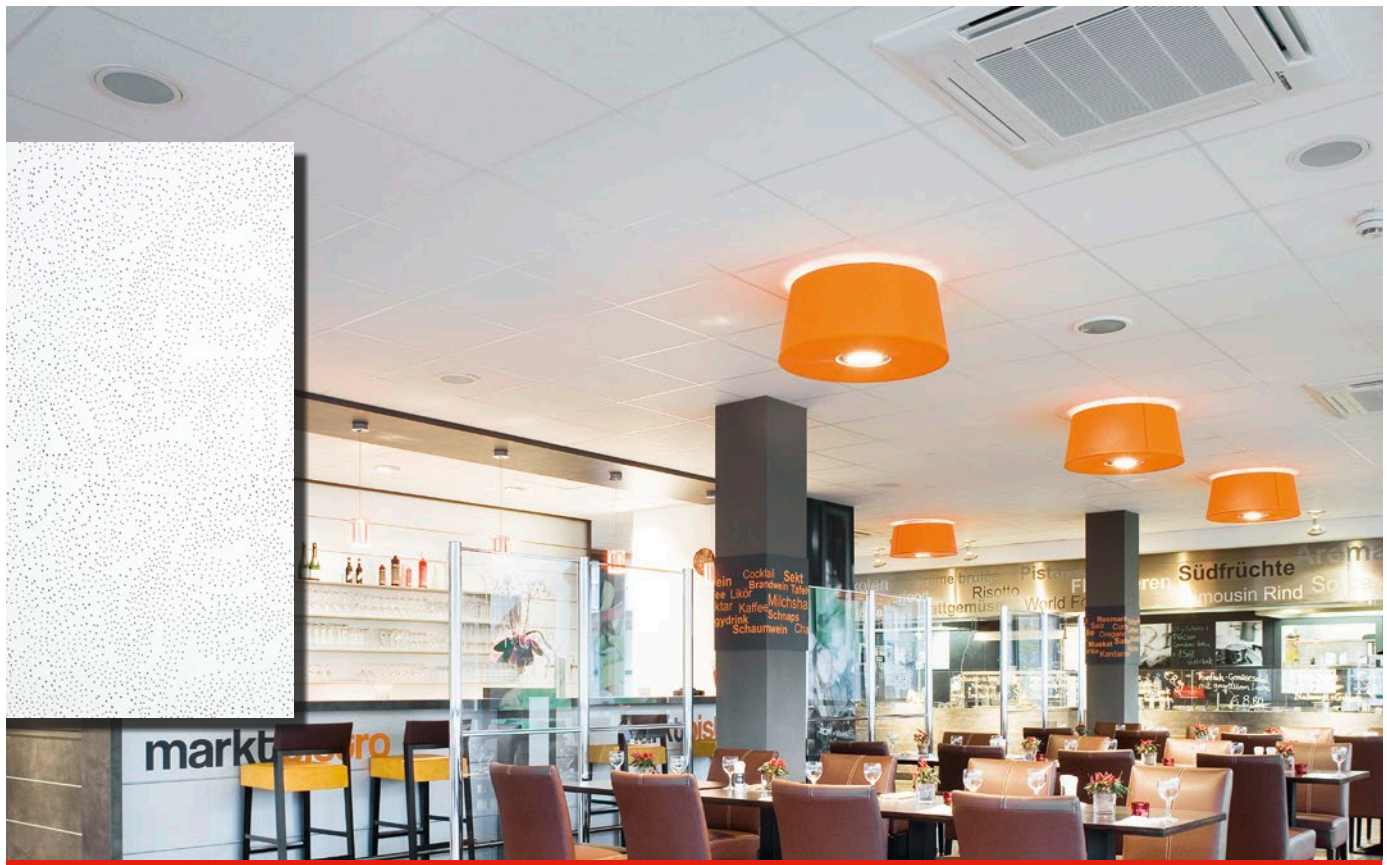
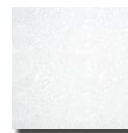


# Constellation



<b>Material</b>	Mineral tile ASTM Type III, Form 2, Pattern CE
<b>Fire hazard properties</b>	Group 1, conforms with NCC Spec C1.10 Clause 4 (tested to AS 5637.1:2015) Group 1-S, conforms with NZBC verification method C/VM2 Appendix A (tested to ISO 9705:2003)
<b>Thermal resistance</b>	0.25 m <sup>2</sup> K/W (R-Value) 14 mm thickness 0.27 m <sup>2</sup> K/W (R-Value) 15 mm thickness
<b>Light reflection</b>	approx. 88 (ISO 7724-2, ISO 7724-3)
<b>Sound absorption</b>	up to NRC = 0.80
<b>Sound reduction*</b>	up to CAC = 33 dB
<b>Humidity resistance</b>	up to 99 % RH
<b>Release of formaldehyde</b>	OWAcoustic < 5 µg/m <sup>3</sup> (ISO 16000)
<b>LEED EQ credit „Low-emitting products“</b>	TVOC limit acc. to CDPH < 50 µg/m <sup>3</sup>

## Versions:



Constellation.....	2
Constellation smart.....	2

\* Dependent on dimension, design, system, soffit and other project specific factors  
Detailed product features can be found on the following pages.



Item no.	Dimensions (nom.) [mm]	PU	NRC	Absorption class	CAC	Humidity resistance	Cleanroom class	Washability ASTM D4828	Scrubability ASTM D2486	Mold and mildew ASTM D3273	Weight approx. [kg/m <sup>2</sup> ]	Recyclability	Recycled content	Warranty (years)
----------	------------------------	----	-----	------------------	-----	---------------------	-----------------	---------------------------	----------------------------	-------------------------------	-------------------------------------	---------------	------------------	------------------

## OWAconstellation® premium Constellation

Edge														
00087476	1200 x 600 x 15		10	0.80	C	33 dB	99 % RH	-	✓	✓	✓	4.0	100 %	✓ 10
Edge														
on request	1200 x 600 x 15		10	0.80	C	33 dB	99 % RH	-	✓	✓	✓	4.0	100 %	✓ 10
Edge														
on request	1200 x 600 x 15		10	0.80	C	33 dB	99 % RH	-	✓	✓	✓	4.0	100 %	✓ 10
Long Edge														
Short Edge														
on request	1500 x 500 x 20		10	0.80	C	33 dB	99 % RH	-	✓	✓	✓	4.0	100 %	✓ 10
on request	1500 x 300 x 20		10	0.80	C	33 dB	99 % RH	-	✓	✓	✓	4.0	100 %	✓ 10
on request	1200 x 300 x 20		10	0.80	C	33 dB	99 % RH	-	✓	✓	✓	4.0	100 %	✓ 10



## OWAconstellation® smart Constellation smart

Edge														
00043931	1200 x 600 x 14		10	0.60	C	31 dB	90 % RH	-	✓	✓	✓	3.9	100 %	✓ 10



## General guidance

---

Our mineral tiles are manufactured in Germany according to the highest production standards and are subject to constant quality controls. This guarantees constant high quality of the materiality and performances of our products, which are tailored to the specific needs of the application area. The following section shows a general guidance of the main features of our products.

---

### Dimensions (nom.)

The dimensions (length x width x thickness) refers to the grid dimension of the ceiling system. Depending on the version the manufacturing dimensions can differ.

### VPE

Packaging unit (pieces/packet)

### Fire hazard properties of internal ceiling linings

Any actions, materials, or conditions that might increase the size or severity of a fire or that might cause a fire to start are called fire hazards. Fire properties of building products are regulated to minimize rapid fire spread and smoke growth in buildings and ensure safe and timely evacuation of occupants. OWA acoustic mineral tiles are in Group 1, conforms with NCC Spec C1.10 Clause 4 (tested to AS 5637.1:2015)

### Thermal Resistance

The R-value (thermal insulation factor) measures the **thermal resistance of a material**. This can also be expressed as the temperature difference that will cause one unit of heat to pass through one unit of area over a period of time. The thermal insulation factor R has the units [m<sup>2</sup>K/W]

### NRC (Noise Reduction Coefficient)

Specifies the absorption properties – viz. the degree of sound reflection – of materials in a closed space according to **american** standard ASTM E 1264.

### Absorption class

Absorption classes according to EN ISO 11654 appendix B:

**A** ( $\alpha_w = 0.90; 0.95; 1.00$ ) | **B** ( $\alpha_w = 0.80; 0.85$ ) | **C** ( $\alpha_w = 0.60; 0.65; 0.70; 0.75$ ) | **D** ( $\alpha_w = 0.30; 0.35; 0.40; 0.45; 0.50; 0.55$ ) | **E** ( $\alpha_w = 0.15; 0.20; 0.25$ )

**not classified** ( $\alpha_w = 0.00; 0.05; 0.10$ )

### CAC (Ceiling Attenuation Class)

Specifies the sound insulation properties – viz. the room to room sound transmission through the common cavity – of a ceiling system according to the american standard ASTM E 1414.

### Humidity resistance

OWA acoustic ceiling tiles are tested and classified according to EN 13964:2014 with regard to their bending tensile strength in accordance with the stress classes in table 8. The mineral tiles can temporary be subjected to the stated values without sagging. For permanent moisture load use special tiles (Mavroc®).

### Cleanroom class

Many of our ceilings meet six of the nine classes that are defined via the maximum limits specified in EN ISO 14644-1 (ISO classes 4 – 9). This means that these ceiling systems are qualified for many clean room areas and even the highest risk areas in the healthcare sector.

### Washability

Washability tested according to ASTM D4828.

### Scrubbability

Scrubbability tested according to ASTM D2486.

### Mold and mildew

Mold and mildew resistance tested according to ASTM D 3273.

### Weight approx. (kg/m<sup>2</sup>)

Subject to fluctuations of raw materials and production processes.

### Recyclability

All tiles produced from 1999 are 100 % recyclable in the course of the OWA green circle.

### Recycled content

Our products have an up to 50 % recycled content (depending upon type).

### Warranty (years)

OWA grants a warranty of 10 years against visible sag. Please have a look at our guaranty bond.

---

### Legal notice

The printing-related colour and quality variations in this catalogue may result in deviations to the original product. A binding product selection should therefore always be made based on an original sample. All details and technical information in these brochures or other publications that relate to OWA ceiling systems are based on test results that were achieved under laboratory conditions. It is the customer's responsibility to ensure that this information is appropriate for their specific application. All system-related data and statements correspond to the current state of technology. They assume the exclusive application of OWA products and their interdependent behaviour which is confirmed by internal and external testing. If they are used in combination with non-OWA products, any warranties or guarantees are invalidated and liability will not be accepted. Subject to technical changes for the purpose of product or system updates. Subject to technical changes without prior announcement. Our general sales, delivery and payment terms and conditions apply. Prices are subject to change without notice.

Subject to mistakes and printing errors.

---

## Sustainability

---



OWA green circle

## OWA ceiling systems contribute to certification according to

---

- **LEED** (Leadership of Energy and Environmental Design)
- **DGNB** (Deutsche Gesellschaft Nachhaltiges Bauen / German Sustainable Building Council)
- **BREEAM** (Building Research Establishment Environmental Assessment Methodology)
- The **WELL** Building Standard
- **Green Star** (Green Building Council of Australia)



Certified Management Systems



**Odenwald Faserplattenwerk GmbH**  
Dr.-F.-A.-Freundt-Straße 3 | 63916 Amorbach  
tel +49 9373 201-0 | [info@owa.de](mailto:info@owa.de)  
[www.owa.de](http://www.owa.de) | [www.owaceilings.com.au](http://www.owaceilings.com.au)

**OWA Australia**  
Suite 12, Wotso Level 1  
5 Blake Street Kogarah,  
NSW 2217