

PRODUCT CATALOG



#### Principle of infrared heating

Whereas in convection heating\* the air is warmed by a convector which then transfers heat as it flows over the objects that are to be heated (walls, furniture),

Radiant heating\* panels transfer heat mainly through radiant energy. Upon encountering objects (walls, furniture, floors), radiant energy is partially reflected (approx. 15 %) while the majority (approx. 85 %) is absorbed by the objects. This radiant energy is converted to heating energy as it raises the temperature of the objects, which then transfer heat to the cooler air by convection.

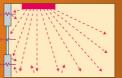
Thanks to unique Silicating technology, high temperature radiant panels reach a high emissivity of up to 0.98 mu.



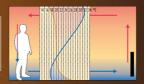
### i The principles mentioned create the following advantages:

- 1. The surface of the radiant panel generates a heat flow whose spectrum is in the wavelength not greater than 5 micrometers and is thus absorbed to a large degree by the human body: people are therefore heated in a manner similar to the objects in the room.
- 2. When the radiant heat flow increases the temperature of the objects in the room to 20–22 °C, comfort conditions are achieved even with air temperatures of 18–19°C which can lead to energy savings of 18–24 %.
- 3. Radiant panels permit the temperature distribution in a room to be more vertically balanced giving a 1-2 degree difference between the floor and the ceiling (for convection heating the difference is given as 1 °C per metre of height, 30–50 cm of height).
- **4.** There is lower circulation of dust therefore dust particles due to Brownian motion, thus reducing the risk of illnesses – asthma, mucous membrane infection, etc.
- 5. Increased wall temperatures mean a lower possibility of surface condensation, although the humidity in the room is not lowered.
- 6. Glass is not "transparent" (we might say "transthermant") when it comes to radiation with wavelengths over 3 and thus the radiant flow is not lost through windowpanes.











THERMONORDIC system

Convection Heating



<sup>\*</sup> Convectional heat uses air convection currents circulating through the body of the appliance, and across a heating element.

### 1 Ecora IR Panels "Design was at the first place"

Heating panel ECORA is made for ceiling heating or tempering. It can be used as a primary or supplementary heating to the already existing system. Heating panels ECORA have been used successfully in following premises:

- In public buildings (kindergartens, schools, cafes, bars, restaurants, etc.)
- In commercial premises (shops, kiosks)
- In living premises (apartments, houses)
- In offices



# SIZE & POWER ALTERNATIVES

Model	Size	Power
TPS 200	510 x 510 x 30 mm	200 W
TPS 300	610 x 610 x 30 mm	300 W
TPS 400	860 x 510 x 30 mm	400 W
TPS 500	950 x 610 x 30 mm	500 W
TPS 650	1210 x 610 x 30 mm	650 W
TPS 1000	1810 x 610 x 30 mm	1000 W

Infrared heaters ECORA are made by unique technology that not only gives warmth, but also has a therapeutic effect on the human body and on environment.









### 02 IR Thermo S "Ideal in it's configuration"

ST Thermo high-temperature radiant panels are intended primarily for the heating of industrial, storage and agricultural structures, although they can be used within any structure with a ceiling height of 3.5 m to 10 m

Class I. Rating IP 44. Basic

Colour: white (RAL 9002).











## SIZE & POWER ALTERNATIVES

Model	Size	Power
ST 12	1550 x 150 x 60 mm	1200 W
ST 24	1550 x 250 x 60 mm	2400 W
ST 36	1550 x 350 x 60 mm	3600 W



### Terrace Heater "Comfort for cold days and nights when the Sun is not shining"

Terrace Heaters are designed for the zonal heating of winter gardens, enclosed and roofed balconies and terraces, garden tents, churches, etc. – i.e., applications where they are protected against direct contact with the effects of the weather.

The min. height at which such panels can be installed is 1.8 m above the floor (the lower edge of the panel); for panels installed on the ceiling there must be a min. gap of 30 cm between the ceiling and the upper edge of the panel. 2 m cold lead with plug. Rating IP 44.



#### **SIZE & POWER ALTERNATIVES**

Model	Size	Power
TH 1000	1080 x 150 x 45 mm	1000 W
TH 1500	1580 x 610 x 30 mm	1500 W









### O4 Carbon Cristal Panel "Green Energy and Save cost"

#### Carbon Panel designed for those who like the art.

All heating material are scattered evenly on the panel so that panels can heat in a large and balanced situation.

Thermostat can control room temperature automatically.

Low install invest and operating cost.

#### SIZE & POWER ALTERNATIVES

Model	Termostat	Power
C-Crystal H6	Yes	600 W
C-Crystal H8	Yes	800 W
C-Crystal H9	Yes	900 W
C-Crystal H10	Yes	1000 W
C-Crystal H11	Yes	1100 W
C-Crystal H15	Yes	1500 W







- It will stop working when room temperature reached rated degree.

  Low install invest and operating cost.
- + Products service pictures can be designed according to costumers.









### 05 Bathroom IR Panel "Aluminium frame and isulation"





The NOMATERM unit is put into the aluminum frame and from the back side it is protected by the insulation material covered with aluminum foil and aluminum plate. There is inner thermostat built-in TPK to prevent overheating in case that something falls onto heating element.

### Newton 06 "Solve any lime scale problem"

Newton® is the name of the revolutionary system to solve any lime scale problem once and for all...

The new ecological anti lime scale that you install yourself, the only one that makes a revolution on the old systems because it acts on the lime scale crumbling it.







You install it yourself it does not require electrical current, therefore saving on detergents, softeners, electrical energy and maintenance.



