

Specification and data sheets

# **Strato**breathing ceiling

<b>Strato</b> breathing ceiling	p. 3
Acoustic performance	p. 4
Specification	p. 5
Sizes	p. 6
Fitting methods	p. 7
Aeria - cleaning guidelines	p. 8
Technical characteristics	p. 9

### **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.

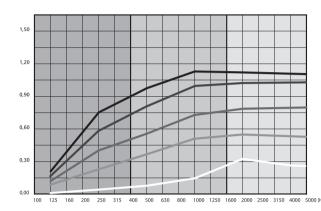
With this system architects can design ceilings in a truly architectural way with both creative freedom and technical rigour. They can combine absorber and breathing panels, juxtaposing them or separating them to achieve the specified performance and appearance.

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



100 % absorber panels

75 % absorber panels

25 % breathing panels

50 % absorber panels

50 % breathing panels

25 % absorber panels

75 % breathing panels
100 % breathing panels

Frequencies (Hz) 125 250 500 1,000 2,000 4,000

Frequencies (Hz)	125	250	500	1,000	2,000	4,000			
$\alpha_{\text{Sabine}}$ – hanging in a cluster, 300 mm below the ceiling							$\alpha_{_{\!\scriptscriptstyle W}}$	Class	NRC
100 % absorber panels	0.23	0.76	0.97	1.13	1.12	1.11	1	Α	1
75 % absorber panels – 25 % breathing panels	0.17	0.59	0.80	0.95	0.98	0.98	0.85	В	0.85
50 % absorber panels – 50 % breathing panels	0.12	0.42	0.58	0.73	0.78	0.79	0.65	С	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/m²)
   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/m²)
     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** ≥ 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/m²/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

acoustic contribution
– EPD (EN 15804) certified

very low VOC (Volatile Organic Compounds) and formaldehyde emissions.

#### Cleaning

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

#### Guarantee

10 years

#### Colours

**Aborber 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 $\alpha_{_{\!\scriptscriptstyle W}}$
☐ 599 x 1,199 x 55-mm breathing panel	3.5	-
☐ 599 x 2,399 x 55-mm breathing panel	5.2	-
☐ 1,199 x 1,199 x 55-mm breathing panel	4.4	0.15
☐ 1 199 v 2 399 v 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 $\boldsymbol{\alpha}_{\!_{\boldsymbol{w}}}$
☐ 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

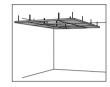
### □ Fitting: suspended from vertical cables, joined together

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.









#### **ABSORBER PANELS OPTIONS**

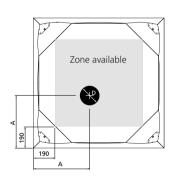
- □ Top face covered option
- □ Embroidery option

#### ☐ 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.



$$A - \frac{D}{2} > 190 \text{ mm}$$

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)</li>

### **COMMON OPTIONS**

### ☐ Access hatch options







Closed hatch Opened hatch

Opened hatch (detail)

#### $\hfill\Box$ 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
Fitting	Suspended
Components	Aeria MR* / white AF1 felt / grey or black microporous cloth cladding / Aluzinc steel frame
Colours	30 colours
Physical properties	
Light reflectance (for Nacre (Pearly white) colour, MR 640)	81%
Durability	
Mechanical properties	
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
Health and safety	
Reaction to fire classification	
Europe EN – for complete product – absorber panels	B-s2, d0
United States ASTM	Class A
Environmental characteristics	
Development of micro-organisms	The materials used reduce the proliferation of house dust mites and micro-organisms
HQE® High Quality Environmental standard (standart EN 15804)	AFNOR-certified environmental product declaration
VOC and formaldehyde emissions French health labelling / in accordance with German protocol AgBB	A+ / compliant
Contribution to LEED/BREEAM certification – certified EPD – air emissions – acoustic contribution	4 points
Cleaning	
Method	Vacuum clean every one to five years, depending on conditions of use**
	Cover is removable and machine-washable at 30°C, dry flat

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

Definition	Strato — Breathing panels
Fitting	Suspended
Components	Aeria GMR* / Aluzinc steel frame
Colours	2 colours
Physical properties	
Air permeability (ISO 9237)	6596 l/m²/s
Impact on air conditioning	Flow rate loss: 50% approx.
(in-house assessment protocol, report available on request)	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	52% for a spotlight located between 50 and 1,600 mm from the panel
(in-house assessment protocol, report available on request)	55% for a light panel located between 50 and 1,600 mm from the panel
	52% for a spotlight located between 50 and 1,600 mm from the panel
Light transmission, Nacre colour:	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
Light sources and heat limits	Minimum distances between light sources and fabric: LED 50 mm; neon 100 mm; 75-watt halogen 200 mm
Durability	
Mechanical properties	
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
Health and safety	
Reaction to fire classification	
Europe EN – for complete product – absorber panels	B-s1, d0
United States ASTM	Class A
Environmental characteristics	
Development of micro-organisms	The materials used reduce the proliferation of house dust mites and micro-organisms
<b>HQE®</b> High Quality Environmental standard (standart EN 15804)	AFNOR-certified environmental product declaration
VOC and formaldehyde emissions French health labelling / in accordance with German protocol AgBB	A+ / compliant
Contribution to LEED/BREEAM certification  - certified EPD  - air emissions  - acoustic contribution	4 points
Cleaning	
Method	Vacuum clean every one to five years, depending on conditions of use**
	- Conditions of use

<sup>\*</sup> Texaa $^{\circ}$ '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

\_ \_ \_

Texaa® textile, acoustics, architecture

### **United Kingdom**

Lincoln House, 4th Floor 300 High Holborn London WC1V 7JH

- - -

020 7092 3435 contact@texaa.co.uk www.texaa.co.uk

### **USA**

2825 East Cottonwood Parkway Suite 500 Salt Lake City, UT 84121

- - -

(801) 783-1231 contact@texaa.com www.texaa.com /ersion STO2006EN — Any new version cancels and replaces this document — 06/2020  $^{\odot}$  Texaa $^{\circ}$