

# SOFTLINE

High performance module



## QUICK FACTS

- Thermal comfort according to EN ISO 7730
- Very high heating & cooling capacity
- With optional absorbers:  
Advanced sound absorption values (class B)
- Powerful and energy efficient
- Simple installation; option to pivot modules down
- Forms: Curve, Roof & Base (others available 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 142 W/m <sup>2</sup> (8 K), EN 14240:2004	Up to 135 W/m <sup>2</sup> (15 K), EN 14037:2016
Acoustics with sound absorber	
α <sub>w</sub> : up to 0.85	

# Technical description

## General

SOFTLINE affords a wide range of installation options. With its sleek design, the ceiling fits perfectly in showrooms, offices and corridors. Lighting can be installed between the aluminium profiles or beneath the profiles in the form of pendant lights. The SOFTLINE high performance modules are available as Base, Roof and Curve versions.

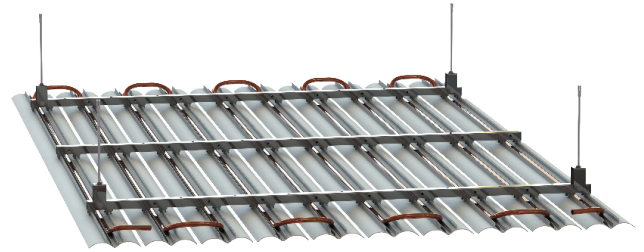
## Activation

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

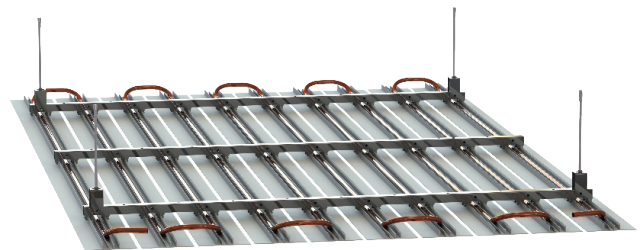
The high performance modules are multifunctional. In addition to their thermal functions of cooling/heating, they can also be fitted with additional features, such as acoustic elements, smoke detectors and lighting.



SOFTLINE Curve



SOFTLINE Roof



SOFTLINE Base

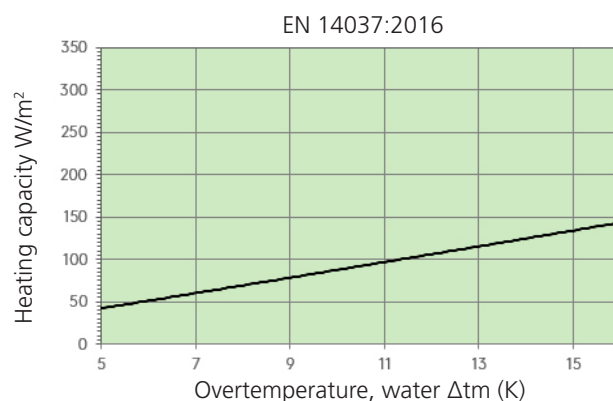
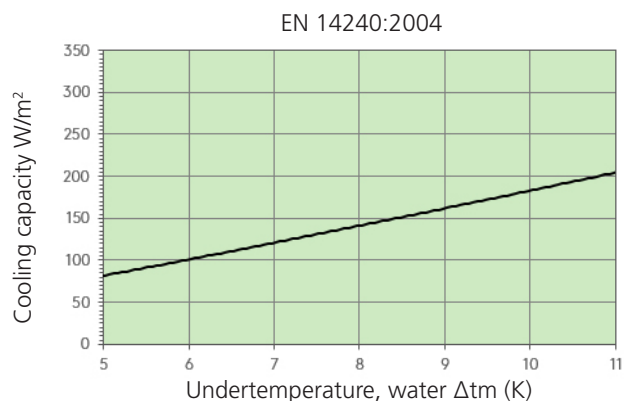
# Technical data

## Capacity

Design example:

Module length	600 mm to 2500 mm
Installation height	180 mm
Supply/extract air <small>(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.)</small>	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 142 $W/m^2$	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  $\Delta t$  (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

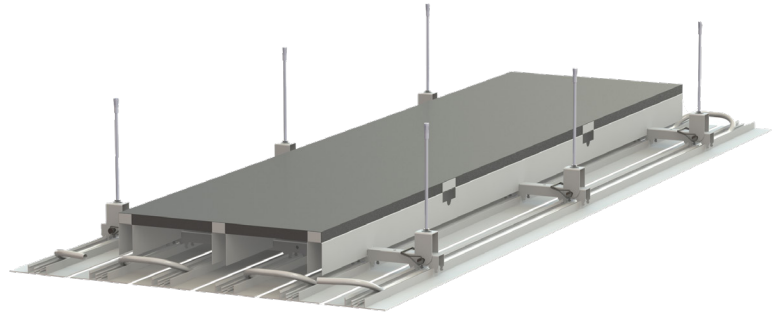
- Ambient temperatures: +5 – 50 °C
- Relative humidity: up to 90 %

## Acoustics

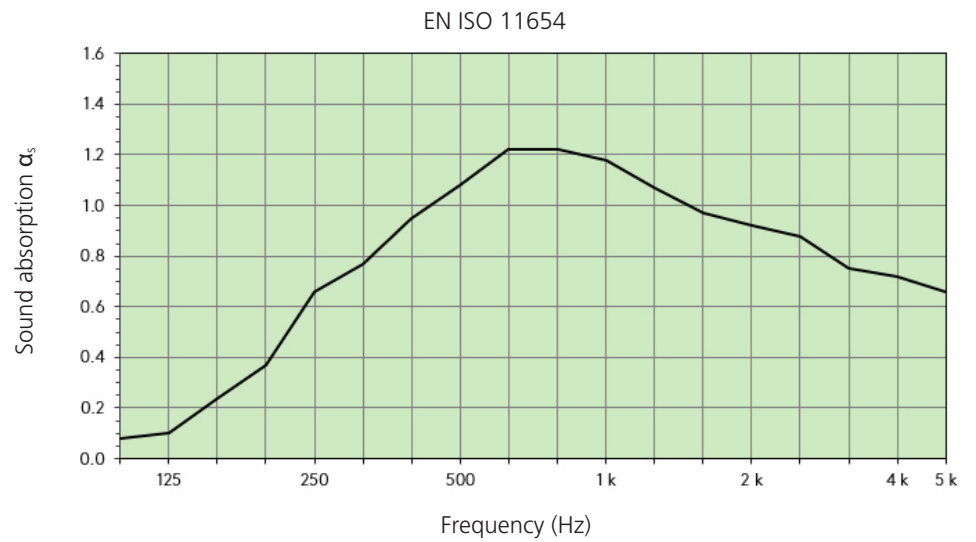
Baseline data, example:

In combination with sound absorber:

- Sound absorber structure with acoustic mat (mineral wool)



- $\alpha_w$ : 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

## 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	Approx. 12 kg/m <sup>2</sup>

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

Profile length	Pipe rows	Pipe spacing
Min. 600 mm / max. 2500 mm	3 – 10	130 mm

Custom dimensions on request.

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