

SOFTLINE WOOD

High performance module



QUICK FACTS

- Thermal comfort according to EN ISO 7730, SIA 382/1
- Building material class B-s1, d0 according to EN 13501-1
- High heating and cooling capacity
- With optional absorbers: advanced sound absorption values (class B)
- Fins with real wood surfaces in different wood types and perforation variants
- Easy to install
- Can be combined with CAURUS and FAVO
- Integration of various components
 - Different lighting designs
 - Sprinklers
 - Smoke detectors
 - Supply / extract air elements

Capacity (water)	
Cooling	Heating
Up to 102 W/m ² (8 K), EN 14240:2004	Up to 86 W/m ² (15 K), EN 14037:2016
Acoustics with sound absorber	
α _w : up to 0.85	

Swegon 

In cooperation with

TOP **A|K|U|S|T|I|K** 

Acoustic panel solutions

Technical description

General

The SOFTLINE WOOD high performance module combines fins with real wood surfaces and high-performance heat-conducting profiles, enabling heating and cooling via the ceiling.

Room air flows around the heat-conducting profiles and supports heat transfer during heating and cooling. In combination with optional absorbers, the system can also contribute to sound absorption in the room.

The fins with real wood surfaces define the natural wood appearance of the ceiling system. Different wood types and perforation variants enable different design solutions for the interior.

Activation

Water system: the radiant ceiling is a passive system which absorbs heat via the ceiling surface (cooling application) or transfers it to the room (heating application).

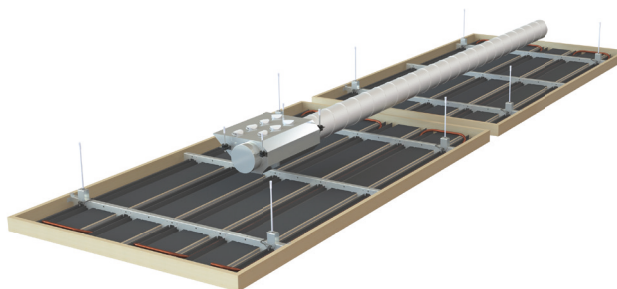
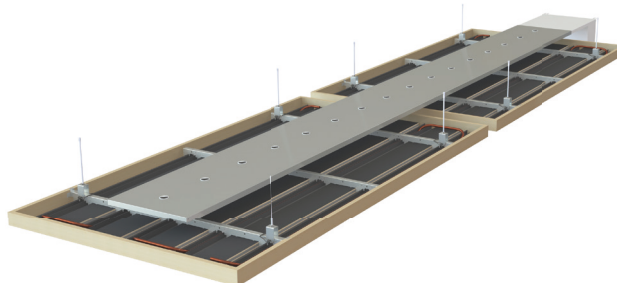
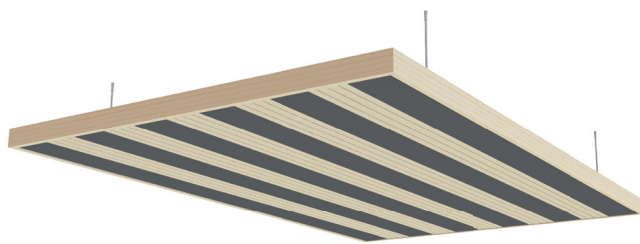
The SOFTLINE modules are activated by copper pipe meanders (external diameter 12 mm) which are pressed into the aluminium fins.

Functions

The high performance modules are multifunctional. In addition to their thermal functions of cooling/heating, they can also be fitted with additional features, such as acoustic elements, smoke detectors and lighting.

Combinations

- SOFTLINE WOOD + CAURUS
- SOFTLINE WOOD + FAVO



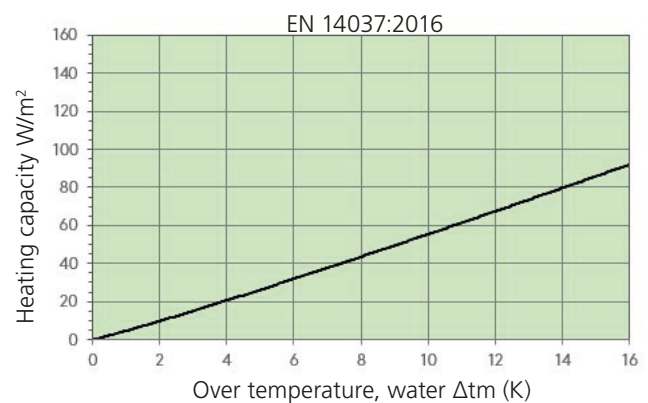
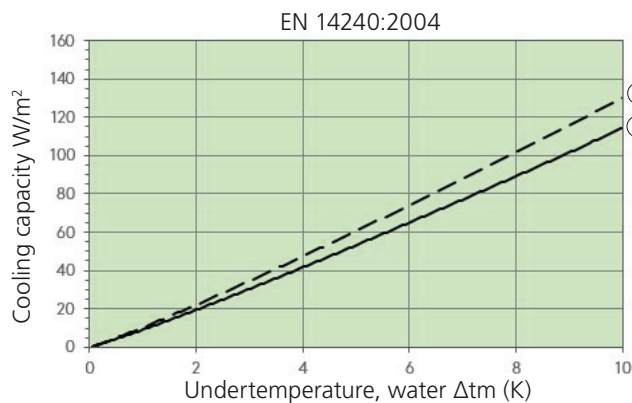
Technical data

Capacity

Design example:

Module length	1000 mm to 2550 mm
Installation height	min. 180 mm
Supply/extract air (Combination options with ventilation system on request. With supply air, the capacity increases by 5 % in office space.	None

(Capacity specifications without object-specific performance-increasing factors. Depending on the configuration, an additional output of 20 W/m² of panel area is achieved through concrete management.)



Version	Cooling 8 K	Cooling 10 K	Heating 15 K ⁽¹⁾
①SOFTLINE WOOD	Up to 90 W/m ²	Up to 114 W/m ²	Up to 86 W/m ² (—)
②SOFTLINE WOOD + CAURUS / FAVO	Up to 102 W/m ²	Up to 130 W/m ²	Up to 86 W/m ² (- - -)

¹⁾ When the supply air is running, there is a 20 to 40 % higher heating capacity.

Note

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

Recommendations for use

Water

- Flow temperature
 - For cooling: 16 – 18 °C
 - For heating: 28 – 37 °C
- Temperature spread Δt (flow - return)
 - For cooling: 2 – 3 K
 - For heating: 3 – 5 K
- Pressure drop: 20 – 25 kPa
- Water flow rate: 90 – 200 l/h
- Max. operating pressure: up to 9 bar
- Water quality according to: SWKI BT 102-01, BTGA 3.003, VDI 2035

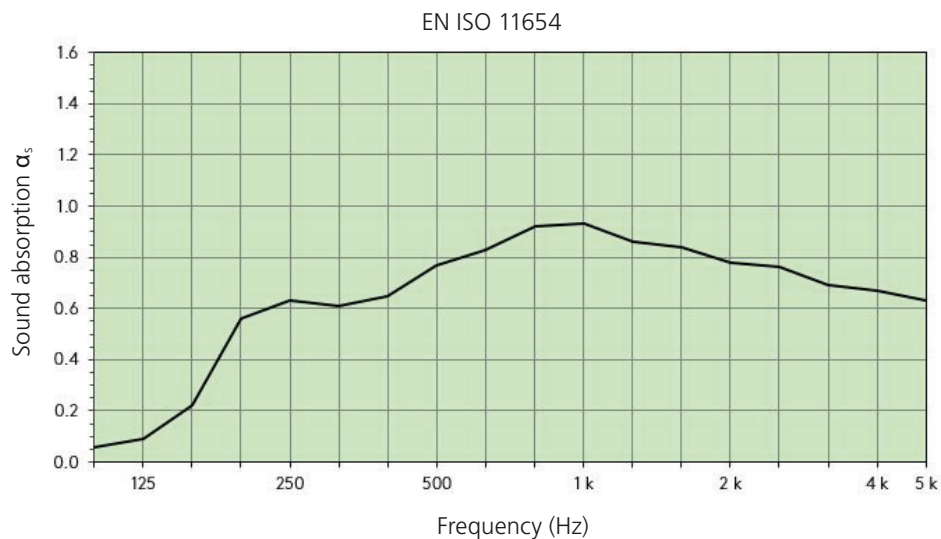
Environment

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

Acoustics

Baseline data, example:

Installation height	min. 180 mm
Acoustic inlay	Fleece
Additional inlay (mineral wool)	with
Sound absorption α_p	250: 0,63 500: 0,77 1k: 0,93 2k: 0,78 4k: 0,67
Sound absorption α_w	α_w : 0,85
Sound absorption class (EN ISO 11654)	B



Fire safety

- Building material class B-s1,d0, EN 13501-1 (without sound absorber)

System

Ceiling system

- High performance module with fins
- Real wood between the fins

Installation systems

- Installation height: min. 180 mm
 - Threaded rods
 - Mounting bracket

Material, weight and dimensions

Material and weight

Material	Weight (incl. activation elements, water)
Aluminium fins and wooden fins with frame	Approx. 10 kg/m ²
Aluminium fins and wooden fins without frame	Approx. 9 kg/m ²

Building material class: B-s1,d0, EN 13501-1
(depending on acoustic elements and surfaces).

Surface

Finishes

- Powder coating
- Anodised
- Wooden fins

Colours

- Standard: RAL 9010
- For other RAL/NCS colours, please enquire
- Common anodised colours

Wooden fins

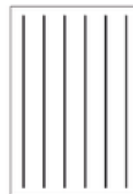
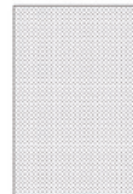
- 3-layer panel white fir
- MDF veneered European oak
- MDF veneered American walnut
- Other types available on request

Real wood veneers

Surfaces

3-layer panel white fir	MDF veneered European oak	MDF veneered American walnut
		

Perforations

Classic 14/2 M	ARIA-Plus 28/4 M	Micro 2/2/0.5 M
		

Dimensions

	Length	Width	Height	Pipe rows	Pipe spacing
With frame	1050 mm – 2550 mm	650 mm – 1370 mm	60 mm	3 – 6	240 mm
Without frame	1000 mm – 2500 mm	600 mm – 1320 mm	50 mm	3 – 6	240 mm

Custom dimensions on request.

Swegon Klimadecken GmbH

Schwarzwaldstrasse 2

64646 Heppenheim

T: +49 6252 7907-0

F: +49 6252 7907-31

vertrieb.klimadecken@swegon.de

swegon.de/klimadeckensysteme