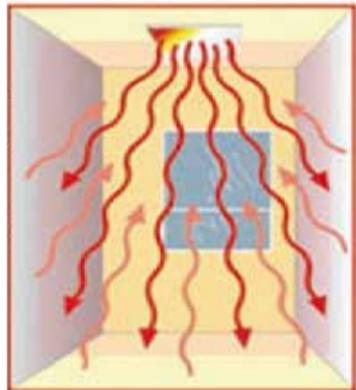
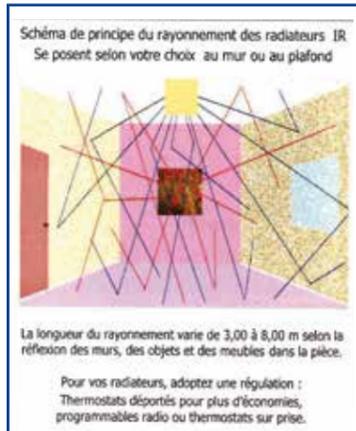


INFRARED HEATING PRINCIPLES



Chauffage infrarouge

IR heating radiation principles. Can be located on the wall or ceiling as desired. Radiation length varies between 3m and 8m according to the reflection from walls, objects and furniture in the room. For your radiators, use a control: Remote/radio programmable/plug-in thermostats for greater savings.) The radiator gives off infrared rays impacting materials and persons in a similar way to sunshine. In turn, these materials become emitters and gradually release heat. Black Sun Heating radiators transmit 80% of their energy in the form of 'far or long' infrared radiation and 20% in the form of convection. Infrared radiation types are distinguished by their wavelength and intensity. Infrared rays are divided into three types: 'near' IRA (700-1400nm), 'mid' IRB (1400-3000nm) and 'far' IRC (3000-10000nm), beyond which we have submillimeter microwaves. Whereas traditional convection heating is designed to heat the air of a given volume, e.g. a room and its contents, the new infrared heating directly warms materials and persons. Hence the heat is transmitted directly between the radiator and the person. Moreover, some places are difficult or impossible to insulate (cave/underground dwellings, large exhibition halls, work stations in garages/workshops, etc. In all cases, infrared heating is also an appropriate response.

Indications for an enclosed room	
Heating power	Heated surface area
200 Watts	3 to 6 m ²
300 Watts	4 to 8 m ²
400 Watts	6 to 12 m ²
500 Watts	8 to 14 m ²
600 Watts	12 to 18 m ²
800 Watts	14 to 22 m ²
1000 Watts	16 to 28 m ²

MANUFACTURE AND GUARANTEES



The equipment is assembled by BLACK SUN HEATING in Belgium. Parts suppliers are located in the EU to ensure responsiveness and prompt supply times.

Our heating equipment is guaranteed for 5 years and the electronic regulation modules for 2 years.

REFERENCES AND ADVICE



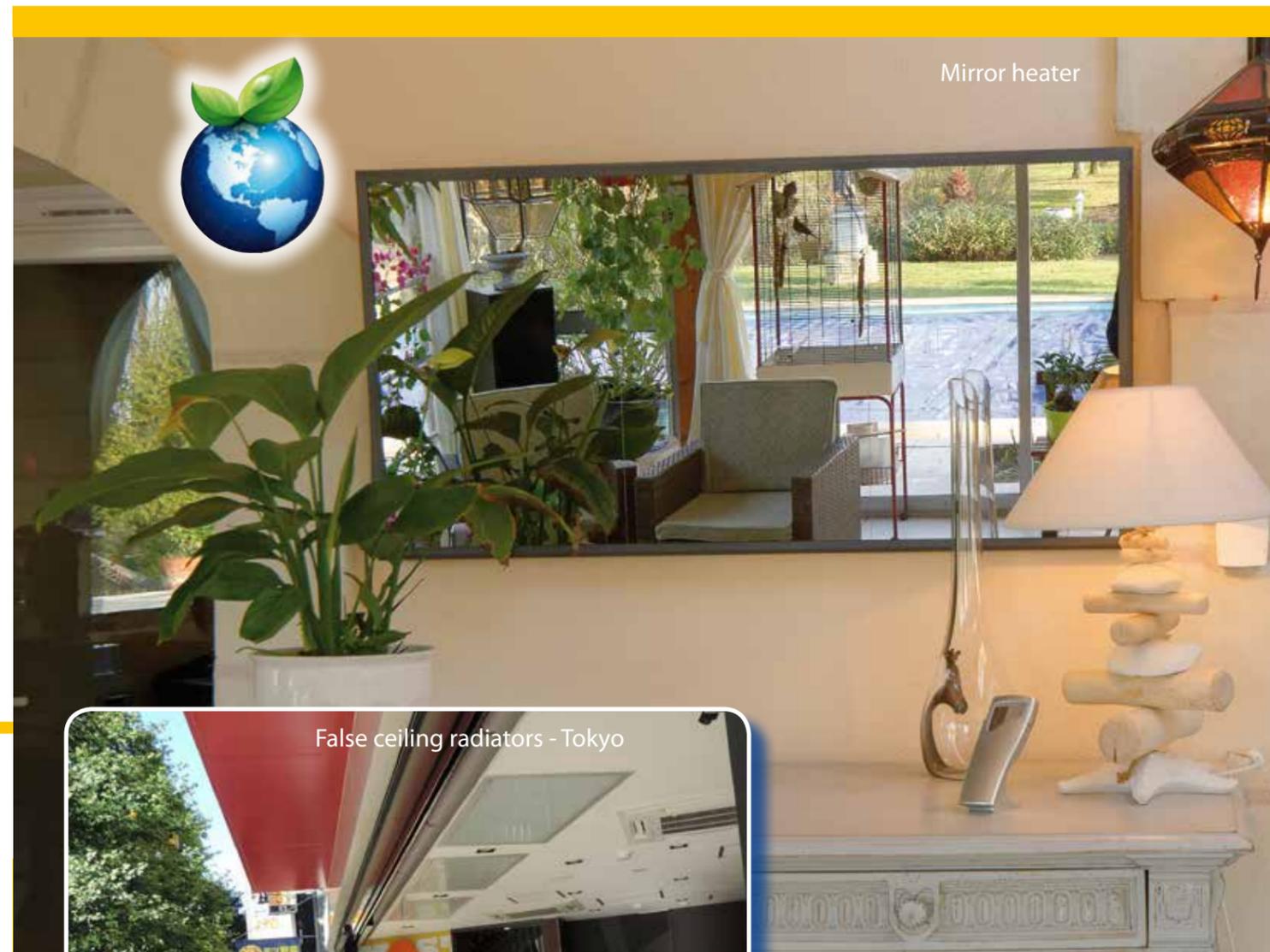
REFERENCES

The new infrared heating system built and distributed by Black Sun Heating has been operational for several years. It is installed in various places such as exhibition halls, industrial workshops in addition to the schooner La Cardinale that sails in Antarctica.

<https://www.blacksunheating.com/>
<http://www.objectifgrandsud.com/>

ADVICE

InfraSOLS is a French company that distributes the products manufactured by Black Sun Heating. InfraSOLS teams are available to answer your questions and provide solutions suited to your requirements.



Mirror heater

False ceiling radiators - Tokyo

Infrared heating
comfortable, healthy
& economical

6 rue des Rivières - 37140 Chouzé sur Loire
09 88 05 33 34 / 06 08 68 07 85
Contact : roger.amirault@infrasols.fr
www.infra-sols.fr

ECONOMICAL

- purchase price: c. €1/W
- efficiency: 60-80W/m² (classic convectors 100W/m²)
- programmable (via smartphone)
- provides a heating solution in premises that cannot be insulated or are difficult to insulate.

HEALTHCARE

- no air circulation and hence no dust/pollen/mite circulation
- installed in hospital environments

RESPECT OF THE ENVIRONMENT

- does not burn oxygen
- no CO₂ emissions
- 100% recyclable
- no fine particles
- no nitrates



CHARACTERISTICS

- power supply possible in 12, 24 or 220V
- power available from 300W to over 2000w
- many shapes and dimensions
- just plug in
- heating reach of about 5m
- all equipment complies with EC and IP 65 standards

COMFORT

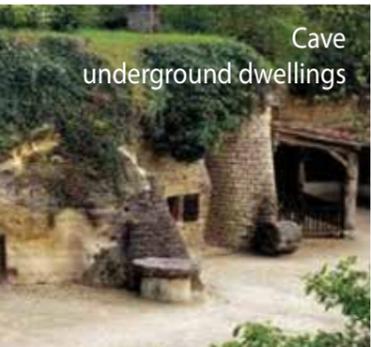
- odourless
- silent
- instant heat

INSTALLATION

- complies with current electrical equipment regulations
- in 'complex' premises, specialist knowledge is required

AESTHETIC

- fits in easily with the decor (wall/suspended/pedestal/false-ceiling models)
- the surface of certain equipment may be decorated as required (mirror/false chimney/glass/picture, etc.)



Cave underground dwellings



Greenhouses



Belgian Naval Shipyard



Bathroom



LED Surround



Façade Decor