

# radiant heating panels

## radiant ceiling tiles and modules



## System Description

Ceiling mounted Radiant Heating Panels offer a space saving alternative to traditional wall or floor mounted heating systems.

Radiant Heating Panels with their rapid warm up times, radiate heat downwards, warming the occupants and surfaces in a space, not the air temperature.

There are two types of panel available, a Radiant Ceiling Tile (RCT) and a Radiant Ceiling Module (RCM). Both panels can be freely suspended or integrated into a suspended ceiling system.

Radiant Heating Panels work by radiating heat downwards, heating the occupants and contents directly, rather than wasting large quantities of energy raising the air temperature of the whole occupied area. Imagine the increase in temperature felt when the sun comes out from behind a cloud.

## System Features

- Easy to clean
- Frees up floor and wall space
- Rapid warm up times, due to low water content
- Low air movement
- Low pressure drop (operating pressures)
- Low whole life costs – lack of moving parts

## Access

Dependant on application, either via hinge down access or via a flush access panel.

## Standard Sizes

Panels are available in lengths from 600mm and widths from 300mm.

## Finish

Polyester Powder coated supplied as standard with a RAL 9010 smooth finish; a fine textured finish (SAS FT), anti-bacterial coating (SAS AB) and other colours are available. See page 36 for a full range of paint finish options.

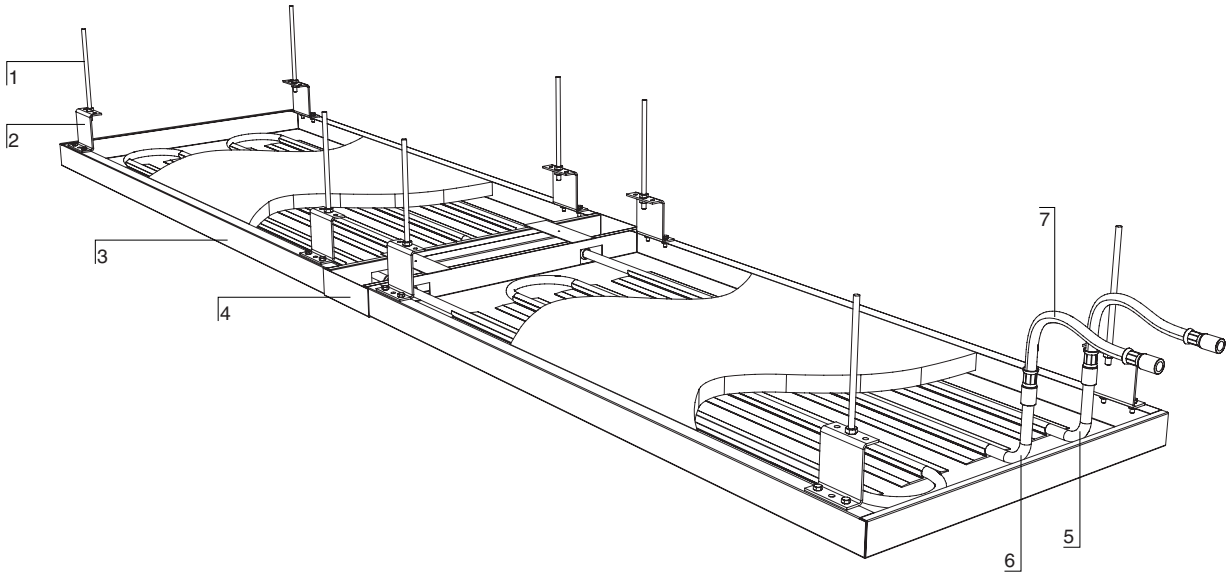
## Perforation

Dependant on design of panel and acoustic requirements.

## Weight

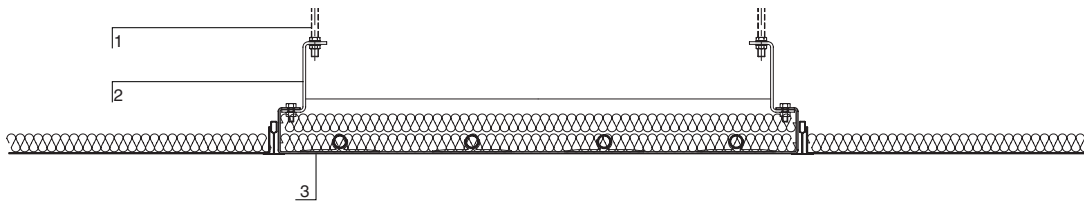
Approximately 22kg/m<sup>2</sup> for tiles, filled copper elements, and suspension system.





- 1] Threaded Rod
- 2] Suspension Bracket
- 3] Radiant Heating Panel
- 4] In-fill Panel
- 5] Flow Pipework
- 6] Return Pipework
- 7] Flexible Connection Hose

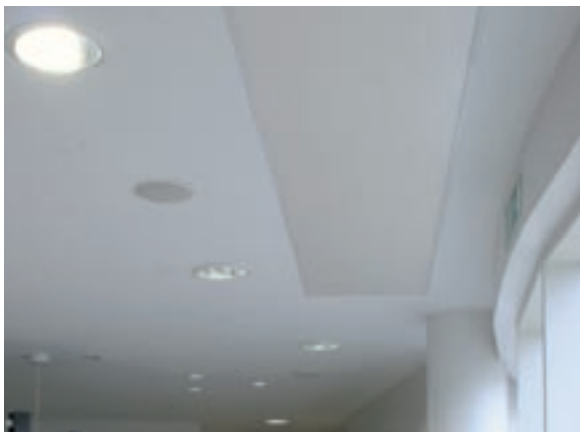
## Section Drawing



## Performance Data

Radiant Heating Panels	Heating range*
Watts per square metre – area	480–580 W/m <sup>2</sup>

\*Performance is dependant on individual system design.  
Further information is available in the Room Comfort brochure or on the SAS website.



## Radiant Heating

Radiant Heating Panels work using electromagnetic radiation as opposed to traditional convective methods. Occupants and objects are warmed directly i.e. not the air temperature. The air temperature then rises as a result of the increase in temperature of the objects in the room. Therefore Radiant Heating Panels can operate with slightly lower average room temperatures than spaces using traditional convection heating methods, saving energy without compromising thermal comfort levels.

## Energy Efficiency

Due to the low water content and rapid warm up times of Radiant Heating Panels, the energy they consume is lower than other heating systems. Savings can also be realised at the central plant as Radiant Heating Panels have a low pressure drop (i.e. operating pressures).

## Low Whole Life Costs

Radiant Heating Panels have no moving parts, reducing maintenance requirements and costs.

## Space Saving

Because Radiant Panels are ceiling mounted, valuable floor and wall space is freed up. They are removed out of reach, reducing any risk of burns and maximising the area available to let or work in.

## Surface Area

Finished with a polyester coated powder paint radiant heating panels are easy to clean and maintain. An optional anti-bacterial coating can also be incorporated, particularly relevant in healthcare environments, see page 36.

## Durability

Manufactured from aluminium and copper, RCTs and RCMs have life cycles of approximately 25 years.

## Additional information

Further information on the range of Radiant Heating Panels can be found in the Room Comfort brochure.