

ARCHISONIC®

Acoustic baffle



QUICK FACTS

- Can be combined with A11-S, A11-C and ALBATROS
- Building material classes B-s1, d0 and B-s2, d0 according to EN 13501-1
- In combination with activated ceiling systems, high to very high heating and cooling capacity is possible
- Superior sound absorption values (class A)
- Acoustic material made of 100 % PET (min. 60 % recycled)
- Simple hook-in installation
- Shapes: Edge, Straight and Wave
- 45 colours available
- Integration of various components
 - Different lighting designs
 - Sprinklers
 - Smoke detectors
 - Supply / extract air elements

A11-S output (water)	
Cooling	Heating
Up to 70 W/m ² (8 K), EN 14240:2004	Up to 90 W/m ² (15 K), EN 14037:2016
Acoustics	
αw: up to 1,00	

A11-C output (water)	
Cooling	Heating
Up to 60 W/m ² (8 K), EN 14240:2004	Up to 82 W/m ² (15 K), EN 14037:2016
Acoustics	
αw: up to 1,00	

ALBATROS output (water)	
Cooling	Heating
Up to 190 W/m ² (8 K), EN 14240:2004	Up to 233 W/m ² (15 K), EN 14037:2016
Acoustics	
αw: up to 1,00	

Technical description

General

ARCHISONIC® can be combined with the A11-S and A11-C climate ceiling systems as well as with the ALBATROS high performance module. This allows thermal and acoustic functions to be combined with different architectural design options.

The ARCHISONIC® acoustic ceiling baffles from Impact Acoustic® support sound absorption in the room. The PET felt panels are particularly effective in the higher frequency range. The A11 metal climate ceiling system complements the acoustic effect in the lower frequency range.

ARCHISONIC® acoustic ceiling baffles are available in various colours and in the Wave, Straight and Edge shapes. On-site installation is carried out on the underside of the metal ceiling by using magnets.

Activation

Water system: The radiant ceiling is a passive system that in the case of cooling absorbs heat from the room via the ceiling surface, transfers it to the water, which is conducted in activation registers, and dissipates it, respectively emits heat in the case of heating.

The activation of the A11 radiant metal ceiling system consists of meandering copper pipes (outside diameter 12 mm) and aluminum heat-conducting rails (width 80 mm), which are connected by laser spot welding and glued into the ceiling panels.

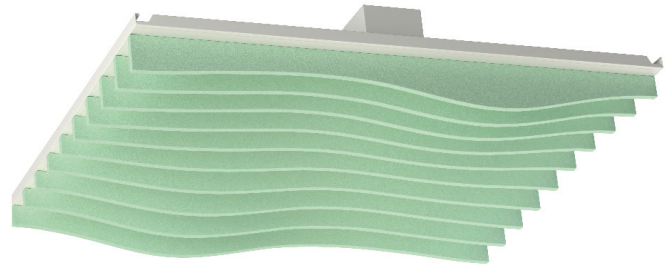
The activation of the ALBATROS High performance module consists of meandering copper pipes (outside diameter 12 mm), which are connected by laser spot welding and glued into the ceiling panels.

Functions

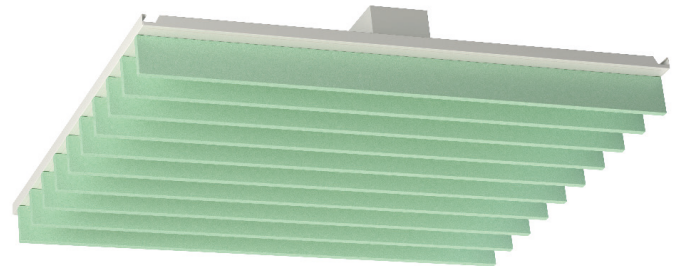
ARCHISONIC® + A11 radiant metal ceiling system resp. the ALBATROS High performance module are multifunctional. In addition to their thermal function – cooling and heating – they can be fitted with additional features, such as acoustic elements, smoke detectors and lighting.

Combinations

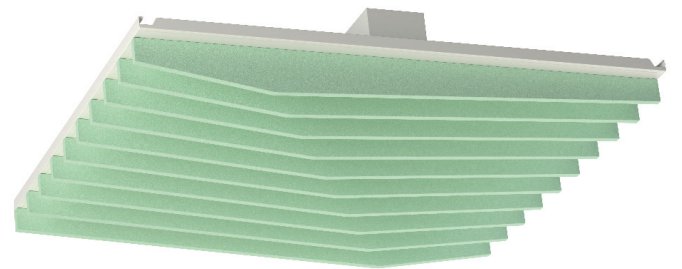
- ARCHISONIC® + A11-S Radiant metal ceiling sail
- ARCHISONIC® + A11-C Radiant metal ceiling
- ARCHISONIC® + ALBATROS High performance module



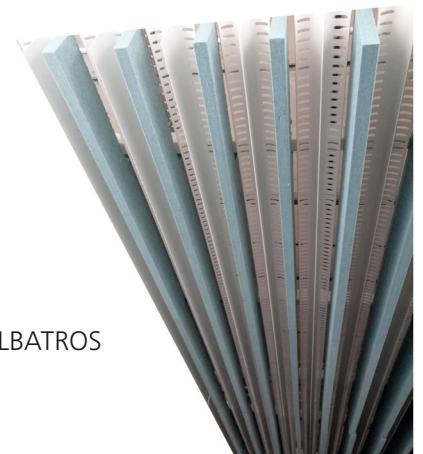
ARCHISONIC® Wave



ARCHISONIC® Straight



ARCHISONIC® Edge



ARCHISONIC® + ALBATROS

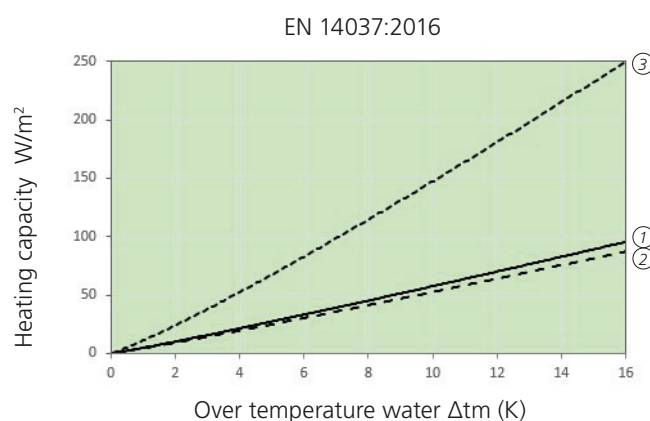
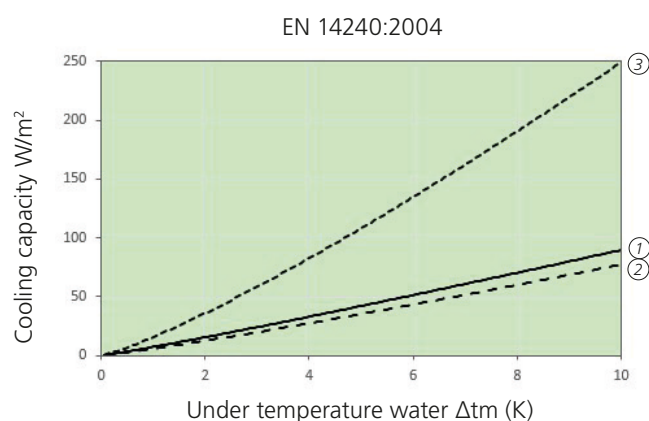
Technical data

Capacity

Initial data is presented below A11 climate ceiling system:

Material ceiling panel	Steel
Perforation	Rg 1,5 – 11 %
Distance heat conducting rails (hcr)	150 mm
Activation method	on fleece

(Capacity information without project-specific performance-influencing factors.)



Version	Cooling 8 K	Cooling 10 K	Heating 15 K
① ARCHISONIC® + A11-S Radiant ceiling sail	up to 70 W/m^2	up to 90 W/m^2	up to 90 W/m^2 (—)
② ARCHISONIC® + A11-C Radiant ceiling	up to 60 W/m^2	up to 77 W/m^2	up to 82 W/m^2 (-.-.-)
③ ARCHISONIC® + ALBATROS	up to 190 W/m^2	up to 250 W/m^2	up to 233 W/m^2 (-----)

Notice

- SN EN 14240: The cooling capacity is related to the active area according to SN EN 14240:2004. The active area is calculated according to SN EN 14240 from the number of heat-conducting rails x length of heat conducting rail x distance between heat conducting rails.
- SN EN 14037: The heating capacity is related to the active area according to SN EN 14037:2016. The active area is calculated according to SN EN 14037 from the length of the ceiling panel x the width of the ceiling panel.

Recommendations for operation

Water

- Temperature
 - Cooling 16 – 18 °C
 - Heating 28 – 37 °C
- Temperature distance Δt (VL-RL): 2 – 3 K
- Pressure drop: 20 – 25 kPa
- Water flow: 80 – 150 l/h
- Max. operating pressure up to 9 bar
- Water quality according to: SWKI BT 102-01, BTGA 3.003, VDI 2035

Surrounding

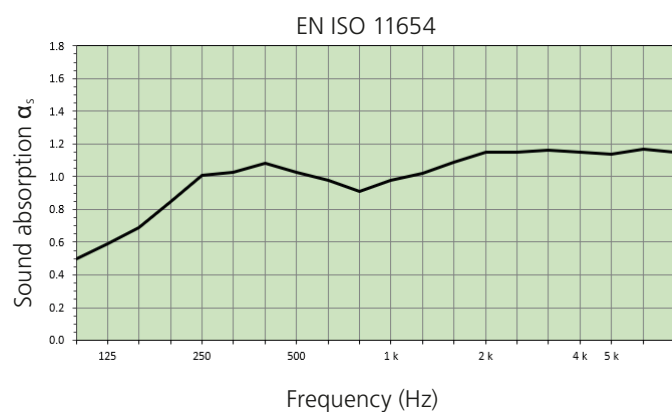
- Ambient temperatures: +5 – 50 °C
- Humidity: up to 90 % relative humidity

Acoustics

Initial data is presented below A11 climate ceiling system:

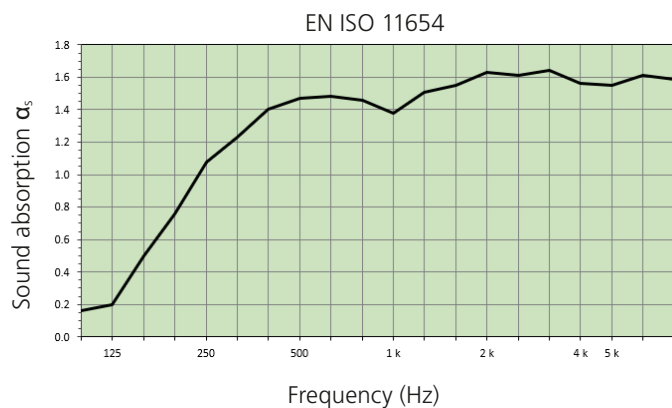
Material ceiling panel	Steel
Perforation	Rg 1,5 – 11 %
Distance heat conducting rails (hcr)	150 mm
Activation method	on fleece
Height ceiling baffles	150 mm
Distance ceiling baffles	150 mm

A11-C Radiant metal ceiling



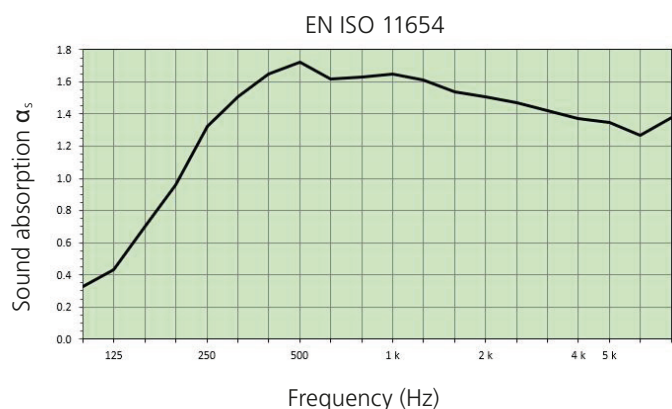
Sound absorption α_p	250: 0,95 500: 1,00 1k: 1,00 2k: 1,00 4k: 1,00
Sound absorption α_w	α_w : 1,00
Sound absorption class	A

A11-S Radiant metal ceiling sail



Sound absorption α_p	250: 1,00 500: 1,00 1k: 1,00 2k: 1,00 4k: 1,00
Sound absorption α_w	α_w : 1,00
Sound absorption class	A

ALBATROS High performance module



	without additional insulation	with additional insulation
Sound absorption α_p	250: 0,28 500: 0,58 1k: 1,00 2k: 1,00 4k: 1,00	250: 1,00 500: 1,00 1k: 1,00 2k: 1,00 4k: 1,00
Sound absorption α_w	α_w : 0,55	α_w : 1,00
Sound absorption class	D	A

System

Ceiling system

- Ceiling baffles
 - 88 PET bottles/m²
 - Special solutions on request

Installation systems

- Hook-on system min. 240 mm
 - Hook-on system

Materials, weight and dimensions

Materials and weight

System	Material	Gewicht (inkl. Aktivierung, Wasser)	Baustoffklasse
ARCHISONIC®	100 % PET (min. 60 % recycled)	4,0 kg/m ² (+/- 10 %)	B-s1, d0, EN 13501-1
A11-S + ARCHISONIC®	Aluminum 1,00 mm + PET	8,0 – 10,0 kg/m ²	B-s1, d0, EN 13501-1
A11-S + ARCHISONIC®	Steel 0,70 mm + PET	10,0 – 12,5 kg/m ²	B-s1, d0, EN 13501-1
A11-C + ARCHISONIC®	Aluminum 1,00 mm + PET	7,5 – 10,0 kg/m ²	B-s1, d0, EN 13501-1
A11-C + ARCHISONIC®	Steel 0,70 mm + PET	10,0 – 12,5 kg/m ²	B-s1, d0, EN 13501-1
ALBATROS + ARCHISONIC®	Aluminum fins + PET	ca. 20,0 kg/m ²	B-s1, d0, EN 13501-1

Baffle dimensions

Length	Width	Thickness
400 – 1800 mm	150 mm	24 mm

Special dimensions on request.

Surface

Versions

- PET baffles

Colours

- 45 different colours to choose from
Free colour samples can be ordered from us

Formes

- Wave, Straight, Edge

Dimensions A11-S, A11C

Panel length	Panel width	Panel height
min. 800 / 600 mm	min. 400 mm	min. 30 mm
max. 3000 mm	max. 1200 mm	max. 50 mm

Special dimensions on request.

Dimensions ALBATROS

Module length	Module width	Module height	Pipe rows	Pipe spacing
600 – 2500 mm	610 – 1260 mm	190 mm	5 – 10	130 mm

Special dimensions on request.

ARCHISONIC® colours

									
Name	Snow White	Cloud	Smoke	Slate	Charcoal	Raven	Ground	Gull	Milk
Code	500	103	442	444	542	550	108	144	404
NCS	S 0300-N	S 1002-B	S 3005-R80B	S 4500-N	S 7502-B	S 8500-N	S 5005-Y20R	S2502-Y	S 0502-Y

									
Name	Linen	Dune	Jute	Fallow	Warm Stone	Truffle	Sunshine	Honeycomb	Electric Orange
Code	107	104	920	238	105	539	846	139	464
NCS	S 1505-Y30R	S 2005-Y	S 3010-Y30R	S 5010-Y30R	S 3010-Y50R	S 8502-R	S 1040-Y10R	S 2050-Y20R	S 0580-Y70R

									
Name	Terracotta	Soft Coral	Cinnabar	Shell Pink	Garnet	Poster Red	Hot Pink	Grape	Marine Blue
Code	239	516	725	102	724	662	140	540	864
NCS	S 4040-Y70R	S 2020-Y90R	S 6030-R	S 0510-R30B	S 5040-R10B	S 1080-R	S 2060-R20B	S 5040-R40B	S 4050-R70B

									
Name	Midnight	Royal Blue	Winter Sky	Deep Sea	Nocturne	True Navy	Ice Blue	Pacific Ocean	Lagoon
Code	810	865	410	918	866	194	304	432	917
NCS	S 7020-R70B	S 3560-R80B	S 2020-R90 B	S 5020-R90B	S 8010-R90B	S8005-B	S 0510-B	S 3040-B	S 7020-B30G

									
Name	Succulent	Spearmint	Seafoam	Nordic Pine	Moss	Grove	Pistachio	Lichen	Fern
Code	712	706	710	311	439	317	315	160	180
NCS	S 3020-B30G	S 1010-B90G	S 3010-G30Y	S 5030-G10Y	S 2040-G40Y	S 7020-G30Y	S 5020-Y	S4005-Y	S6010-G90Y

These NCS codes represent the best possible visual match and may not be exact due to the use of blended fibres.

Colour fastness

Class 6

ISO 105-B02:A1

You can order a free sample box from us



These ARCHISONIC® felt collections comply with building material class B-s2,d0, EN 13501-1:

Hot Pink 140 12mm	Raven 550 24mm
Lichen 160 12mm	Raven 550 12mm
True Navy 194 24mm	Poster Red 662 12mm
Pacific Ocean 432 12mm	Midnight 810 24mm
Electric Orange 464 24mm	Marine Blue 864 24mm
Soft Coral 516 24mm	

ARCHISONIC® Riftcut Natural Collection

Colour sets from the Natural Collection

Riftcut Natural Collection (NC) is an extension of Impact Acoustic's best-selling Riftcut product, available in natural wood tones. Developed in collaboration with German veneer specialists Schotten & Hansen, ARCHISONIC® Riftcut NC introduces three distinct colour groups: elegant light tones, essential mid-tones and classic dark tones.



Sustainable ink

Compliant with CP65 and RoHS3



**Free sample sets can
be ordered from us**



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