

CEILING PROFILE

NeoMega



HEATING / COOLING CEILING SYSTEM

It is ideal for achieving thermal comfort all year round. The modified ceiling profile has a special surface for radiating heat into the room.

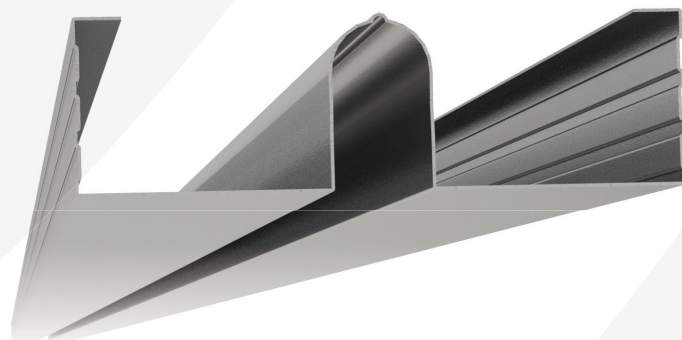
Simple installation of the plasterboard ceiling and low construction height from 6 cm allows the use of ceiling heating and cooling for new construction and reconstruction.

HOW CEILING HEATING WORKS

Ceiling heating works on the principle of radiant heat similar to the sun. All areas in the room are heated directly or indirectly by the reflection of heat waves, including the floor.

Thanks to the large radiating surface, the ceiling heating guarantees the maintenance of an uniform temperature level in the interior space with minimal losses of heating power.

One of the advantages of ceiling heating is a relatively fast thermal response of 5-60 minutes and consistent temperature without fluctuations throughout the day.



HEATS IN WINTER



COOLS IN SUMMER

BENEFITS OF CEILING HEATING / COOLING



LOW OPERATING COSTS

They are caused due to a lower heating water temperature of 20-35 °C, which is less than for heating radiators.



THERMAL COMFORT ALL YEAR ROUND

In summer you switch the heat pump to cooling, in winter to heating.



SUITABLE FOR ALLERGICS

Virtually zero air movement and minimal swirling of dust particles.



IT DOES NOT DISTURB THE APPEARANCE OF THE ROOM

Free interior layout for the best placement of furniture.



INSTALLATION ON SLOPED CEILINGS

Installation of ceiling profiles on flat and sloping ceilings not only for attic installations



MOLD PREVENTION

Ceiling heating heats even damp walls in the room and thus acts against mold.

THE CEILING HEATING AND COOLING SYSTEM CONSISTS OF 3 PARTS:

1. Special profiles with a standard length of 4 lm for PEX / AL / PEX 16/2 pipes
2. Common plasterboard construction
3. Distributor which sets the water flow and its connection to the heat source (heat pump)

CONSTRUCTION WEIGHT

The weight of the whole structure depends mainly on the type of plasterboard design. The boards weigh approximately 10 kg / m² (depending on the board design, number of screws, grouting and possibly the plaster layer).

If the plasterboard construction is to be hung well, add another 7-10 kg to the given weight.

Standard profile meter - weight approx	1.00 kg
Standard pipe meter - weight approx	0.10 kg
Water volume in a standard meter of pipe - weight approx	0.14 kg

EXAMPLE OF CALCULATING THE WEIGHT OF A SQUARE METER

Profile spacing	125 mm	150 mm	175 mm
Plasterboard 12.5 mm	10.00 kg	10.00 kg	10.00 kg
Plasterboard	7.50 bm	6.60 bm	5.7 bm
Pipe 16/2	9.00 bm	8.00 bm	7.00 bm
Water volume in the pipe / m ²	1.26 kg	1.12 kg	0.98 kg
A total approx 1 m² / kg	23 kg	21 kg	19 kg

SUMMARY OF HEATING AND COOLING CAPACITIES

Profile spacing	Cover	Cooling Δt : 8K	Heating Δt : 10K	Heating Δt : 15K	Heating Δt : 20K
125 mm	none	57.2 W	40.0 W	61.2 W	82.3 W
125 mm	SDK 12.5 mm	52.0 W	36.3 W	55.6 W	74.8 W
250 mm	none	37.4 W	26.1 W	40.0 W	53.8 W
250 mm	SDK 12,5 mm	34.0 W	23.7 W	36.3 W	48.9 W

The measurement is based on the standard: DIN EN 14240, DIN 4715, DIN 14037