INFRA LINE
INFRARED ELECTRIC RADIANT PANELS

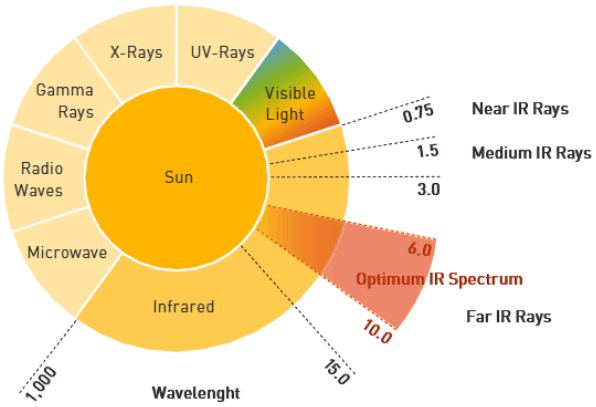
The INFRA panel line features the highest level of efficiency for maximum savings on energy costs

radiant: inspired by nature

Only the warm rays of the sun have allowed life on our planet. The heat we feel in sunlight, but also in front of a fireplace or stove, is infrared radiation. On a winter's day, the cold air doesn't bother us as long as the warm rays of the sun reach us directly.

technology

The panels in the INFRA line use the principle of solar radiation. The sun is the best heating system in the world, its rays are infrared rays. The best radiant panel is the panel that produces the largest possible amount of infrared rays.



There are panels on the market that emit only 25% of infrared rays; our panels have a very high efficiency (about 81% which is the highest achievable value) and actually work like the sun.

effects

Human well-being mainly depends on the air temperature and the temperature of the surrounding surfaces (walls, floor, ceiling).
With the INFRA line panels
the same thermal comfort is felt at much lower ambient temperatures than with a traditional system;
in literature it is said that with radiant heat one gains 3 °C, i.e. one has the same sensation of heat perceived at ambient temperatures that are 3 °C lower, this translates into considerable energy savings.

Conclusion:
With the INFRA line panels it is possible to create perfect comfort which is considerably healthier and more convenient than heating the air.

> dry walls and without mould or condensation
> humidity increase
> **no** dust circulation
> **imp**rovement to blood circulation
> **stre**ngthening of the immune system

perfect comfort

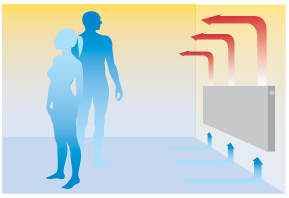
With the INFRA line panels it is possible to heat only what you need and only when you need it.

Principle of conventional heating systems

Conventional radiators work on the convection principle. They give off their heat to the cold air near the ground. As a result of the heating, the air rises and spreads out from the top of the room and finally falls down the cold wall again. The result is the typical dry air ventilation that stirs up dust and bacteria and gives you a warm head and cool feet.

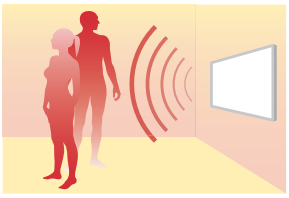
Conventional heating systems are expensive to purchase, require expensive installation, an elaborate piping system, and often additional fuel storage space as well. Due to their size, they take away valuable space from the walls of the rooms.

convection effect



Conventional radiators primarily heat the surrounding air, resulting in upward ventilation of the air. The warm air stays on the ceiling and the heat will be distributed unevenly.

radiant effect



With the INFRA line panels, the radiant heat will be uniformly distributed in the room and absorbed by all the masses present within that room: furnishings, objects and walls. This guarantees more comfort and a pleasant sensation of diffused heat.

advantages

cheap to buy

The INFRA line panels are up to 50% cheaper than conventional heating systems. Highest quality components are assembled to produce a heating element with virtually unlimited life.

very easy to install

They don't require expensive installation work, one power outlet is enough. They are installed with simple screws to the wall or ceiling. Thanks to their elegant design, just 2.5 centimeters thick, they integrate harmoniously into any living area.

easy to use

Together with the optional room thermostats, the radiant panels provide perfect heat according to your needs. Even in a single room, several thermal comfort zones can be generated.

cheap to manage

The panels convert 100% of the energy consumed into comfortable warmth. They heat up quickly and uniformly, they have no service or maintenance costs over time.

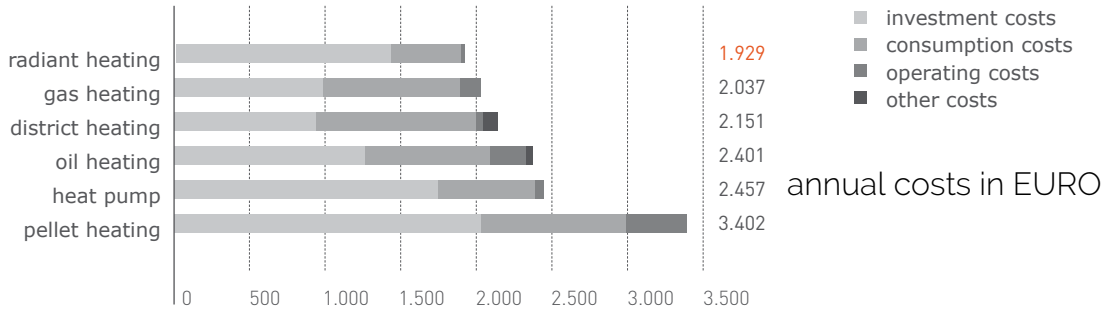
ideal for comfortable and healthy room heating

Thanks to the introduction of silver and copper nanoparticles, the panels guarantee dust-free and bacteria-free air, making you forget the unpleasant dry breeze of convection heating. Mould-free masonry and completely silent. The temperature is spread evenly throughout the room.

eco-friendly

En-Tech srl is attentive and proactive to environmental policies, which is why INFRA panels in combination with photovoltaic or clean energy systems are a perfect contribution to protect resources and the environment. None of the components used include metals (such as lead) or PVC that are harmful to the environment.

comparison – annual costs for different heating systems



Base: Low energy building
Area: 130 m2
Residents: 3 people

Capital expenditures are calculated by allocating the total investment cost over the lifetime of the heating system. The calculation was carried out taking into account the interest rate with the annuity method (according to VDI 2067).

application

range of application

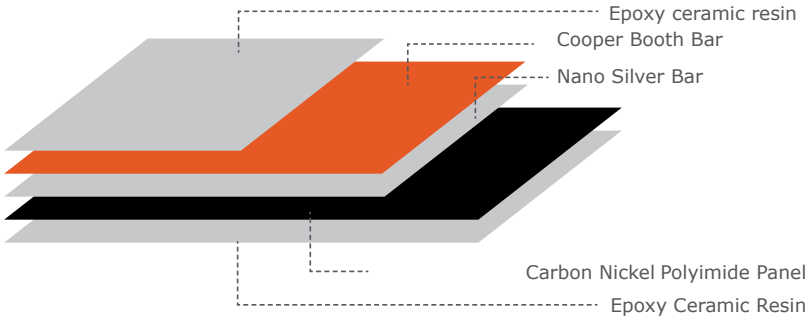
PRIMARY HEATING
The only source of heating in a building.

INTEGRATION
When the existing system is unsatisfactory.

ISLAND HEATING
When there is the need to create heat islands: for example in industrial warehouses, sometimes it is unnecessary to heat the entire warehouse but just the areas where the operators are stationed.

technology

Leading technology on infrared heating panels. We guarantee maximum efficiency and the lowest possible energy consumption.



Unlike most radiant panels that simply use carbon, the INFRA line panels are based on an integrated panel in CARBON GRAPHITE POLYAMIDE, a new electrical conductor with a very high efficiency rate, together with silver and copper nanoparticles to improve the ionization of the air and the reduction of the bacterial concentration.

Furthermore, thanks to the patented Reflector technology, 100% of the infrared rays generated are directed towards the front side of the panel.

The electrical conductor in carbon graphite polyamide guarantees extraordinary efficiency and durability over time.

Each single panel has on the back a template that allows easy installation both on the wall and on the ceiling. All fixing systems are included.

certifications

SEIBERSDORF LABORATORIES

tecnology

safety

Each panel has five built-in safety sensors to protect the panel from overheating.

The radiant heating panels in the INFRA line are CE, GS compliant and TUV certified.

They are IP44 certified

INFRA Line

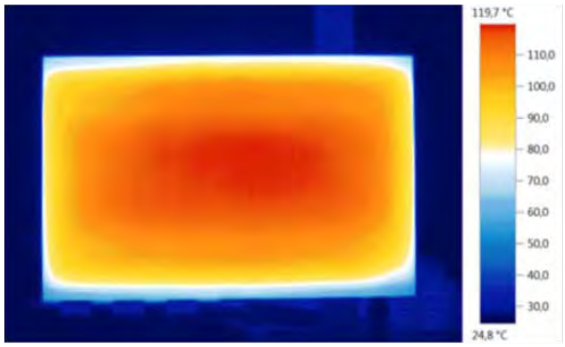
Technology analysed at the Seibersdorf Austria Laboratories.

The result: 18% better performance than the best-known European brand. This means that the panels produce around 18% more infrared waves than the best European panel manufacturer.

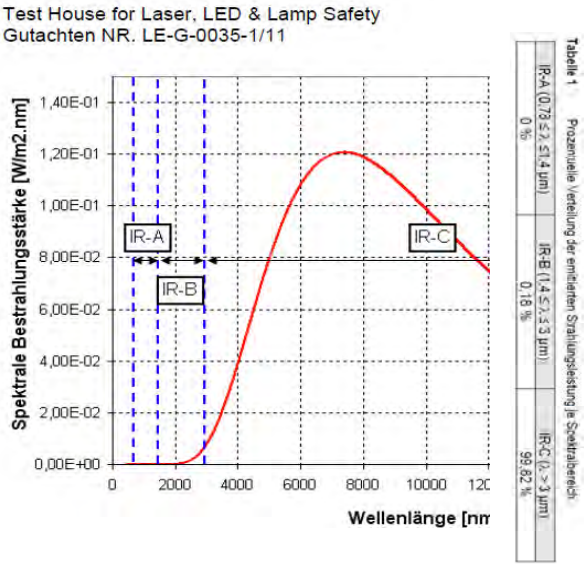
The most important result for an infrared panel is that it produces the highest possible percentage of infrared and the lowest possible percentage of normal convection heat. If an infrared panel has a low efficiency percentage it is not an infrared heater but a convection radiator.

This technology **provides us with the following advantages:**

>output performance on average 20% higher than the best products on the national and international market
>uniform surface temperature over the entire surface
>maximum infrared output power
>safe and resistant panels



VCIR testato presso SEIBERSDORF AUSTRIA LABORATORIES 08/2013



models

All the standard panels in the INFRA line are complete and ready to use panels, just supply them with mains voltage: 220 V- 5O Hz. All necessary instructions and tools are included: CAN BE FITTED IN JUST 5 MINUTES

white aluminium panels, with frame

INFRA W.	dimensions L x W x H (cm)	weight (kg)	power (W)	fitting
300	30 x 90 x 2.5	3,0	300	wall/ceiling
400	30x120x2.5	5,5	400	wall/ceiling
400	60x60x2.5	5,5	400	wall/ceiling
600	60x90x2.5	6,5	600	wall/ceiling
800	60x120x2.5	7,5	800	wall/ceiling

All information is subject to change

The panels in the INFRA W. line can be installed both on the wall and on the ceiling.

models

mirror panels, no frame

INFRA M	dimensions L x W x H (cm)	weight (kg)	power (W)	fitting
400	60 x 60 x 2.5	6.0	400	wall
600	60 x 90 x 2.5	9.0	600	wall
800	60 x 120 x 2.5	14.0	800	wall

black or white glass panels, without frame

INFRA G	dimensions L x W x H (cm)	weight (kg)	power (W)	fitting
400	60 x 60 x 2.5	6.0	400	wall
600	60 x 90 x 2.5	9.0	600	wall
800	60 x 120 x 2.5	14.0	800	wall

All information is subject to change

accessories

The INFRA line panels can be controlled by any room thermostat

Towel warmer support

The towel rail can be used for drying and using the infrared INFRA panel in bathrooms. Each panel can be fitted with a maximum of 2 towel rails (applicable to all aluminium models with 60 cm sides).

PLUG-IN thermostat

This simple plug-in thermostat can be used to control room temperature and create a comfortable climate.

Wireless thermostat

This simple thermostat contains a receiver and a transmitter. The main advantage of this thermostat is that it can be programmed and managed remotely via the App.

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INFRA

radiant heating panels

certifications

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