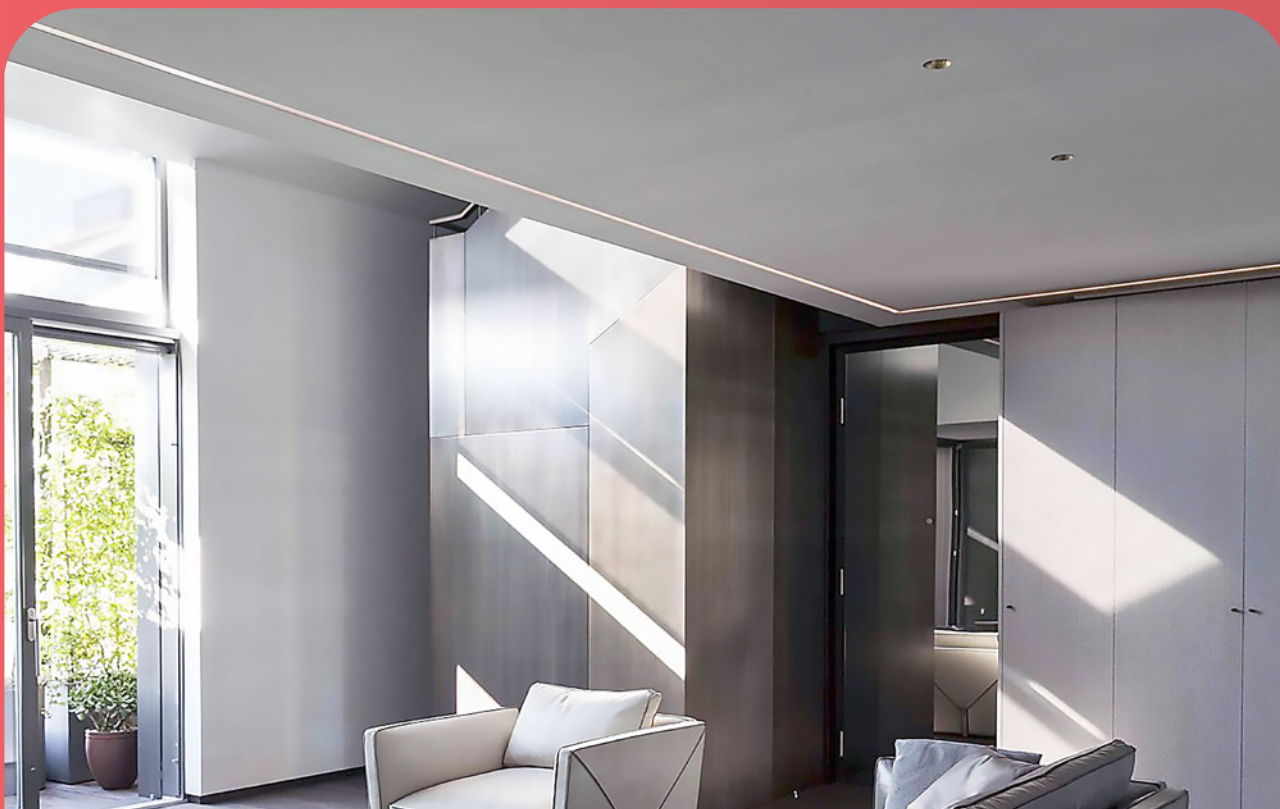




# Radiant ceiling systems

Ceiling systems create an even temperature in all rooms, perfectly tailored to your needs, providing a natural feeling of well-being in both winter and summer.



## Climatic comfort **from above**

Radiant systems interact with the environment through the physical principle of radiation by releasing or absorbing energy, creating an ideal situation for heat exchange between people and surfaces. Thanks to radiant technology, the classic phenomenon of hot air going up and cold air going down as happens with air conditioners and radiators is eliminated.

Leonardo is the ceiling-mounted air conditioning system completely developed and manufactured by Eurotherm – 100% made in Italy. The special configuration succeeds in maximising the yield while restoring top comfort.

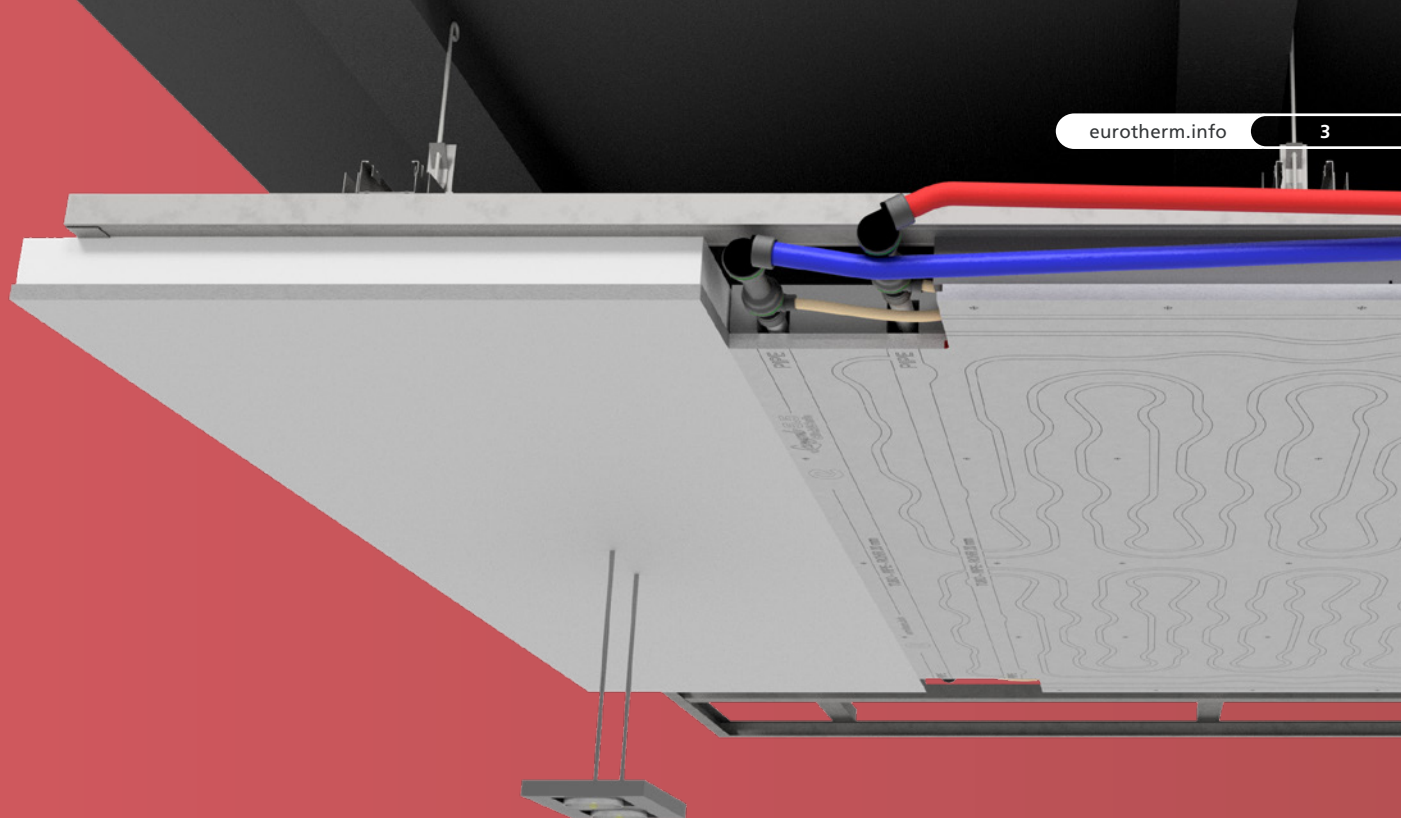
In fact, the pipe's larger diameter, compared to other ceiling systems, and its serpentine pattern allow for greater energy exchange, which increases its inertia rate and performance.



### **DISCOVER OUR ONLINE CONFIGURATOR**

Scan the QR code with your smartphone, configure and calculate the price of your radiant ceiling system in minutes.

Or go directly to the dedicated website [soffittoradiante24.it](https://soffittoradiante24.it)



## The revolutionary **Leonardo** **Click&Safe** ceiling system



### **It becomes a full-fledged ceiling**

The Leonardo system assembles like a traditional plasterboard ceiling.



### **Easy to install in any condition**

Whether new construction or renovation, the Leonardo system can be installed quickly.



### **Certain costs and complete turnkey service**

Certain and precise costs with installation by Eurotherm specialists with turnkey service.



### **Design flexibility and reduced masonry work**

The system suits every project and adapts to any type of surface and environment.



### **Fast commissioning**

The system reaches the set temperature within minutes, reducing waste and energy expenditure.

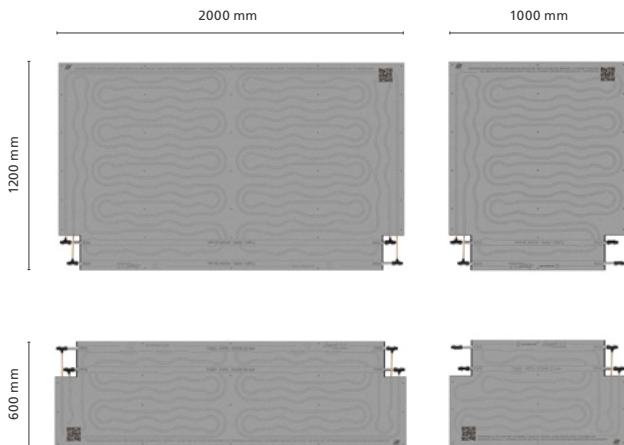


### **Simple plant housing**

It blends into the environment and perfectly incorporates recessed lighting, air treatment vents, etc.

# The new **Leonardo Click&Safe** radiant panel

The Leonardo Click&Safe system allows for a ceiling radiant system for multiple applications. This system is composed of modular plasterboard panels with MidiX Plus piping already inserted and arranged in a serpentine pattern so as to maximise the exchange surface between piping and plasterboard; there are two circuits for each loop. The plasterboard panel is supplied coupled with an insulating sheet to ensure high thermal performance.



## Modularity

The new system introduces a completely new and more efficient approach compared to the previous model. One of the main innovations is the availability of modular panels in a range of standardised sizes which eliminates the need to cut panels during installation.

This means that professionals can directly choose the most suitable format for specific project requirements, significantly reducing processing time and improving the accuracy of the final result.

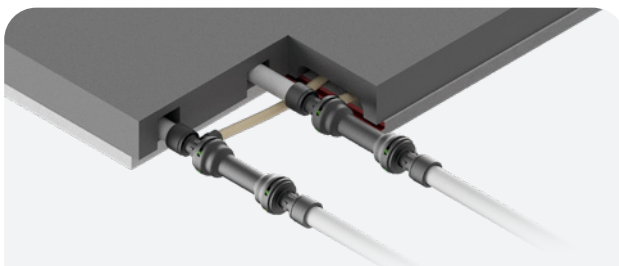
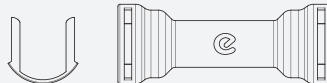
## New Click&Safe connection

Pre-assembled compression fittings on the pipe to ensure maximum tightness over time, with double seals on the connectors between panels that close on the fitting.

**CONNECTS 10 M2 IN LESS THAN 10 MINUTES**

**NO EQUIPMENT REQUIRED**

**VISUAL SAFETY THANKS TO THE CLIP**



## Pre-installed hydraulic backbone

The hydraulic backbone already integrated within the panel, designed to facilitate the series connection of the panels, greatly simplifies installation operations on site.

## Digital instructions

Each Leonardo panel comes with a QR code that allows access to technical manuals, instruction videos and other resources directly from your smartphone, making installation and maintenance quicker and easier.



The exploded view shows the main components of the Leonardo system, highlighting the integrated hydraulic backbone, Click&Safe fittings, laser marking and MidiX Plus tubing, all designed for safe, durable and efficient installation.

### Safety and durability

Pre-assembled compression fittings on the pipe to ensure maximum tightness over time, with double gasket (Click&Safe) fittings between panels that close on the calibrated fitting and not on the pipe. Fittings tested at different temperature and pressure cycles in a certified laboratory.

### Hydraulic backbone

The panel is complete with hydraulic piping for connecting the panels in series. The pipework is made of multilayer PE-RT type II 20 x 2 mm. Including pre-assembled fitting with certified in-line leak test.

### Always isolated system

The insulation sheet is increased in accordance with the requirements of the UNI EN 1264:2021 allowing thermal losses to be limited, increasing the performance of the entire system.

### Plasterboard for every room

Depending on the installation context, either "classic" or hydro panelling can be used for wet rooms such as bathrooms, kitchens. In rooms that require it (e.g. offices, meeting rooms, etc.) a ceiling system can be installed with sound-absorbing panelling.

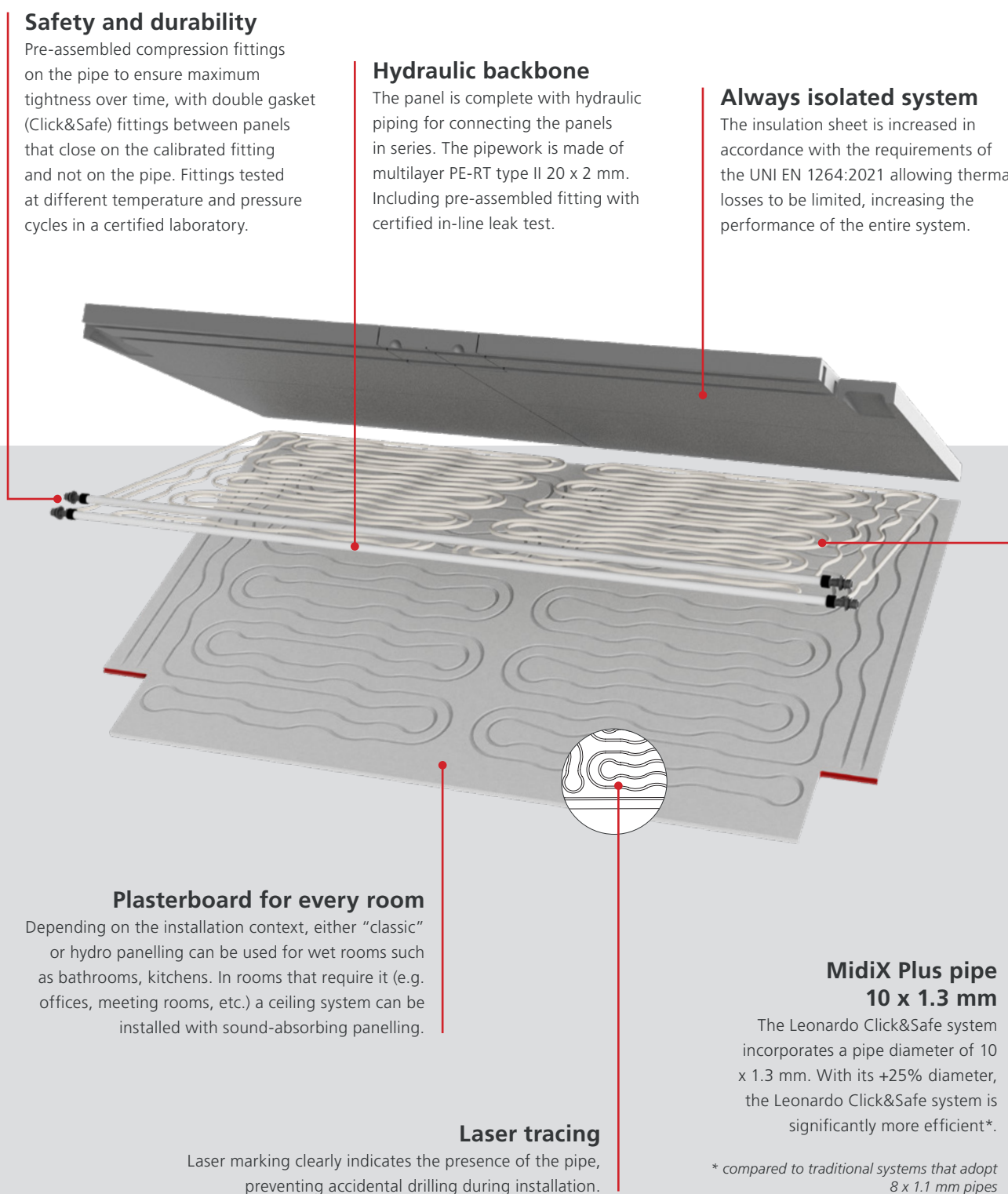
### Laser tracing

Laser marking clearly indicates the presence of the pipe, preventing accidental drilling during installation.

### MidiX Plus pipe 10 x 1.3 mm

The Leonardo Click&Safe system incorporates a pipe diameter of 10 x 1.3 mm. With its +25% diameter, the Leonardo Click&Safe system is significantly more efficient\*.

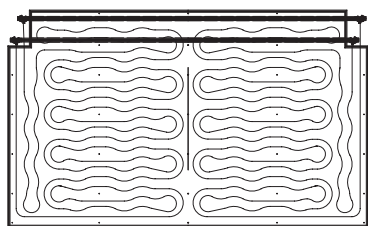
*\* compared to traditional systems that adopt 8 x 1.1 mm pipes*



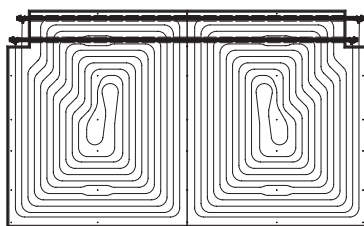


## The advantage of differentiated spacing

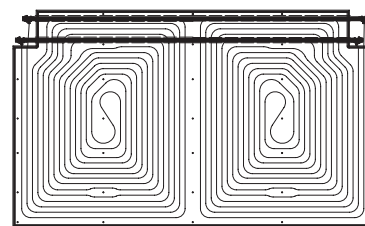
The Leonardo Click&Safe system offers the advantage of three different spacings, designed to guarantee versatility in design and installation, combined with two specific types of insulation, designed to optimise the system's performance according to environmental requirements, guaranteeing flexibility and high quality results in any application context. It is also available in special versions for specific technical requirements: Leonardo HYDRO for humid environments and Leonardo RF SPECIAL with high-density fibreglass for enhanced fire performance (on request). This complete range makes the system a flexible and efficient solution for any application context.



Pipe spacing 5.5



Pipe spacing 3.5



Pipe spacing 3.0

## Optimised performance for all seasons

The tables compare the performance of Leonardo Click&Safe 5.5 and Leonardo Click&Safe 3.0 PLUS in winter and summer conditions, highlighting the differences in heat output and surface temperature. Leonardo Click&Safe 5.5 is more suitable for those looking for a more even surface temperature and a more immediate sensation of warmth, while Leonardo Click&Safe 3.0 PLUS is the better choice for those looking for greater energy efficiency and heat output.

The choice of the ideal system will therefore depend on the specific requirements of the environment and operating conditions.



### Winter conditions

**Ambient T** 20 °C

**Delivery T** 37 °C

$\Delta T_{m-r}$  4 °C

$\Delta \theta$  15 °C

### Heating output

Leonardo Click&Safe 5.5

Leonardo Click&Safe 3.0 PLUS

59.8 W/m<sup>2</sup>

79.6 W/m<sup>2</sup>

### Surface temperature\*

29.2 °C

32.2 °C

\*UNI EN 1264-3:2021 – Surface temperature limit of 33 °C



### Summer conditions

**Ambient T** 26 °C

**Delivery T** 15 °C

$\Delta T_{m-r}$  2 °C

$\Delta \theta$  10 °C

### Cooling output

Leonardo Click&Safe 5.5

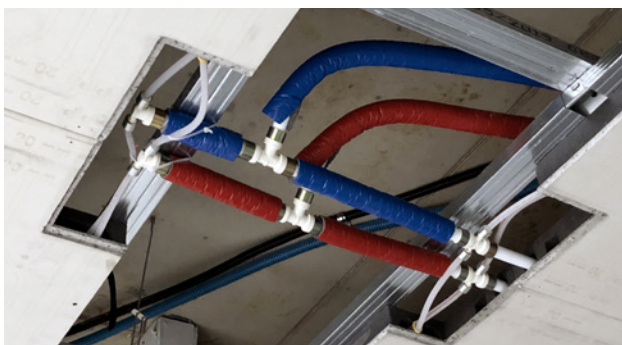
Leonardo Click&Safe 3.0 PLUS

47.4 W/m<sup>2</sup>

79 W/m<sup>2</sup>

## Simplicity of installation

The Leonardo Click&Safe radiant ceiling is easy to install thanks to innovative technical solutions. The laser marking on the panels guarantees precise positioning and reduces the risk of errors, while the pre-integrated, pre-expanded pipes simplify plumbing connections. Designed to reduce installation time and improve the quality of the final result, this system represents an evolution from traditional methods. Two dedicated installation kits are available: one complete with clamps and drills and one with drills only. Please refer to the Leonardo 2024 installation manual for further details.

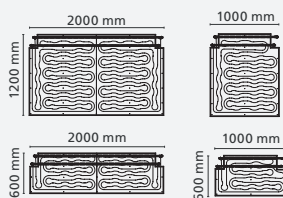
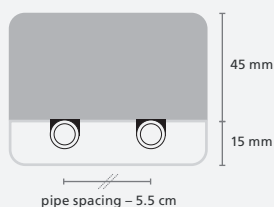
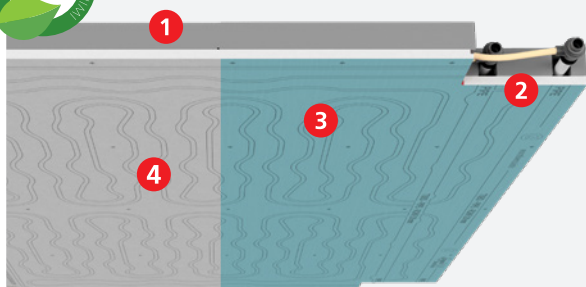


Installation method before



Installation method with Click&Safe

## Our panel range

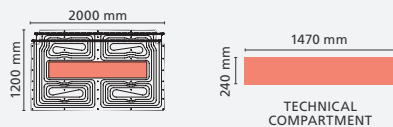
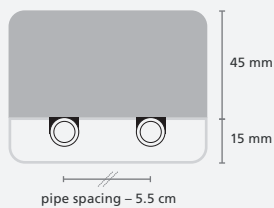
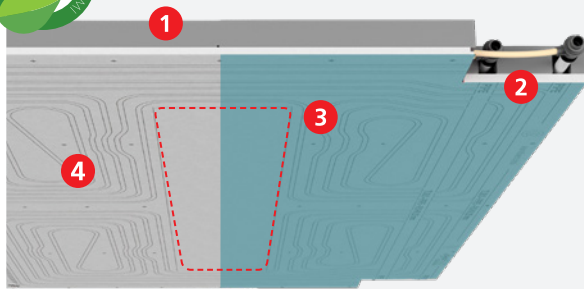


### Leonardo Click&Safe 5.5 | 5.5 HYDRO

1. Sintered EPS insulation sheet with graphite.
2. 5-layer MidiX Plus pipe with integrated C&S fittings.
3. Plasterboard / hydro plasterboard.
4. Laser-etched pipe marking.

<b>Material</b>	EPS graphite + hydro plasterboard panel
$\lambda_D$	0.031 W/mK (EPS)
<b>Thickness</b>	60 mm (45 + 15)
<b>Weight*</b>	~13.5 kg/m <sup>2</sup> (1200 x 2000) / ~13.8 kg/m <sup>2</sup> (600 x 2000) ~13.3 kg/m <sup>2</sup> (1200 x 1000, 600 x 1000)
<b>Hydro weight*</b>	~14.2 kg/m <sup>2</sup> (1200 x 2000) / ~13.9 kg/m <sup>2</sup> (1200 x 1000) / ~14.4 kg/m <sup>2</sup> (600 x 2000)
<b>Pipe</b>	10 x 1.3 mm
<b>Pipe spacing</b>	5.5 cm
<b>Power</b>	<div> <span style="color: red;">●</span> PH: 76.9 W/m<sup>2</sup> Water inlet 40° C, <math>\Delta\theta</math> = 2K           <div style="margin-left: 20px;"> <span style="color: blue;">●</span> PC: 47.7 W/m<sup>2</sup> Water inlet 15° C, <math>\Delta\theta</math> = 2K           </div> </div>

\*specific weight of the panel with water in the pipes

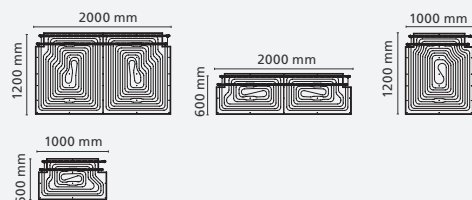
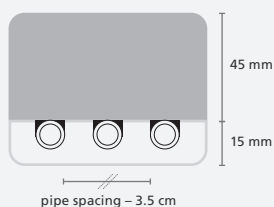
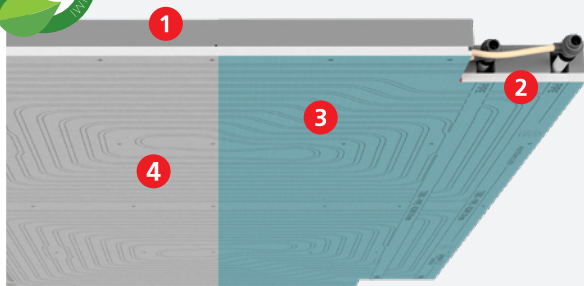


## Leonardo Click&Safe Lux | Lux HYDRO

1. Sintered EPS insulation sheet with graphite.
2. 5-layer MidiX Plus pipe with integrated C&S fittings.
3. Plasterboard / hydro plasterboard.
4. Laser-etched pipe marking.

<b>Material</b>	EPS sintered with graphite
$\lambda_D$	0.031 W/mK (EPS)
<b>Thickness</b>	60 mm (45 + 15)
<b>Weight*</b>	~13.5 kg/m <sup>2</sup> (1200 x 2000 mm)
<b>Hydro weight*</b>	~14.1 kg/m <sup>2</sup> (1200 x 2000 mm)
<b>Pipe</b>	10 x 1.3 mm
<b>Pipe spacing</b>	5.5 cm
<b>Power</b>	● PH: 76.9 W/m <sup>2</sup> Water inlet 40° C, $\Delta\theta = 2K$ ● PC: 47.7 W/m <sup>2</sup> Water inlet 15° C, $\Delta\theta = 2K$

\*specific weight of the panel with water in the pipes



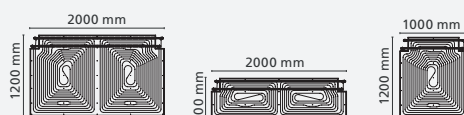
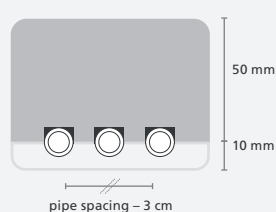
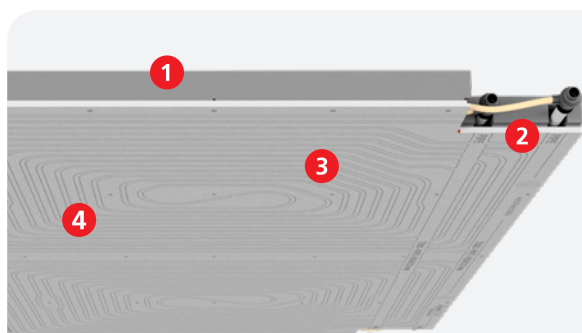
## Leonardo Click&Safe 3.5 | 3.5 HYDRO

1. Sintered EPS insulation sheet with graphite.
2. 5-layer MidiX Plus pipe with integrated C&S fittings.
3. Plasterboard / hydro plasterboard.
4. Laser-etched pipe marking.

<b>Material</b>	EPS sintered with graphite
$\lambda_D$	0.031 W/mK (EPS)
<b>Thickness</b>	60 mm (45 + 15)
<b>Weight*</b>	~13.6 kg/m <sup>2</sup> (1200 x 2000) / ~13.8 kg/m <sup>2</sup> (600 x 2000) ~13.3 kg/m <sup>2</sup> (1200 x 1000, 600 x 1000)
<b>Hydro weight*</b>	~14.1 kg/m <sup>2</sup> (1200 x 2000) / ~14.4 kg/m <sup>2</sup> (600 x 2000) ~13.9 kg/m <sup>2</sup> (1200 x 1000, 600 x 1000)
<b>Pipe</b>	10 x 1.3 mm
<b>Pipe spacing</b>	3.5 cm
<b>Power</b>	● PH: 86.8 W/m <sup>2</sup> Water inlet 39° C, $\Delta\theta = 2K$ ● PC: 61.6 W/m <sup>2</sup> Water inlet 15° C, $\Delta\theta = 2K$

\*specific weight of the panel with water in the pipes



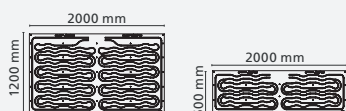
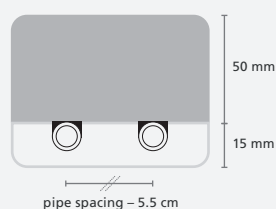
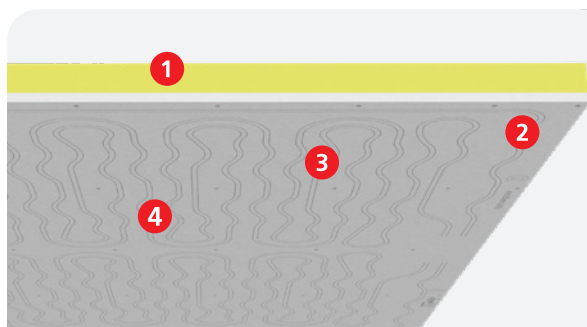


## Leonardo Click&Safe 3.0 PLUS

1. Sintered EPS insulation sheet with graphite.
2. 5-layer MidiX Plus pipe with integrated C&S fittings.
3. Plasterboard panel with Activ'Air® technology.
4. Laser-etched pipe marking.

<b>Material</b>	EPS sintered with graphite
$\lambda_D$	0.031 W/mK (EPS)
<b>Thickness</b>	60 mm (50 + 10)
<b>Weight*</b>	~11.7 kg/m <sup>2</sup> (1200 x 2000, 1200 x 1000) ~12 kg/m <sup>2</sup> (600 x 2000)
<b>Pipe</b>	10 x 1.3 mm
<b>Pipe spacing</b>	3 cm
<b>Power</b>	<div> <span style="color: red;">●</span> PH: 84.9 W/m<sup>2</sup> Water inlet 37° C, <math>\Delta\theta = 2K</math> </div> <div> <span style="color: blue;">●</span> PC: 79 W/m<sup>2</sup> Water inlet 15° C, <math>\Delta\theta = 2K</math> </div>

\*specific weight of the panel with water in the pipes



## Leonardo RF SPECIAL

Classic system panel (not Click&Safe), available on request.

1. High-density fibreglass sheet.
2. 5-layer MidiX Plus pipe.
3. Fibreglass + plasterboard
4. Laser-etched pipe marking.

<b>Material</b>	Fibreglass + plasterboard
$\lambda_D$	0.037 W/mK (insulation)
<b>Thickness</b>	65 mm (50 + 15)
<b>Weight*</b>	~16.1 kg/m <sup>2</sup> (1200 x 2000 mm) ~16.2 kg/m <sup>2</sup> (600 x 2000 mm)
<b>Pipe</b>	10 x 1.3 mm
<b>Pipe spacing</b>	5.5 cm
<b>Power</b>	<div> <span style="color: red;">●</span> PH: 76.9 W/m<sup>2</sup> Water inlet 40° C, <math>\Delta\theta = 2K</math> </div> <div> <span style="color: blue;">●</span> PC: 47.7 W/m<sup>2</sup> Water inlet 15° C, <math>\Delta\theta = 2K</math> </div>

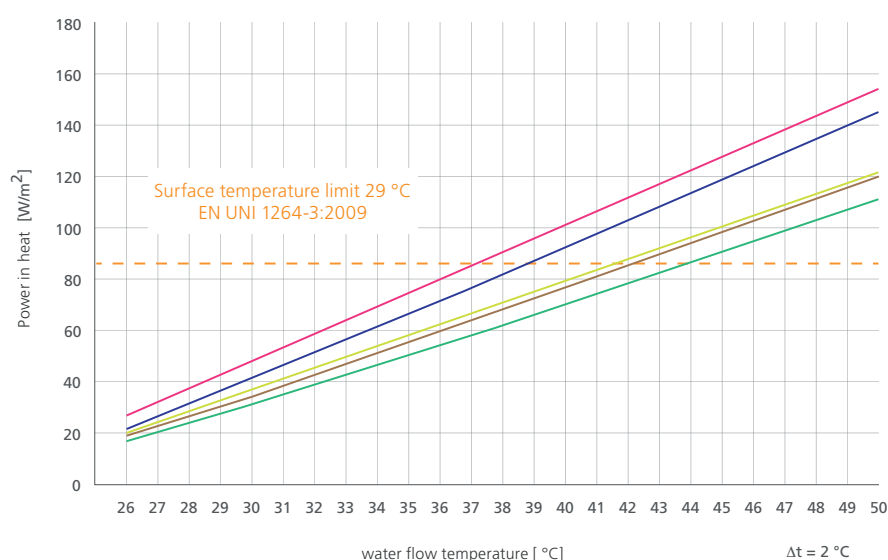
\*specific weight of the panel with water in the pipes

# Ceiling system performance certificates



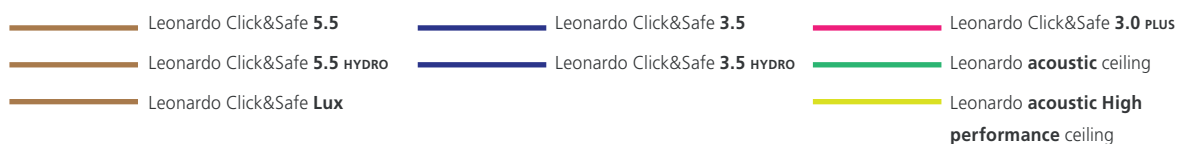
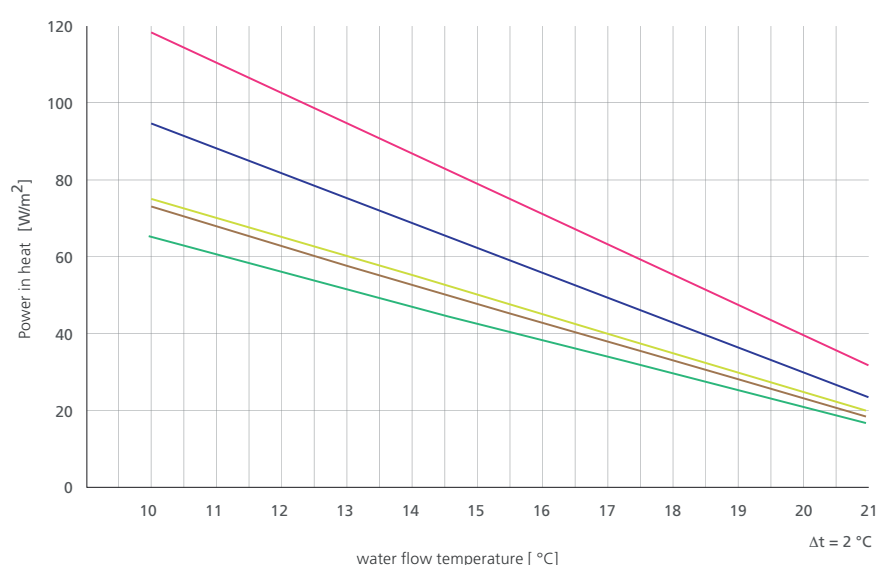
## Heating

Curves from performance certificates according to EN 14037-5:2016 in heating mode



## Cooling

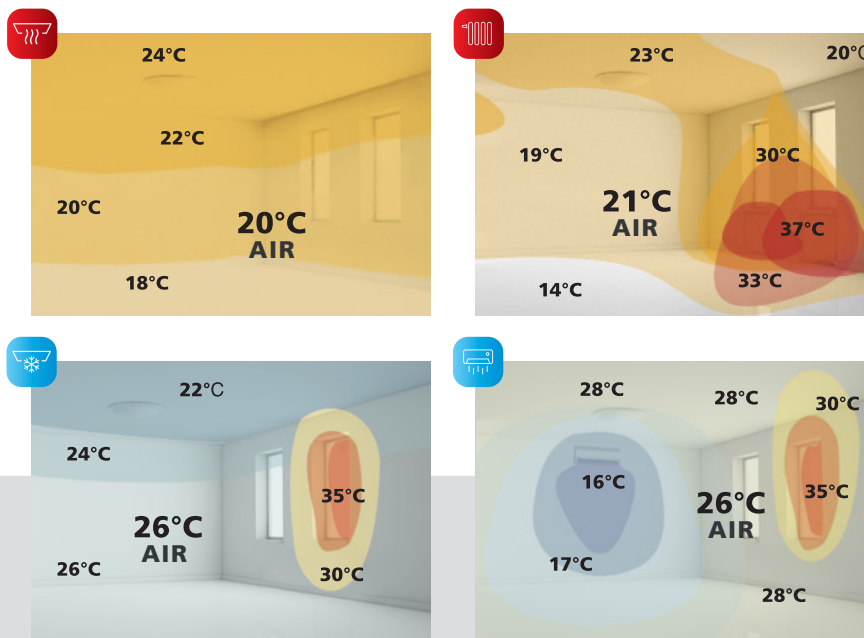
Curves from performance certificates according to EN 14240:2005 in cooling mode



## The **natural** climate

The radiant ceiling heating system transmits heat by radiation. Unlike a radiator, which heats the surrounding air by directing it upwards and generating convective motion, radiant ceiling heating creates a uniform zone of comfort without causing air movement.

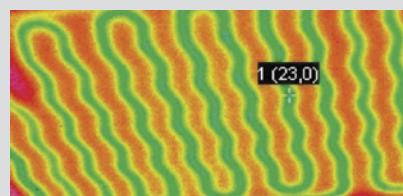
In cold air systems with split or fancoils, air movement is generated that creates stratification and often discomfort to people if the machines are not correctly positioned. The radiant ceiling system cools all the surfaces of the room evenly by discharging energy from the mass and creating the right heat exchange with the people in the room.



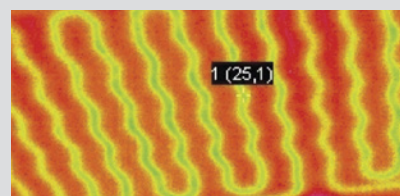
## Low thermal inertia

The diameter and thickness of the pipe used (MidX Plus 10 x 1.3 mm), the pipe integrated into the plasterboard and its special coil geometry, make of Leonardo a high-performance ceiling system that gives the system a low thermal inertia. Below are thermographic photographs of the system Leonardo and its start-up in cooling mode with an average water temperature of 18 °C. Note how after just 20 minutes the system has already arrived at full speed.

5 minutes after start-up



20 minutes after start-up





## Thermal and acoustic comfort in a single solution

The acoustic ceiling is the ideal radiant system to be installed in all environments that require a high degree of thermal and acoustic comfort such as: offices, meeting rooms, auditoriums, shops, etc.

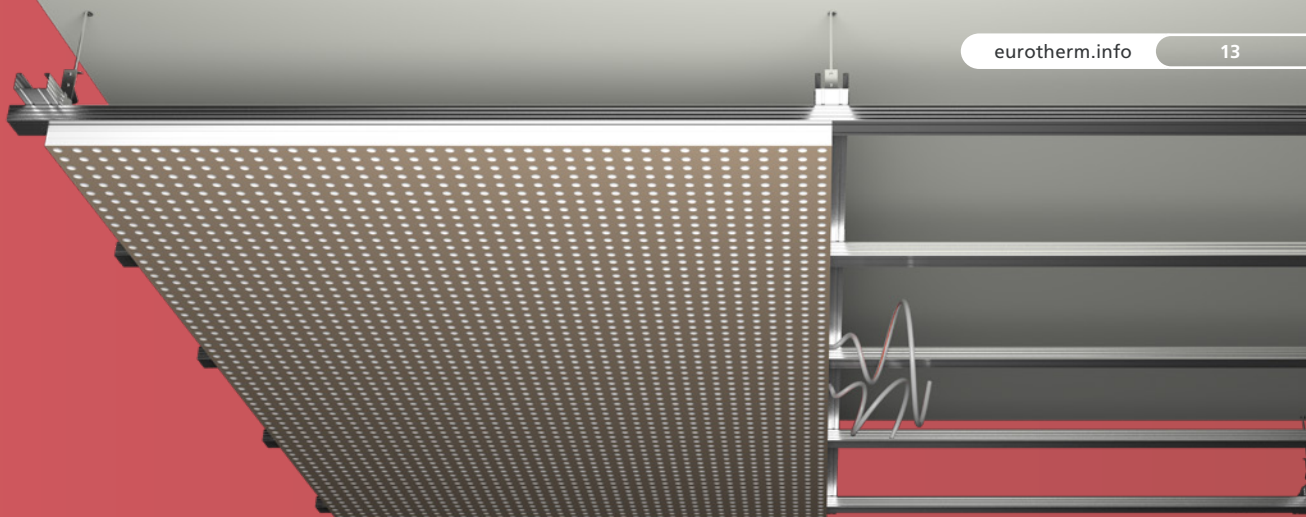
The bagged glass wool provides excellent insulation, while the pipework with a diameter of 10 x 1.3 mm allows for a greater exchange of energy that increases inertia speed and performance. Thanks to the double acoustic plasterboard sheet, this system combines the benefits of the climatic comfort of a radiant ceiling system with the high sound-absorbing power that eliminates all those annoying environmental reverberation phenomena.



### DISCOVER OUR ONLINE CONFIGURATOR

Scan the QR code with your smartphone, configure and calculate the price of your radiant ceiling system in minutes.

Or go directly to the dedicated website [soffittoradiante24.it](http://soffittoradiante24.it)



## Radiant comfort is also **sound-absorbing**



### **Double laminated acoustic sheet**

The system is silent and invisible, plus the double panel is very effective in reducing footfall noise.



### **High performance in every season**

The system designed for year-round comfort according to climatic conditions.



### **Reduction of air pollutants**

The presence of zeolite in gypsum plasterboards promotes the absorption of pollutants.



### **Fast commissioning**

The system reaches the set temperature within minutes, reducing waste and energy expenditure.



### **High sound absorbing power**

The system ensures acoustic comfort. You can say goodbye to environmental reverberation phenomena.



## The **Acoustic** radiant panel

The acoustic ceiling system, thanks to the double acoustic sheet made of perforated plasterboard and acoustic felt, combines the benefits of radiant comfort with a high sound-absorbing power that eliminates all annoying environmental reverberation.

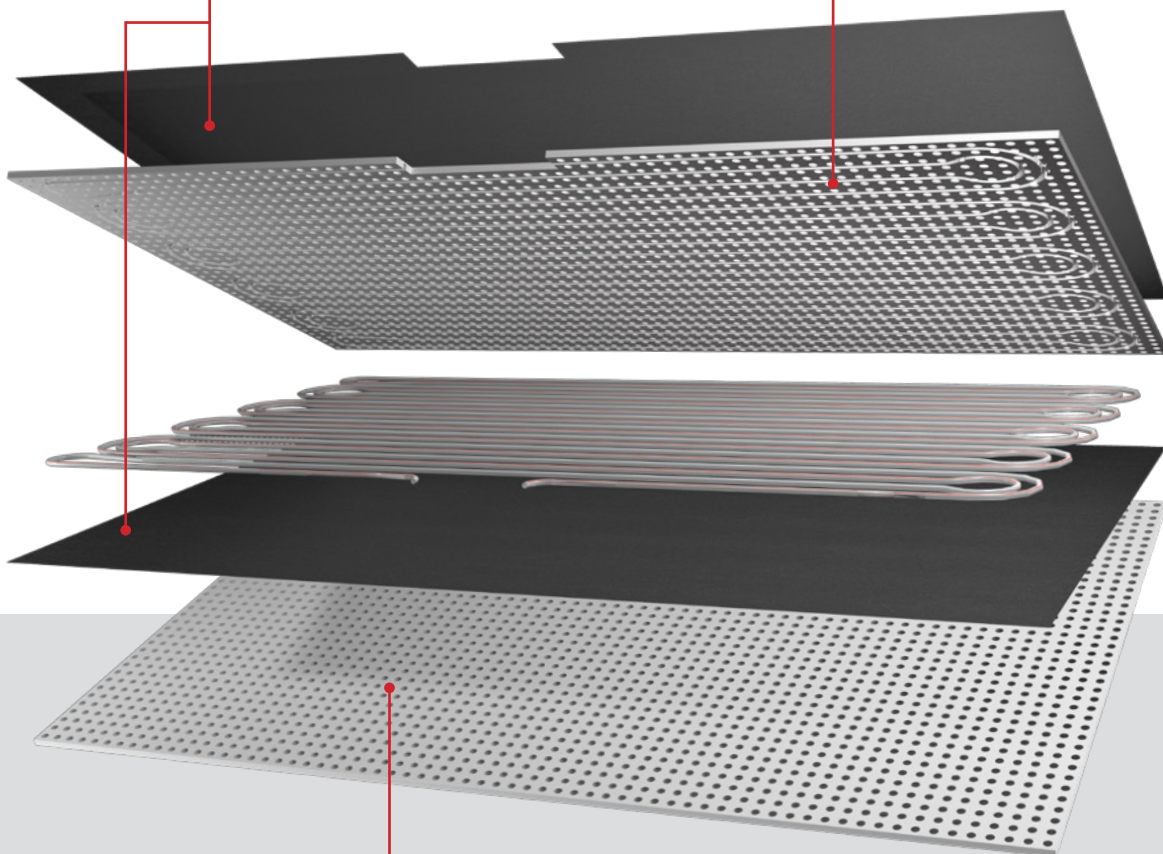
The composition of the panel, made of gypsum and zeolite, also contributes to reducing indoor air pollutant concentrations. The MidiX Plus pipe is arranged in a coil in the thickness of the upper panel. It is ideal for both winter heating and summer cooling.

### Acoustic felt

Felt is a sound-absorbing material, which, thanks to its fairly soft structure, does not reflect sound waves, thus reducing reverberation.

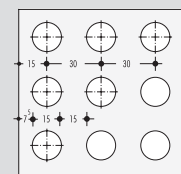
### Acoustic plasterboard sheet

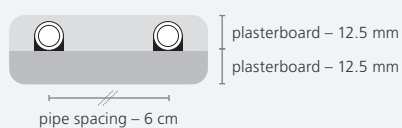
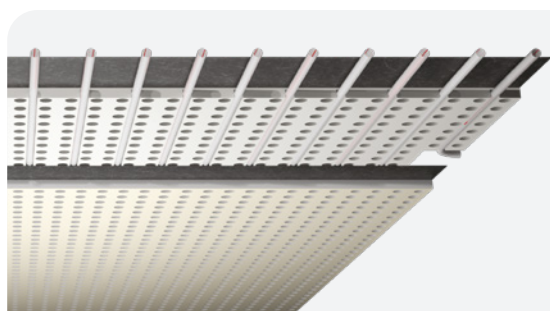
The panel consists of a core of gypsum and zeolite. Zeolite is a natural rock with a honeycomb-like crystalline structure, characterised by a huge number of pores of varying sizes.



### The structure

Its special cage-like structure allows it to capture odours in quantities of 65% of its weight and to develop a positive action on indoor air quality, reducing the concentration of pollutants in rooms with poor ventilation (cigarette smoke, cooking smell, benzene, aromatic hydrocarbons, etc.).





## Leonardo Acoustic

**COMPOSITION:** glass fibre + acoustic plasterboard

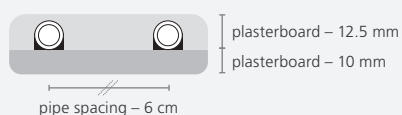
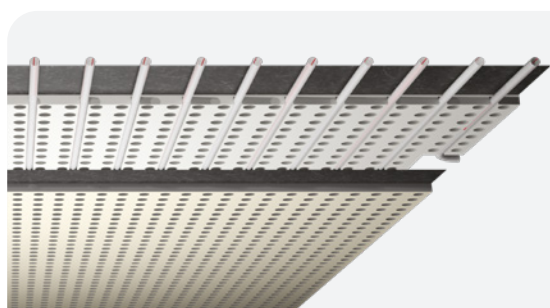
**PIPE:** MidiX Plus 10 x 1.3 mm

**PIPE SPACING:** 6 cm

● PH: 71.1 W/m<sup>2</sup> ● PC: 42.7 W/m<sup>2</sup>



1200 x 1980 x 25 mm



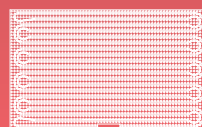
## Leonardo Acoustic High Performance

**COMPOSITION:** fibreglass + acoustic plasterboard with graphite

**PIPE:** MidiX Plus 10 x 1.3 mm

**PIPE SPACING:** 6 cm

● PH: 80 W/m<sup>2</sup> ● PC: 50 W/m<sup>2</sup>



1200 x 1980 x 25 mm

## Acoustic performance

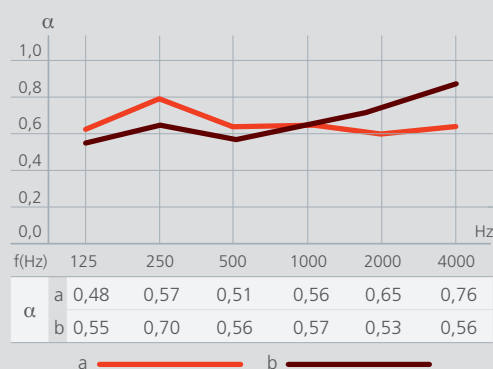
Determination of sound absorption coefficient in reverberation chamber according to UNI EN ISO 354 and UNI EN ISO 11654 at the University of Padua (Industrial Engineering Department).

a – Eurotherm Acoustic Ceiling\*  
b – Single panel\*\*

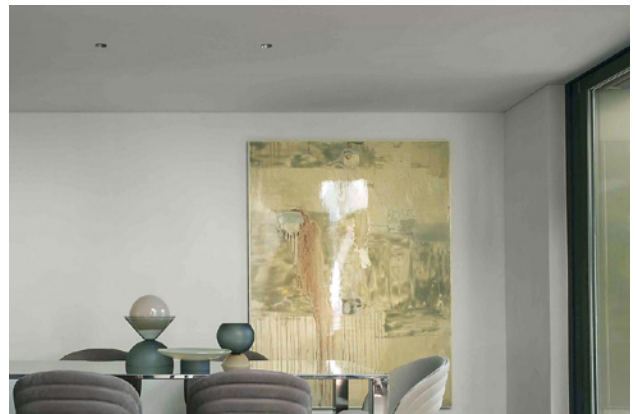
\* radiant ceiling made from two 12.5 mm plasterboard sheets each with 15 mm diameter circular perforation with 30 mm centre distance with pipework inserted. Glass fibre bagged cavity, 50 mm thick, density 14 kg/m<sup>3</sup> laid on the back of the panel and air 225 mm

\*\* plasterboard sheet with circular perforation 15/30 thickness 12.5 mm. Packed glass fibre cavity, thickness 50 mm, density 14 kg/m<sup>3</sup> laid on the back of the panel and air 225 mm

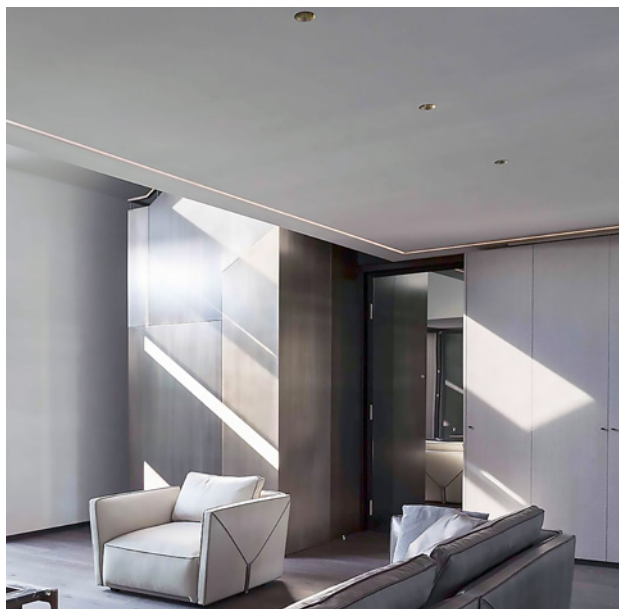
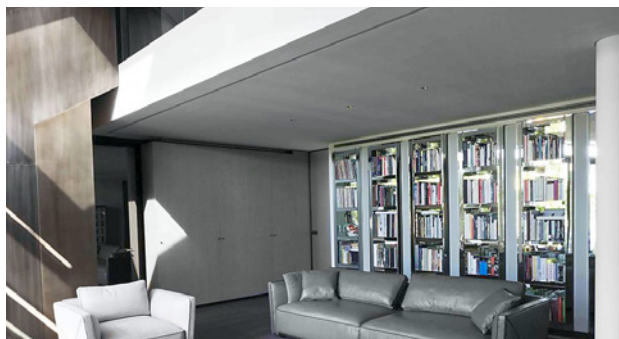
Sound absorption class – D











# The SAPP® system

The metal ceiling SAPP® (Smart Acoustic Passive Power) is the solution for those who seek the highest standards of sustainability and eco-friendliness, but accept no compromise on acoustic and thermal comfort. The metal ceiling SAPP® lends itself to any creative architectural solution, thanks to its unique and harmonious open structure.

**HIGH DESIGN  
AESTHETICS**

**LOW ENERGY  
CONSUMPTION**

**HIGH EFFICIENCY  
ALL YEAR ROUND**

**OPTIMAL ACOUSTIC  
PERFORMANCE**



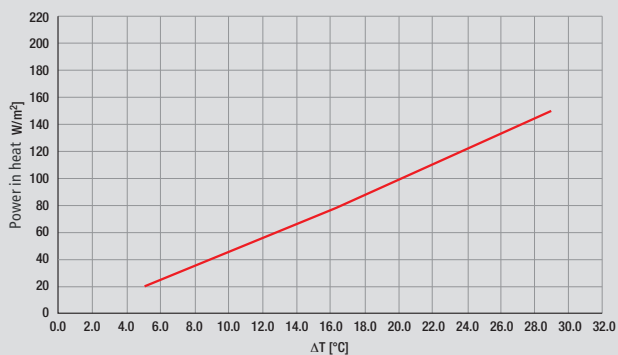
The ceiling system works with heat pumps, geothermal and other environmentally friendly sources that significantly reduce both energy waste and environmentally harmful emissions. Only steel was used in its construction, thus avoiding energy-consuming and polluting processes.

## Heating output



### WINTER

Curves from performance certificates according to UNI EN 14037-5:2016 in heating.



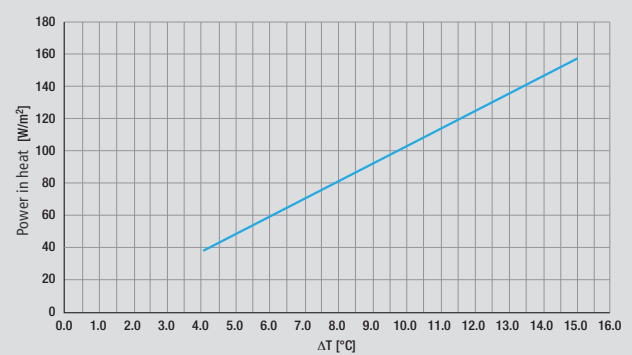
ΔT between mean water temperature and reference room temperature = 15 K **71 W/m²** (in accordance with EN14037)

## Cooling performance



### SUMMER

Curves from yield certificates according to UNI EN 14037-5:2016 in cooling.



ΔT between reference ambient temperature and average water temperature = 10 K **103 W/m²** (in accordance with EN14240)



# The **EASY-KLIMA®** system

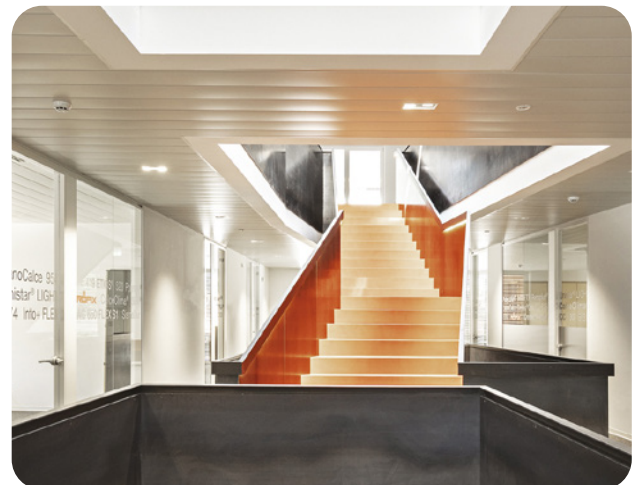
Easy installation and maintenance-free operation make EASY-KLIMA® the versatile and economical ceiling that contributes to an extremely comfortable room climate and acoustics. The numbers speak for themselves: more than one million square metres of metal ceiling already installed.

**LOW INSTALLATION  
HEIGHT**

**OPTIMAL ACOUSTIC  
PERFORMANCE**

**SUITABLE FOR  
RENOVATIONS**

**CONTAINED COSTS**



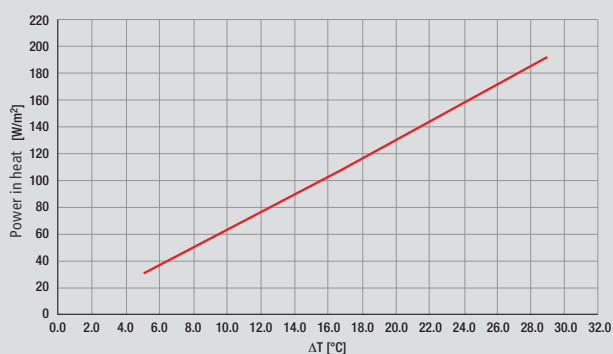
The ceiling system works with heat pumps, geothermal and other environmentally friendly sources that significantly reduce both energy waste and environmentally harmful emissions. Only steel was used in its construction, thus avoiding energy-consuming and polluting processes.

## Heating output



### WINTER

Curves from performance certificates according to UNI EN 14037-5:2016 in heating.



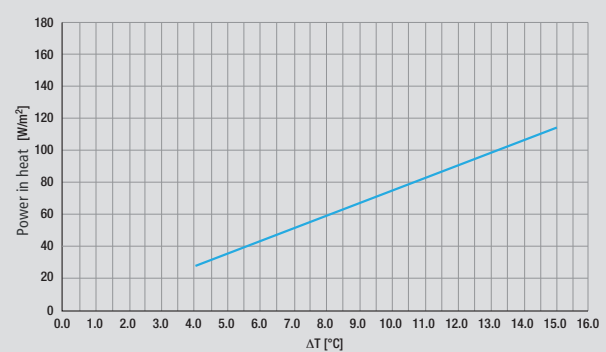
ΔT between mean water temperature and reference room temperature = 15 K **96 W/m²** (in accordance with EN14037)

## Cooling performance



### SUMMER

Curves from performance certificates according to UNI EN 14240:2005 in cooling.



ΔT between reference ambient temperature and average water temperature = 10 K **74 W/m²** (according to EN14240)



More quality for the  
indoor **climate**.  
More value for  
**well-being**.

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Art. 9290010141 REV.01

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radiant comfort systems



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