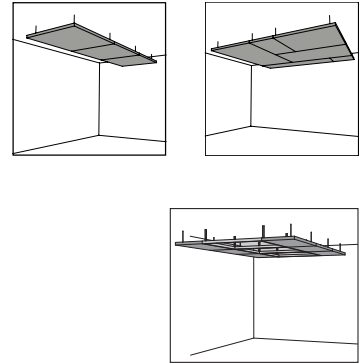
Dimensions (mm)	Weight (kg)	Sound absorption coefficient $\alpha_w$
□ 299 x 1,199 x 55-mm absorber panel	4.3	-
□ 299 x 1,799 x 55-mm absorber panel	5.9	-
□ 299 x 2,399 x 55-mm absorber panel	7.2	-
□ 599 x 599 x 55-mm absorber panel	3.9	-
□ 599 x 1,199 x 55-mm absorber panel	5.5	-
□ 599 x 1,799 x 55-mm absorber panel	7.8	-
□ 599 x 2,399 x 55-mm absorber panel	9.6	-
□ 1,199 x 1,199 x 55-mm absorber panel	8	1
□ 1,199 x 1,799 x 55-mm absorber panel	12	-
□ 1,199 x 2,399 x 55-mm absorber panel	14.4	-

# Fitting methods

## Fitting: suspended from vertical cables, joined together

Each Strato module is suspended horizontally from the ceiling by means of galvanized steel vertical cables (diameter 1.8 mm, length 1,000 mm), each equipped with a threaded end-piece (M6) and an adjustable hook. The modules are assembled using brackets.

Configuration to be specified in a drawing.



## ABSORBER PANELS OPTIONS

### Top face covered option

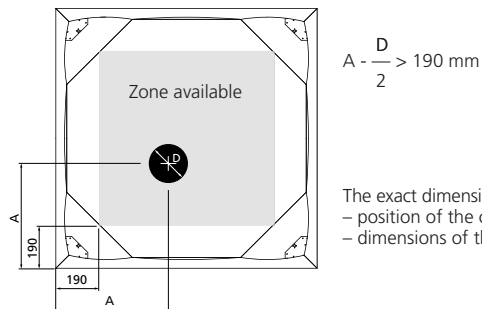
### Embroidery option

### Combination option (panels with different sizes)

Caution, the arrow and the knit direction for the covers vary as a function of the sizes and positioning of the panels.

### Optional space for integrated light fitting, loudspeaker, etc.

The space must be positioned within the grey zone, as shown below.

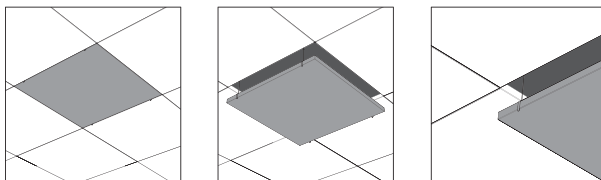


The exact dimensions of the space required should be specified when ordering:

- position of the centre of the space required
- dimensions of the space required (< 600 mm)

## COMMON OPTIONS

### Access hatch options



Closed hatch

Opened hatch

Opened hatch (detail)

### Specific sizes on request option

Width from 300 to 1,200 mm and length from 600 to 2,400 mm, please contact us for larger sizes.



# Aeria - cleaning guidelines

To protect the fresh colour of your **Aeria** fabric, we advise you to clean it regularly by:

- removing dust with a soft brush and vacuum cleaner
- using an absorbent cloth to soak up spilt liquids
- cleaning marks or stains quickly, before they have time to dry and become harder to remove

**Aeria** is treated with a water-repellent product, so any stains can usually be removed by gently dabbing. Never rub the fabric.

**If a stain proves harder to remove, please follow the instructions below:**

## **For water-based liquids (tea, coffee, soft drinks, wine, etc.)**

If the stain has penetrated the fabric, use a vacuum cleaner to remove any dust from the soiled area. Then, rehydrate the stain by dabbing the marked area with one hand using a cloth dampened with clean water, and dry the area with the other hand using a dry, clean absorbent cloth. If the stain persists, repeat the process using water and a little soap.

## **For oil-based liquids**

Dab the stain with a clean cloth dampened with undiluted solvent-based cleaning fluid. Remember to fold the cloth frequently, so that the stain is always in contact with a clean part of the cloth's surface.

## **For semi-solid stains, such as butter, ketchup, etc**

Remove any remaining solid material with a spatula and proceed with the cleaning method detailed above for oil-based liquids.

## **For dye-based stains (marker pen, biro, ink, etc.)**

Dab the stain with a clean cloth dampened with a solvent such as methanol. Remember to fold the cloth frequently, so that the stain is always in contact with a clean part of the cloth's surface.

**In order to avoid the formation of rings, clean stains and marks from the outside towards the middle, and then use a hair-dryer to speed up the drying process.**

# Technical characteristics

Definition	Strato — Absorber panels
<b>Fitting</b>	Suspended
<b>Components</b>	<b>Aeria MR*</b> / white AF1 felt / grey or black microporous cloth cladding / Aluzinc steel frame
<b>Colours</b>	30 colours
<b>Physical properties</b>	
<b>Light reflectance</b> (for Nacre (Pearly white) colour, MR 640)	81%
<b>Durability</b>	
<b>Mechanical properties</b>	
Abrasion resistance (EN 12947-, number of rubs)	> 30,000
Fraying	None
Variations in dimensions under normal conditions of temperature and humidity	None
Colour fastness ISO 105-B02 (scale from 1 to 8)	≥ 5
Electrostatic properties (EN 1149-1)	> 7.10 <sup>10</sup> Ω
Hydro/Oleophobia AATCC118 and AATCC193 (scale from 1 to 8)	≥ 5
Conditions of normal exposure	Relative humidity between 30% and 75% and temperature between 10°C and 30°C
Conditions of exceptional exposure	Relative humidity between 20% and 90% and temperature between 10°C and 30°C
Mechanical strength of the fastenings (DIN EN 12385-4)	15 kg / fixing point
<b>Health and safety</b>	
<b>Reaction to fire classification</b>	
Europe EN – for complete product – absorber panels	B-s2, d0
United States ASTM	Class A
<b>Environmental characteristics</b>	
<b>Development of micro-organisms</b>	The materials used reduce the proliferation of house dust mites and micro-organisms
<b>HQE® High Quality Environmental standard</b> (standart EN 15804)	AFNOR-certified environmental product declaration
<b>VOC and formaldehyde emissions</b> French health labelling / in accordance with German protocol AgBB	A+ / compliant
<b>Contribution to LEED/BREEAM certification</b> – certified EPD – air emissions – acoustic contribution	4 points
<b>Impact on climate change</b>	14.2 kg CO2 eq /m <sup>2</sup>
<b>Cleaning</b>	
Method	Vacuum clean every one to five years, depending on conditions of use** Cover is removable and machine-washable at 30°C, dry flat

\* Texaa®s internationally patented Aeria sound-transparent fabric / \*\* refer to the cleaning and maintenance sheets

Definition	Strato — Breathing panels
<b>Fitting</b>	Suspended
<b>Components</b>	<b>Aeria GMR*</b> / Aluzinc steel frame
<b>Colours</b>	2 colours
<b>Physical properties</b>	
Air permeability (ISO 9237)	6596 l/m <sup>2</sup> /s
Impact on air conditioning (in-house assessment protocol, report available on request)	Flow rate loss: 50% approx. Key factors: ventilator positioned perpendicular to the GMR fabric at a distance between 100 to 250 mm
Porosity (in-house assessment protocol, report available on request)	54 %
Light transmission, Granit colour (in-house assessment protocol, report available on request)	52% for a spotlight located between 50 and 1,600 mm from the panel 55% for a light panel located between 50 and 1,600 mm from the panel
Light transmission, Nacre colour:	52% for a spotlight located between 50 and 1,600 mm from the panel 86% for a light panel located 50 mm from the panel and 65% for a light panel located 1,600 mm from the panel.
Light sources and heat limits	On-going temperature around the Aeria GMR fabric: < 30°C Minimum distances between light sources and fabric: LED 50 mm; neon 100 mm; 75-watt halogen 200 mm
<b>Durability</b>	
<b>Mechanical properties</b>	
Abrasion resistance (EN 12947-, number of rubs)	> 20,000
Fraying	None
Variations in dimensions under normal conditions of temperature and humidity	None
Colour fastness ISO 105-B02 (scale from 1 to 8)	≥ 5
Electrostatic properties (EN 1149-1)	> 7.10 <sup>10</sup> Ω
Hydro/Oleophobia AATCC118 and AATCC193 (scale from 1 to 8)	≥ 5
Conditions of normal exposure	Relative humidity between 30% and 75% and temperature between 10°C and 30°C
Conditions of exceptional exposure	Relative humidity between 20% and 90% and temperature between 10°C and 30°C
Mechanical strength of the fastenings (DIN EN 12385-4)	15 kg / fixing point
<b>Health and safety</b>	
<b>Reaction to fire classification</b>	
Europe EN – for complete product – absorber panels	B-s1, d0
United States ASTM	Class A
<b>Environmental characteristics</b>	
<b>Development of micro-organisms</b>	The materials used reduce the proliferation of house dust mites and micro-organisms
<b>HQE® High Quality Environmental standard</b> (standart EN 15804)	AFNOR-certified environmental product declaration
<b>VOC and formaldehyde emissions</b> French health labelling / in accordance with German protocol AgBB	A+ / compliant
<b>Contribution to LEED/BREEAM certification</b> – certified EPD – air emissions – acoustic contribution	4 points
<b>Impact on climate change</b>	26.4 kg CO <sub>2</sub> eq /m <sup>2</sup>
<b>Cleaning</b>	
Method	Vacuum clean every one to five years, depending on conditions of use**

\* Texaa®s internationally patented Aeria sound-transparent fabric / \*\* refer to the cleaning and maintenance sheets

**Texaa®** is a privately owned company with a staff of fifty-five. Informed by continuous contact with designers and professionals in the building industry, we conceive, manufacture and distribute solutions to enhance the acoustic comfort of the spaces in which people live and work. **Texaa®** products are technically sophisticated, sensitive and hard-wearing. Their hallmark is the textile in which they are clad: **Aeria\*** is knitted in our workshop near Bordeaux in a palette of 30 colours. Since 1978, it has been our pride and delight to play our part in developing quality architecture in France, Europe, the US and beyond.

\* our sound-transparent textile with an exclusive **Texaa®** patent

## Updates at [www.texaa.co.uk](http://www.texaa.co.uk)

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textile, acoustics, architecture

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