

SOFTLINE

High performance module



QUICK FACTS

- Thermal comfort according to EN ISO 7730, SIA 382/1
- Building material class A2-s1, d0 according to EN 13501-1
- Very high heating and cooling capacity
- With optional acoustic inlay:
advanced sound absorption values (class B)
- Easy to install, optionally with fold-down modules
- Shapes: Curve, Roof and Base; other versions on request
- Anodised profiles available
- Integration of various components
 - Different lighting designs
 - Sprinklers
 - Smoke detectors
 - Supply / extract air elements

Capacity (water)	
Cooling	Heating
Up to 140 W/m ² (8 K), EN 14240:2004	Up to 135 W/m ² (15 K), EN 14037:2016
Acoustics with sound absorber	
α_w : up to 0.85	

Technical description

General

SOFTLINE is a high performance module for heating and cooling rooms and offers different installation and design options. The slender fin design is suitable for showrooms, offices and corridors, among other applications. Lighting can be integrated between the aluminium fins or below the profiles as pendant luminaires.

With optional acoustic inlays, the system can also contribute to sound absorption in the room.

The SOFTLINE high performance module is available in the Base, Roof and Curve versions. The different shapes allow adaptation to various architectural and design requirements.

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.



SOFTLINE Curve



SOFTLINE Roof



SOFTLINE Base

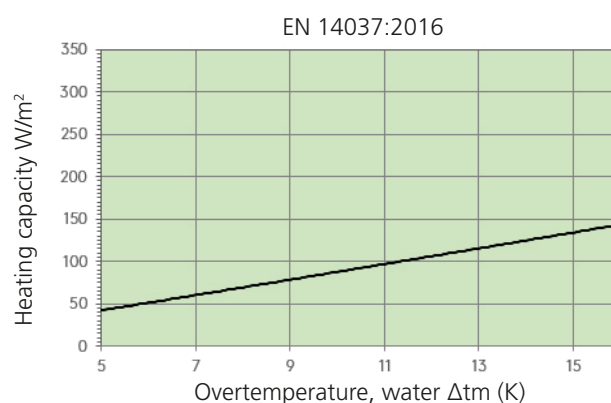
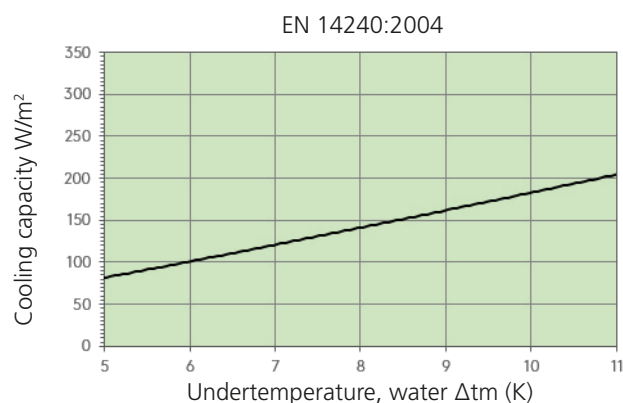
Technical data

Capacity

Design example:

Module length	1000 mm to 2500 mm
Installation height	180 mm
Supply/extract air (Combination options with ventilation system on request. With supply air, the capacity increases by 5 % in office spaces and by up to 30 % in industrial environments.)	None

(Performance data without project-specific factors that affect performance.)



Version	Cooling 8 K	Cooling 10 K	Heating 15 K
SOFTLINE high performance module	Up to 140 W/m^2	Up to 183 W/m^2	Up to 135 W/m^2

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

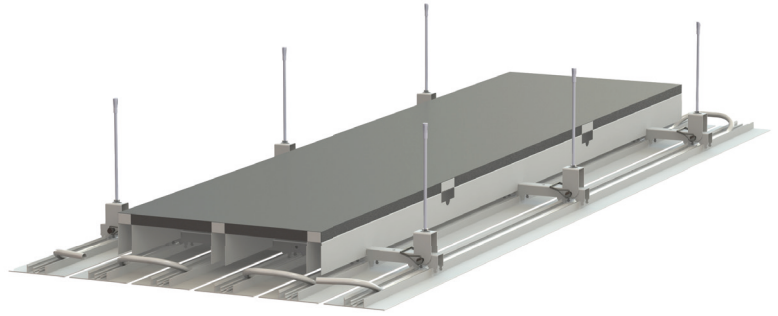
- Ambient temperatures: +5 – 50 °C
- Relative humidity: up to 90 %

Acoustics

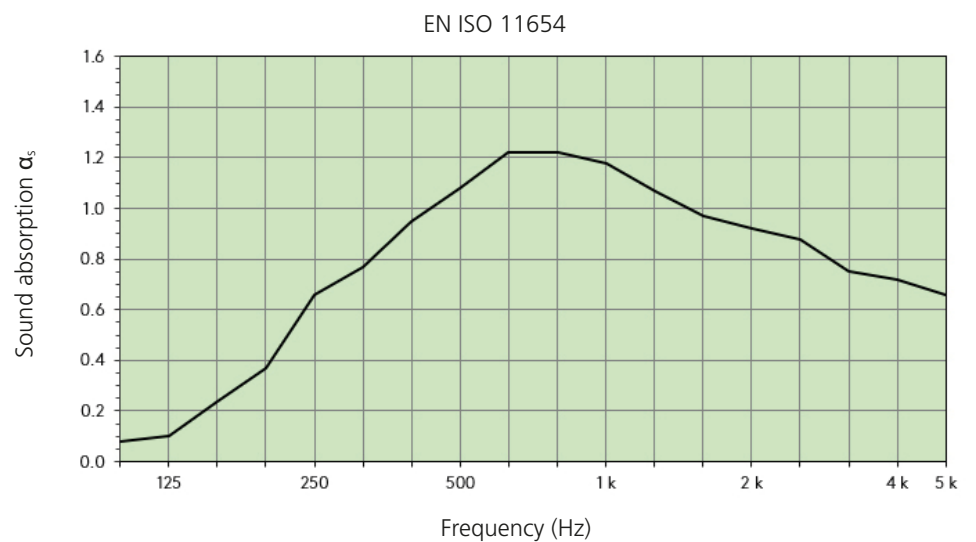
Baseline data, example:

In combination with sound absorber:

- Sound absorber structure with acoustic inlay (mineral wool)



- α_w : up to 0.85
- Sound absorption class B



Fire safety

- Building material class A2-s1, d0, EN 13501-1 (without sound absorber)

System

Ceiling system

- High performance module with fins

Mounting 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	Approx. 12 kg/m ²

Building material class: A2-s1, d0, EN 13501-1
(depending on acoustic elements).

Surface

Finishes

- Powder coating
- Anodised

Colours

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

Dimensions

Length	Width	Height without acoustic inlay	Pipe rows	Pipe spacing
1000 – 2500 mm	380 – 1290 mm	95 mm*	3 – 10	130 mm

Special dimensions on request.

*Height with acoustic inlay is project-specific.

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