

# VARME KILDEN

Steel radiant panels

What are the advantages of VARME KILDEN compared to traditional heaters?



VARME  
KILDEN

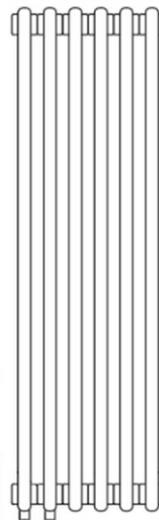


Savings of up to 25%



.....but  
not only!

Traditional  
Heater



**They are more efficient:**

The traditional radiators are designed to emit most of their energy via convection, the ratio between convection and radiation is on average 70/30.

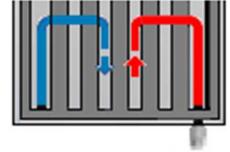
The plates Varme Kilden have been designed to emit most of their energy by means of irradiation, the ratio between convection and radiation is on average 20/80, and this is a very important factor for their efficiency

Because the energy is exchanged by convection to the second power, while the radiation is traded to the fourth power is intuitive that those who prevalence of radiant emission system is the most efficient.

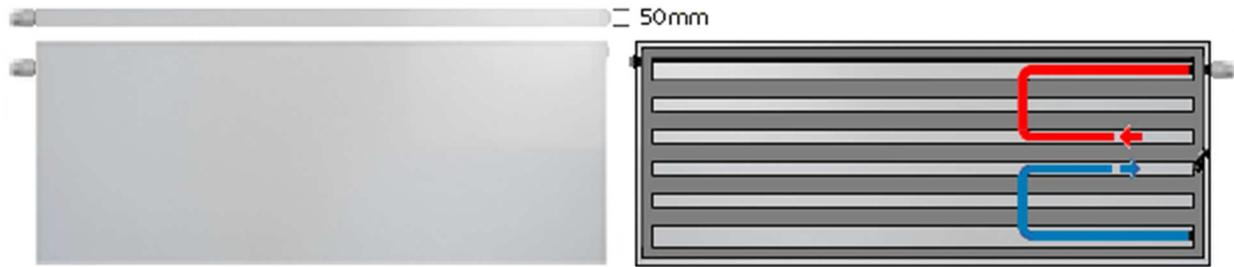


**Easy to install:**

Because they are connected to the system thanks to flexible pipes, plates Varme Kilden not have center distances power from having to comply, this makes it extremely easy management of the shipyard and makes them unique in the replacement of old heaters being able to replace any old heater.



Thanks to their ease of installation, it is ideal for new homes and for replacement in existing ones, without the need for costly on the system, thus allowing the upgrading to high standards to enable them to meet standards relating to energy certification;

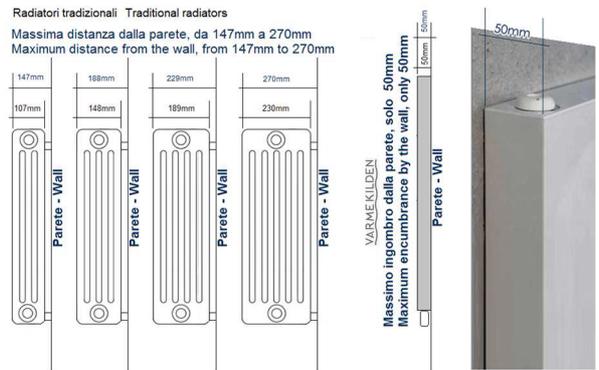


**They are totally different**



They are totally different from normal heaters, both in heat distribution and in aesthetic terms, in fact they are not only efficient and effective but also beautiful and can be customized in thousands of ways.

Thanks to a footprint of about 50mm, do not steal floor space making it even more spacious our homes



The technology also allows you to install the Varme Kilden radiant plates where no traditional heater can be installed, or near the ceiling or above the doors

Any traditional radiator cannot be installed in a place far away from the floor



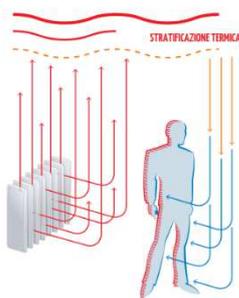
The plate VarME Kilden is a new type of heater developed exclusively by the Italian company E2S3 that for over 12 years works searching the natural interactions that favor the maximum thermal comfort situation for the man, in full respect for the environment. In this context, there has been the unequivocal confirmation that the parameters that most affect the thermal comfort are the following:

- ✚ Surface temperature perimeter;
- ✚ air temperature;
- ✚ ambient relative humidity;
- ✚ air speed.

By intervening on the first of these parameters, the importance of which is well known, the plates VARME Kilden offering an innovative way to heat ensuring high energy savings and a qualitative leap in terms of livability and comfort!

**Design concept:** the starting point is based on person's health and comfort. Environment friendly, low-emission, energy-efficient, elegant and beautiful.

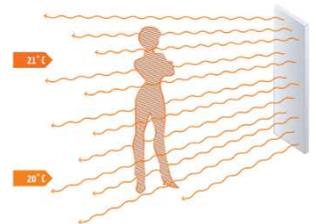
Fundamental principle of our technology is to minimize the exchange by convection while promoting the exchange of energy by radiation.



**What is convection** Heating systems through convection will mostly warm up the air that will have to be changed with external air, causing a loss of energy .

**What is radiation:** any material, when heated, transmits energy as heat, mainly in three ways, Conduction, Convection and Radiation. The radiation is the system used by us to transmit energy in the form of heat.

**Why to choose radiation it is the better?** The problems of convection heating systems are negative management of the heat, with waste and dispersion

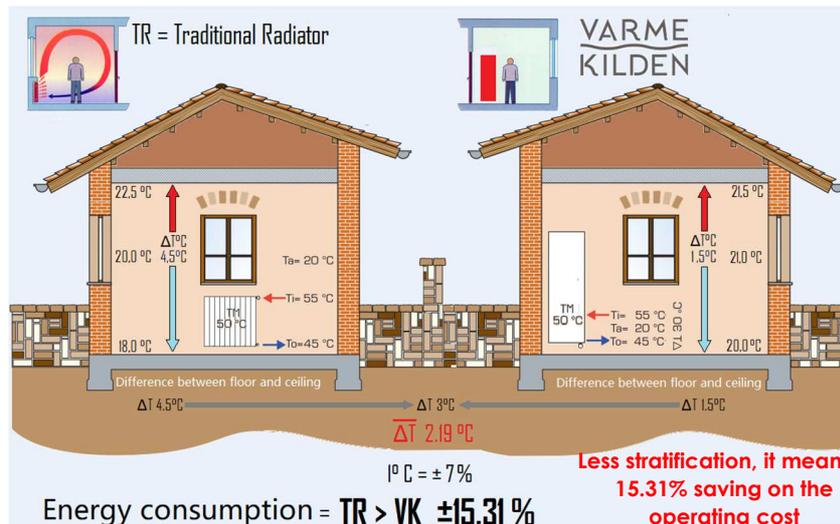


The problems of convection heating systems are negative management of the heat, with waste and dispersion.

The solution provided by VARME KILDEN radiating technology is able to give the best result at the least possible energetic cost.

Heating through radiation is able to limit unwanted side effects due to an excessive air temperature: avoiding economic waste caused by thermal stratification, that is: the air closer to the ceiling is much warmer than the air close to the floor.

There is further economic waste caused by the need to open a window in order keep the ambience comfortable with new fresh air from outside.



Furthermore, the warm air in the upper level of the room can cause condensation in the colder areas of the building/room (thermal bridge), facilitating the proliferation of molds

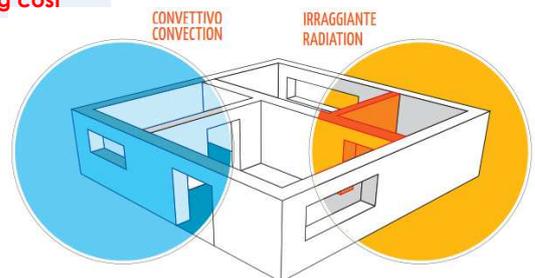
Restricting the thermal stratification to 0.5°C per meter for the height of the room; this means that on high rooms 3 mt you will have a maximum difference between floor and ceiling of 1.5 °C against about 4.5 °C of the normal convective radiators. If we are to get cold because heating the ceiling? So why heat up the air when it's your body that needs comfort?

Heating systems through radiation will not warm up the air, on

the contrary the heat will be transferred to the objects and internal walls which in their turn will return the heat to human bodies and other structures when needed.

The air is warmed naturally by the simple convective motion triggered by the surfaces that have been heated by the irradiation

- The convective system favors the heating of the air.
- Our radiant system favors the heating of walls, furnishings and people.





For more information visit our institutional website [www.varmekilden.it](http://www.varmekilden.it) and our technical / commercial web site [www.varmekilden.org](http://www.varmekilden.org) where you can see hundreds of images of VARME KILDEN radiating panels installed in thousands of homes.

**VARME  
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Official and Exclusive Distributor

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