



## Sargasso Range

A new range of radiant panels for heating commercial applications

# How radiant panels work

Radiant panels provide heating solutions for a wide range of applications.



Sargasso Radiant Panels sit in a ceiling grid, or can be suspended from the soffit, and are supplied with hot water from a heat source. They form part of a 'wet' heating system. The hot water is fed to the Sargasso Radiant Panels and approximately 85% less water is required compared to a traditional radiator heating system. The benefits of this are that the system heats up much quicker than a radiator system. Cost savings in running such a system are realised because of the lower water content and faster heat up of the radiant panels. Further energy savings are possible through zoning so that only occupied areas are heated.

Radiant heat is a form of electromagnetic radiation, between ultra violet and infra-red on the electromagnetic spectrum.

These electromagnetic waves penetrate the air with no loss of energy and this energy is only converted to instant heat when it comes into contact with any object of a lower temperature, warming anyone or anything in close proximity.

This is identical to the way in which the direct sunlight on a cold winter's day produces warmth and makes us feel comfortable.

As a result radiant ceiling panels provide a pleasant and comfortable warmth at ground level, even when installed at a height of 30 metres.



## **Sargasso A**

Continuous copper pipe 10mm O.D. Element. Ends formed from a single length of pipe with no joints between them. Element terminates in plain copper tails.



## **Sargasso S**

Continuous copper pipe 12mm O.D. Element. Ends formed from a single length of pipe with no joints between them expanded to 15mm O.D flow and return connections. Element terminates in plain copper tails.



### Offices

Expensive and valuable office floor space can be maximised through the removal of wall hung heat emitters such as radiators. Radiant heating panels provide a pleasant uniform heating environment.



### Education

Removing radiators from ground level creates valuable teaching space and reduces the risk of accidental burning. Radiant heating panels provide a high level of room comfort, are durable and robust, an ideal solution for both learning and working environments. Acoustic absorption pads can be incorporated in order to meet specific acoustic requirements e.g. Building Bulletin 93 (BB93).



### Healthcare

Longer runs of radiant heating panels are ideal for long corridors and hospital wards. They are also suitable for recovery and public environments; particularly when specified with an Anti-Bacterial (AB) coating as this inhibits bacterial growth such as E. coli and MRSA on the coating surface. Durable, flat and smooth faced, radiant heating panels can be easily cleaned in accordance with a specified cleaning regime.



### Leisure

Sports and leisure venues, which may only be used sporadically, can quickly and efficiently heat their premises using radiant heating. Due to a lack of moving parts, radiant heating systems require minimal maintenance and their smooth surfaces enable easy cleaning, perfect for busy leisure facilities.



### Transport

Key considerations in the transport sector include durability, rapid warm-up times and the ability to increase efficiencies by system zoning. The lack of moving parts in radiant heating products means maintenance disruptions are kept to a minimum, which is another significant consideration in any busy transport building.



### Industrial

In warehouses and large buildings, radiant heating panels can be used effectively to increase working temperatures in a particular area, without heating the entire space. This results in efficient heating, reduced energy consumption and carbon emissions.



# Sargasso Range

An elegant alternative solution to traditional wall mounted radiators, convection heaters and air conditioning systems.



The heat is radiated downwards from the ceiling, providing warmth to the occupants and surfaces rather than to the air.

A major benefit of Sargasso Radiant Panels is that the useable floor space can be maximised. Another benefit is that there is no significant air movement with Smith's Sargasso Radiant Panels minimising the disturbance of air-borne particles such as dust.

## Features

- Suitable for use in both Standard T and Micro T system ceilings.
- Each panel individually packaged for protection
- Loop panel width 595mm; available in lengths 595mm, 1195mm, 1795mm, 2395mm and 2995mm. Feed panel available as 595mm wide by 2395mm (Sargasso S only)
- Panel performance to be supported by independent test certification to EN 14037
- For bespoke specifications, including cooling capability please contact us to discuss your requirements

## Benefits

- Create a more comfortable environment for occupants by creating an even temperature distribution across the room
- Save energy and money by achieving a higher perceived temperature than the actual room temperature
- Works well with lower temperature heating systems
- Provide an efficient solution offering a short heating and cooling time
- Installed within a ceiling or high on a wall they maximise wall and floor space
- Silent operation
- No dust/bacteria dispersal offering a hygienic solution
- Maintenance free
- Easy to clean so lower cleaning costs
- Integrated in plasterboard

## Finish

### Sargasso A

Material: 2mm high-grade aluminium extrusion, lightweight, robust, optimum response time.

Finish: RAL 9016 white powder coat.

Insulation: Rigid non-fibrous, foil-faced insulation to EN13165 fire rating A2.

### Sargasso S

Material: Smooth faced panel manufactured from 1.2/2.0mm aluminium with panel edges to be returned for containment of insulation and increased panel rigidity. Pipe carrier to be manufactured from aluminium bonded to the panel under heat and pressure to ensure integrity of contact along the length of the panel.

Finish: Polyester Powder coated supplied as standard with a RAL 9010 smooth finish with 20% gloss level; anti-bacterial coating and other colours are available. An anti-bacterial paint finish inhibiting the growth of micro-organisms is available, providing additional assistance in meeting infection control targets.

Insulation: 30mm mineral wool pad sealed in tissue paper with foil face

## Installation

### Sargasso A & S

Suitable for use in Micro T system and standard T-Grid ceiling ceilings. Please note that Sargasso is compatible with regular ceiling profiles, but not compatible with Tegular or Microlook ceilings.

Suspension: Sargasso A & S

Suitable for installation from drop rods (not supplied). Panels longer than 1200mm will require 3 fixing locations

## Specification

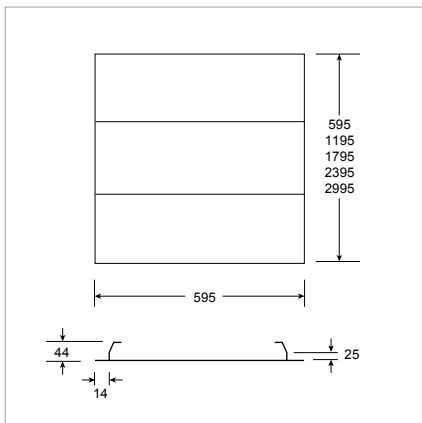
To specify state:

Radiant Panel in White (RAL 9016) at 600mm wide x 600mm (or 1200mm, 1800mm, 2400mm, 3000mm) long. As Smith's Sargasso A.

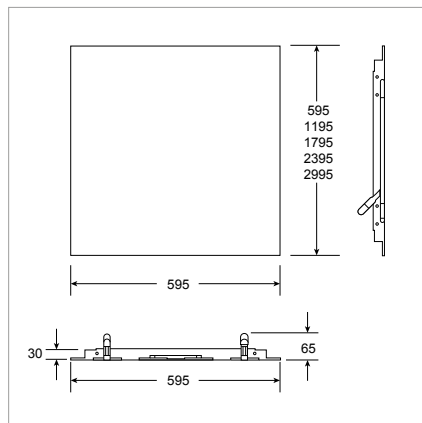
Radiant Panel in White (RAL 9010) at 600mm wide x 600mm (or 1200mm, 1800mm, 2400mm, 3000mm) long. As Smith's Sargasso S.



**Sargasso A**



**Sargasso S**



# Sargasso Range

An elegant alternative solution to traditional wall mounted, radiators, convection heaters and air conditioning systems.



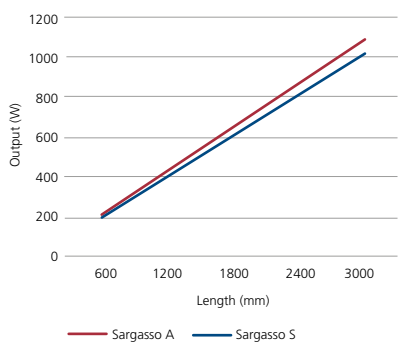
## Sargasso A - Heat output (Watts)

Model	Output at $\Delta T$ °C									Hangers required
	30	35	40	45	50	55	60	65		
600 x 600	105	126	148	170	194	217	242	266	4	
600 x 1200	210	252	296	340	388	434	484	532	4	
600 x 1800	315	378	444	510	582	651	726	798	4	
600 x 2400	420	504	592	680	776	868	968	1064	6	
600 x 3000	525	530	740	850	970	1086	1210	1330	6	

## Sargasso S - Heat output (Watts)

Model	Output at $\Delta T$ °C								
	30	35	40	45	50	55	60	65	
600 x 600	100	120	140	160	181	203	225	230	
600 x 1200	199	240	280	320	361	406	450	460	
600 x 1800	299	360	419	481	542	608	675	689	
600 x 2400	398	480	559	641	722	811	900	919	
600 x 3000	498	600	699	801	903	1014	1125	1149	

Output at  $\Delta T$  55°C





### Ordering guide

Description	Width (mm)	Length (mm)	Operating Weight including water (kg)	Kg/m <sup>2</sup>	Product code
<b>Sargasso A</b>					
600mm loop panel	595	595	4.6	12.7	HPAE350000
1200mm loop panel	595	1195	9.1	12.7	HPAE350001
1800mm loop panel	595	1795	13.7	12.7	HPAE350002
2400mm loop panel	595	2395	18.3	12.7	HPAE350003
3000mm loop panel	595	2995	22.9	12.7	HPAE350004
<b>Sargasso S</b>					
600mm loop panel	595	595	7.9	22.0	HPAE350005
1200mm loop panel	595	1195	15.8	22.0	HPAE350006
1800mm loop panel	595	1795	23.8	22.0	HPAE350007
2400mm loop panel	595	2395	31.7	22.0	HPAE350008
3000mm loop panel	595	2995	39.6	22.0	HPAE350009
2400mm feed panel	595	2395	31.7	22.0	HPAE350010
<b>Accessories</b>					
L brackets 4 required per panel upto 1200mm long, 6 brackets required >1800mm long (for Sargasso S only)	-	-	-	-	HPAE355000

For bespoke specifications, including cooling capability please contact us to discuss your requirements

### Happy to help

Smith's Environmental Products Ltd is one of the leading manufacturers of heating and cooling products in the UK. We are committed to achieving the highest standards and our faith is supported by a free five year parts and labour guarantee with every product. Our customer service is second to none and we are happy to offer any help and guidance that you might need.

### Stockists

All products are available nationally from Builders' Merchants, Plumbers' Merchants, Heating Equipment Distributors and Kitchen Equipment Distributors. In the event of difficulty, please contact us or visit our website [SmithsEP.co.uk](http://SmithsEP.co.uk) for details of your nearest stockist.

### Information and advice

Full technical specifications and list prices is available to download from our website or in hard copy from our office. Also available on our website are price lists, individual product data sheets, installation & user guides, where to buy, who to contact and a media centre.

Alternatively contact our office 9.00am to 5.00pm Monday to Friday.

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