

Z024DV041GB/1500/02

INDUSTRIAL RADIANT HEATING

**VAPORAD**

STEAM RADIANT PANELS

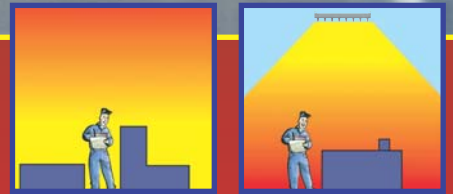


**FRACCARO**  
OFFICINE TERMOTECNICHE

VAPORAD steam radiant panels are particularly indicated for heating industrial buildings, tertiary environments, expositions, schools, and gyms. They consist of varnished steel panels and a group of pipes, with diameter of 28 mm. The standard colour is RAL9002 light grey, optional colours are RAL7038 dark grey and RAL9010 white; other colours can be provided upon specific request.



Heat stratification: comparison between radiant heating and hot air heating



### Radiation

The VAPORAD steam radiant panels use the concept of heat transmission by means of radiation. This technique is very advantageous when heating large masses of air is not necessary, therefore there is energy saving and no heat stratification as there is no convection. The environment is much healthier because of no dust movement.

### ADVANTAGES

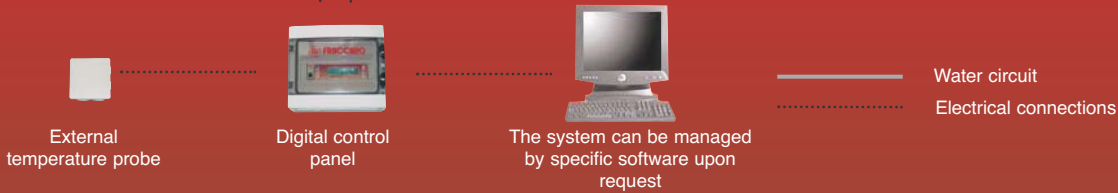
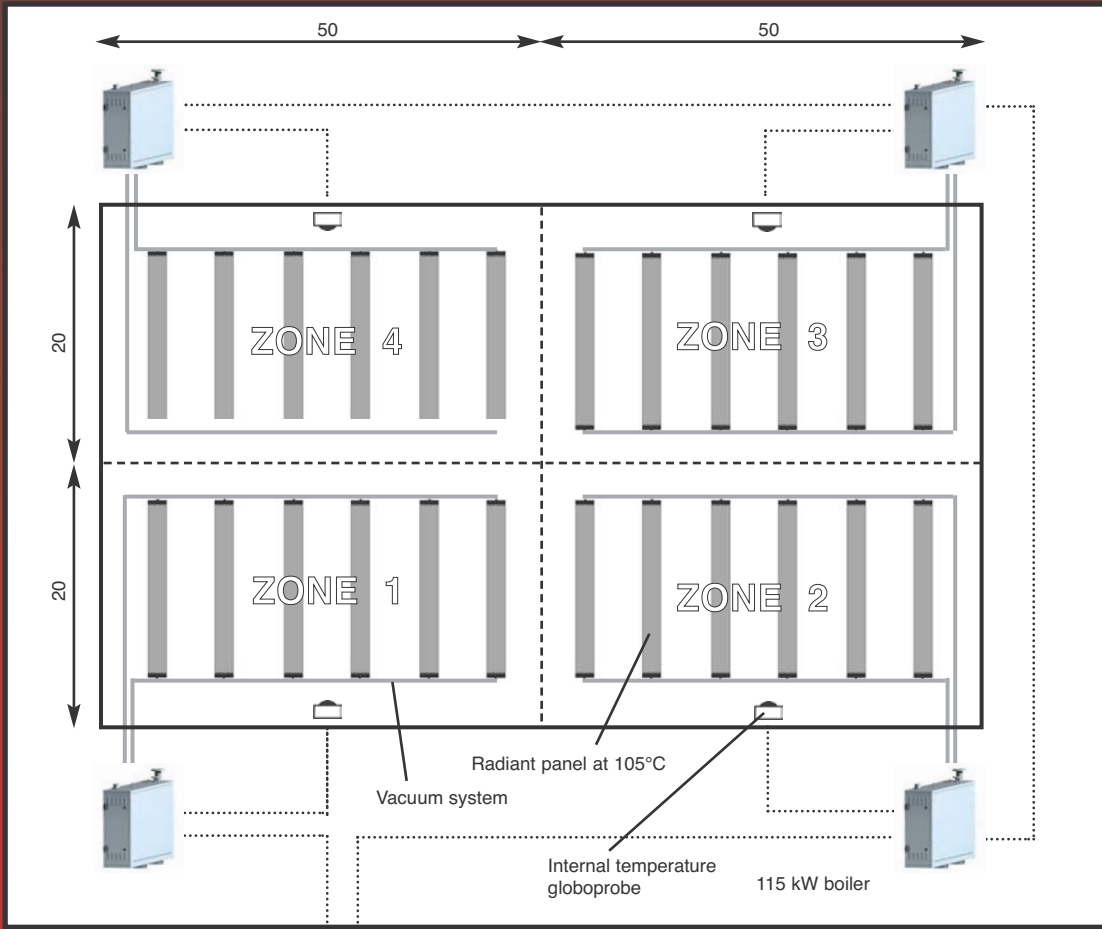


View from below of VAPORAD steam panel

View from above of the panel with the upper insulating panel in mineral fiber to direct radiation only downwards

- Particularly indicated for production activities with specific need for fire prevention.
- Average temperature of 105°C (maximum of 110°C) along all the length of the panel.
- Greater quantity of diffused heat (about 35% more) compared to hot-water panels.
- Fast installation.
- All the boilers have a power of 99,700 kcal (115 kW).
- The maximum temperature of 110°C is reached at a relative pressure lower than 0.5 bar.
- Special boilers reduced in width.
- Very low consumption of electrical energy.
- Silent while running.

# SYSTEM WITH DIGITAL THERMOREGULATION AND AREA HEATING



## Functioning

The system consists of a steam production boiler, throw and delivery piping, radiant panels, and a vacuum control device that expels excess air from the circuit. The water circuit is closed and vacuum-sealed, this condition enables the natural circulation of steam inside the circuit itself, without using pumps as in water systems. Having a temperature higher than that of the water, the steam transfers its heat to the radiant panels, reaching 105°C. After releasing its thermal energy, the steam condenses and returns to the boiler. The entire process takes place at a practically constant temperature along the circuit.



Great savings in energy and running costs



Excellent environmental comfort



Telemangement and digital control system



Easy installation



No maintenance costs



Ecological



No air or dust movement



Possibility of spot heating



Heat only at human height



We heat like the sun



Fast start up

## Models and Features

Model	N. of tubes	C.to C. [mm]	Ø Tube [mm]	Width [mm]	Length [m]	Thermal emission [W/m]*
WS2-600	4	150	28	600	2 - 3 - 6	828
WS2-900	6	150	28	900	2 - 3 - 6	1211
WS3-400	4	100	28	400	2 - 3 - 6	780
WS3-600	6	100	28	600	2 - 3 - 6	1115
WS3-900	8	100	28	800	2 - 3 - 6	1443

\*Emissions refer to a temperature of the panel of 105°C and a room temperature of 15°C



VAPORAD boiler

## The Company



Head Quarters/Production



Production unit



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