



OWAcoustic® AirControl reduces air pollutants by more than 50 percent

The more pleasant the atmosphere of a hospital or care home, the more relaxed is the therapy, the higher the feel-good factor, the quicker the recovery. A decisive factor: fresh, clean air in all rooms. No disagreeable odours, no harmful substances.

OWA innovation: OWAcoustic® AirControl, the ceiling tile which reduces sustainably unpleasant odours of food, cigarette smoke, perspiration, cleaning supplies or solvents, thereunder ammonia, formaldehyde, triethylamine and nicotine, by up to 50 %.

The result: more fresh air in hotels, restaurants, canteens, clinics, care homes; noticeably greater well-being for guests, patients and residents.



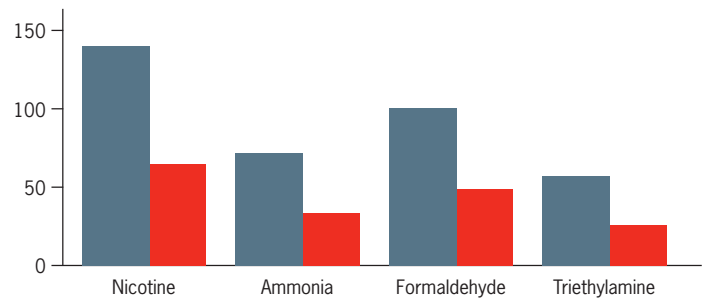
Certified and safe

This effect is certified. Practical examination by the Danish institute Eurofins confirmed:



In a 14-day testing programme, in which the tiles were continuously exposed to the selected representative substances nicotine, ammonia, formaldehyde and triethylamine, OWAcoustic® AirControl lowered the respective concentrations by more than half. OWAcoustic® AirControl can therefore double the purity of air quality.

■ Pollutant concentration without active ceiling
■ Pollutant concentration with OWAcoustic® AirControl ceiling tile



Technical Data

Material	Mineral wool tiles
Building material class	A2-s1,d0 to EN 13501-1
Thickness	approx. 15 mm
Colour	white
Light reflection	approx. 91 (ISO 7724-2, ISO 7724-3) (Plain)
Sound reduction*	from 31 dB up to 49 dB (dependent on surface pattern)
Sound absorption	$\alpha_w = 0.70$ / NRC = 0.70 (Constellation) see next page for patterns
Moisture resistance	up to 95 % RH
Fire protection*	up to F 90 (DIN 4102) up to REI 90 (EN 13501-2)

* Dependent on system, soffit and other factors



Plain 9

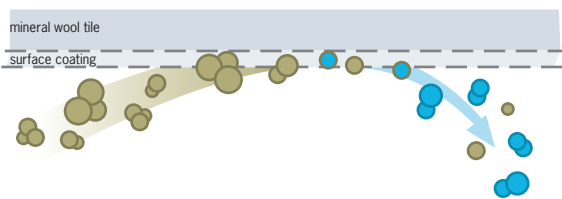
Constellation 3

Sandila 70/O

Sandila 70/N

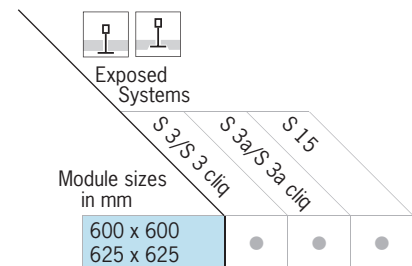
Built-in catalyser

OWAcoustic® AirControl works on a proven principle. The surface of the mineral wool tile contains a catalyst. This converts more than 50 % of olfactory harmful and odorous substances contained in the area air into hygienically harmless materials. The catalytic process works permanently and doesn't degrade over time. Against other air cleaning products the effect is independent of daylight or other sources of light. OWAcoustic® AirControl produces fresh air even over night.



- Adsorption of the pollutant molecules in the area air by the surface of the OWAcoustic® AirControl ceiling tiles
- Catalytic reduction of the pollutants to hygienically and completely harmless final products
- After the chemical reaction the catalyst goes back to its original condition. So it isn't exhausted.

Systems



More than fresh air: a ceiling system

OWAcoustic® premium ceiling systems are multi-functional. They can reduce sound and improve area acoustics, are resistant to moisture and increase the levels of fire protection. OWAcoustic® AirControl is available in surface designs Sandila, Plain and Constellation (square formats) and are compatible with OWAcoustic® suspension systems S 3, S 15 and S 3a.

OWAcoustic® sanitas 02

Where sterile conditions against fungi and bacteria are essential:

Specially developed ceiling tiles for use in hygienically sensitive areas: OWAcoustic® sanitas® 02 reliably protects against bacteria and fungi - also adverse influences from within the ceiling cavity.

Use areas:

- Hospitals (Operating theatres, intensive care units, hospital wards)
- Laboratories
- Sterile and hygiene areas

Cleaning/washability:

The ceiling surface can be vacuum cleaned or wiped with a damp OWA sponge. Even with repeated cleaning processes the sanitized surface remains constant – as proved through 500 contact wash cycles in the “Gardner-Test”.

Disinfection:

Hygiene certificate in accordance with guide lines of the German society for Hygiene and Microbiology (DGHM) is available.

**Professor Dr. R. Mutters**

Institute for medical microbiology and Hospital Hygiene - Philipps University, Marburg



Favourable comments on the behaviour of OWAcoustic® sanitas 02 ceiling tiles to microbial contamination.



Emissionen: OWA mineral wool tiles are low-emission building materials. The environmental label „Blue Angel” confirms that they are made of harmless raw material (certified by RAL gGmbH, Sankt Augustin).



For further information see Brochure No. 898

Technical Data

Material	Mineral wool tiles
Building material class	A2-s1,d0 to EN 13501-1
Thickness	15 mm nom.
Colour	white
Light reflection	approx. 91 (ISO 7724-2, ISO 7724-3) (surface Plain)
Sound reduction*	from 35 dB up to 49 dB (surface Plain) from 31 dB up to 49 dB (surface Constellation)
Sound absorption	$\alpha_w = 0.15$ / NRC = 0.15 (Plain) $\alpha_w = 0.70$ / NRC = 0.70 (Constellation)
Moisture resistance	up to 95 % RH
Fire protection*	up to F 120 (DIN 4102) up to REI 120 (EN 13501-2)

* Dependent on system, soffit and other factors



**Plain 9
sanitas® 02**

$\alpha_w = 0.15$ / NRC = 0.15

**Constellation 3
sanitas® 02**

$\alpha_w = 0.70$ / NRC = 0.70

Systems

Module sizes in mm	Exposed Systems	
	S 3	S 3a
600 x 600	•	•
625 x 625	•	•
1200 x 600	•	•
1250 x 625	•	•

Hygienic ceilings
OWAcoustic® pura

Where simple and thorough disinfection is required



OWAcoustic® pura tiles have been designed to take the rigour of being disinfected and provides a high level of resistance to cleaning regimes (subjected to 500 contact wash cycles in the "Gardner-Test".

Areas of use:

- Hospitals (Hospital wards, corridors, and storage areas)
- Schools
- Fitness studios
- Nursing homes
- Nursery schools

Cleaning/washability:

Tiles can be vacuum cleaned or wiped with a damp OWA cleaning sponge (see Installation Instructions 801).

Disinfection:

Hygiene certificate in accordance with guide lines of the German society for Hygiene and Microbiology (DGHM) is available.



Professor Dr. R. Mutters
 Institute for medical microbiology and Hospital Hygiene - Philipps University, Marburg








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For further information see Brochure No. 898

Technical Data

Material	Mineral wool tiles 
Building material class	A2-s1,d0 to EN 13501-1
Thickness	15 mm nom.
Colour	white
Light reflection	approx. 91 (ISO 7724-2, ISO 7724-3) (surface Plain)
Sound reduction*	from 35 dB up to 49 dB (surface Plain) from 31 dB up to 49 dB (surface Constellation)
Sound absorption	 $\alpha_w = 0.15$ / NRC = 0.15 (Plain)  $\alpha_w = 0.70$ / NRC = 0.70 (Constellation)
Moisture resistance	 up to 95 % RH
Fire protection*	 up to F 120 (DIN 4102) up to REI 120 (EN 13501-2)

* Dependent on system, soffit and other factors



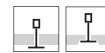
**Plain 9
pura**

$\alpha_w = 0.15 / \text{NRC} = 0.15$

**Constellation 3
pura**

$\alpha_w = 0.70 / \text{NRC} = 0.70$

Systems



Exposed
Systems

Module sizes
in mm

	S 3/S 3 cliq	S 3a/S 3a cliq
600 x 600		
625 x 625	•	•
600 x 1200		
625 x 1250	•	•

Where very smooth surfaces are required:



OWAlux® ceiling tiles achieve the highest standards of cleanliness and hygiene. The smooth aluminium foil surface makes it difficult to harbour dirt, mould or bacteria. The tiles are durable and can be easily cleaned and/or disinfected.

Areas of use:

- Hospitals
- Food handling / Meat preparation
- Laboratories
- Sterile and Hygiene areas
- Moisture areas

Cleaning:

Cleaning of the ceilings differs according to the installation method. All OWAlux® surfaces can be vacuum cleaned or wiped with a damp OWA-sponge.

High pressure cleaning:

The OWAlux® surfaces 64/4 and 64/8 can be cleaned with a high pressure washer. The maximum water temperature should not exceed 38 °C, with a maximum nozzle pressure of 40 bar. The water jet spray should be directed at an angle of 30° at a minimum distance of 40 cm from the surface. For this type of cleaning it is necessary that the tiles be sealed into the suspension grid with silicone sealant. Installation in accordance to system S 3.

With contamination, as well as being open to the effects of aggressive mediums (soaps, acidity, fats etc.), it is vital to achieve optimum surface cleanliness. This can be achieved with OWAlux® surfaces.



Temperature resistance:

Up to 50 °C in the area of the ceiling tile.





Disinfection:

The Dr. Weßling Laboratories in Altenberge have confirmed the effectiveness of surface disinfection.

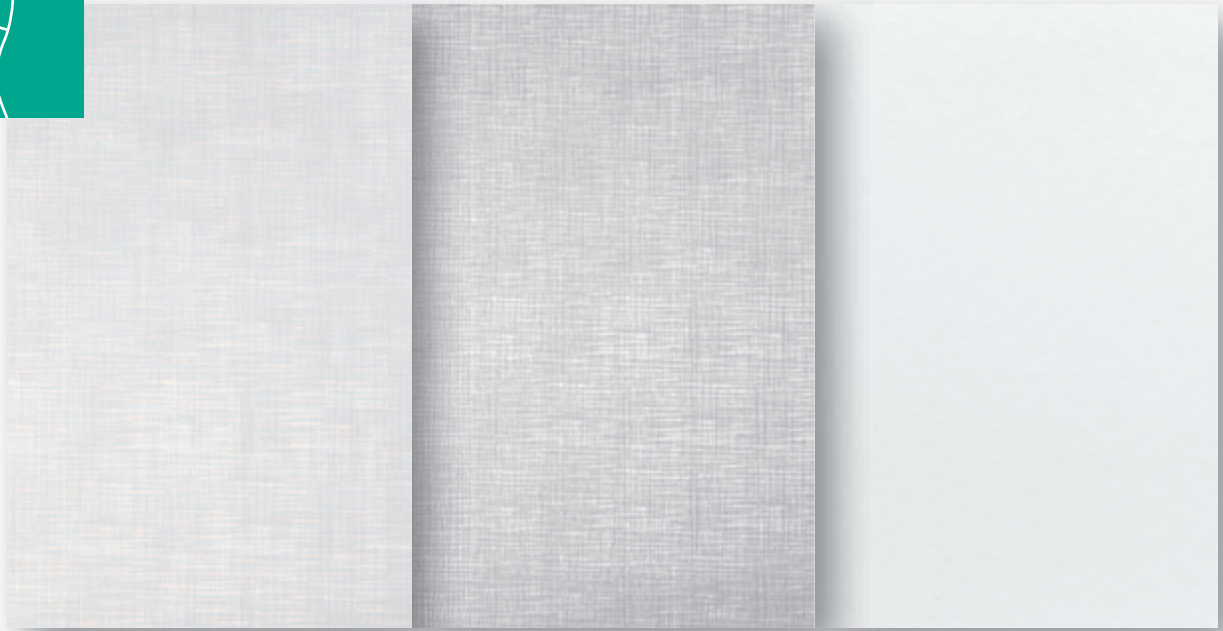


For further information see Brochure No. 898

Technical Data

Material	Mineral wool tiles 
Building material class	A2-s1,d0 and A2-s3,d0 to EN 13501-1
Thickness	15 mm nom.
Colour	grey white, silver, white
Light reflection	on request
Sound reduction*	from 35 dB up to 49 dB
Sound absorption	 $\alpha_w = 0.15$ / NRC = 0.15
Moisture resistance	 up to 95 % RH
Fire protection*	 up to F 120 (DIN 4102) up to REI 120 (EN 13501-2)

* Dependent on system, soffit and other factors




OWAlux® grey white
64/2

OWAlux® silver
64/4

OWAlux® white,
A2-s3,d0 to EN 13501-1
64/8

Systems



Exposed Systems

Module sizes in mm	S ₃	S _{15*}
	600 x 600 625 x 625	•
1200 x 600 1250 x 625	•	•

* conditionally usable



In clean areas there are special requirements for air purity. With OWAcoustic® clean ceiling tiles we comply with the maximum limits of US-Standards in five out of the six classes, from class 10 to 1000,000. This qualifies and confirms the suitability for use in many types of clean rooms.

OWAcoustic® clean mineral wool ceiling tiles are faced with high-quality aluminium foils. They have very smooth and easy to clean surfaces which do not harbour air-borne dust particles. Universal 65/1 tiles also fulfil these functions and additionally offer good sound absorption through simple surface perforations.

Areas of use:









- Precision mechanical engineering industry
- optical industry
- electronic high-tech manufacturing areas

Cleaning:

All OWAcoustic® clean surfaces can be vacuumed or wiped with an OWA sponge (see Installation Instructions 801).



Technical Data

Material	Mineral wool tiles
	    
Building material class	A2-s1,d0 and A2-s3,d0 to EN 13501-1
Thickness	15 mm nom.
Colour	white, silver, grey white
Light reflection	on request
Sound reduction*	from 35 dB up to 49 dB (dependent on surface pattern)
Sound absorption	 $\alpha_w = 0.50$ / NRC = 0.55 (Universal) see next page for patterns
Moisture resistance	 up to 95 % RH
Fire protection*	 up to F 120 (DIN 4102) up to REI 120 (EN 13501-2)

* Dependent on system, soffit and other factors



OWAcoustic® clean

grey white 64/12
 $\alpha_w = 0.15 / \text{NRC} = 0.15$

OWAcoustic® clean

silver 64/14
 $\alpha_w = 0.15 / \text{NRC} = 0.15$

OWAcoustic® clean

white 64/18
 A2-s3,d0 to EN 13501-1
 $\alpha_w = 0.15 / \text{NRC} = 0.15$

OWAcoustic® clean

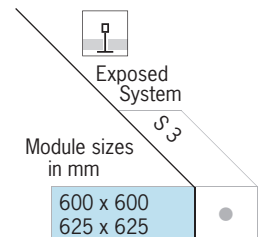
Universal 65/1
 $\alpha_w = 0.50 / \text{NRC} = 0.55$

Testing passed: Clean room approved

To prove the clean room efficiency, the Fraunhofer IPA in Stuttgart carried out prolonged testing in accordance with the clean room classification class 4 (to ISO 14644-1). Class 10 corresponds to the US-Federal Standard 209E. D, which allows a maximum of 10 particles of the reference size $\geq 0.5 \mu\text{m}$ in an air volume of one cubic foot.



System



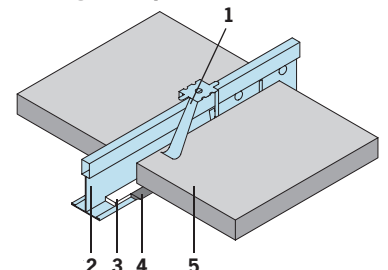
All the OWAclean® clean ceilings qualified to "Class 10." This result was also attained by an OWAtecta® Metal ceiling (system S 31) un-perforated surface (L0).

For more detailed information see OWA Brochure No. 895.

OWAcoustic®-clean tiles	Material class	Edge details	Sealing method*
grey white 64/12 silver 64/14	A2-s1,d0 EN 13501-1	square edges painted	9 mm closed cell polyurethane compression foam sealing strip, one side self adhesive. Injected acrylic sealant.
white 64/18	A2-s3,d0 EN 13501-1	square edges painted	9 mm closed cell polyurethane compression foam sealing strip, one side self adhesive. Injected acrylic sealant.
Universal 65/1	A2-s1,d0 EN 13501-1	square edges painted	9 mm closed cell polyurethane compression foam sealing strip, one side self adhesive. Injected acrylic sealant.

* The method of sealing should be adapted to the requirements of the area. The injection of silicone or acrylic sealant is not usually necessary.

Sealing example*:



- 1 Hold down clips
- 2 Main or cross T-sections
- 3 Foam compression strip*
- 4 Silicone seal (or equivalent)*
- 5 Surface design un-perforated