

## Energy Efficient Heating & Cooling

# S & P Coil Products Ltd (SPC)

## Achieve Low Carbon with Heat Pumps & Radiant Heating & Cooling Systems

We have combined market leading technologies to offer the most energy efficient heating and cooling solution available by seamlessly uniting the proven energy efficiency of radiant heating and cooling, with low carbon, optimised heat pumps. The latest generation of heat pumps provide the option for high temperature water generation up to 65°C along with reversibility for summer cooling and the possibility of building wide heat recovery in mid season.

The ideal partner to the heat pump is an SPC Radiant Conditioning Sail. Sails provide year round space conditioning and require only a relatively high summer chilled water temperature and relatively low winter hot water temperature thus allowing the heat pump to operate at its most efficient level. The heat pump system will operate at the same low water temperatures that are common for underfloor systems but with none of their disadvantages, only the added advantage of summer cooling.

(see Technical page for more information on heat pumps).

This system helps to gain BREEAM points.

### THERMATILE PLUS - Radiant Panels

SPC's ceiling mounted radiant heating system offers a simple, highly efficient yet concealed solution to heat almost any room. The ThermoTile Plus panels can either be suspended just below a ceiling or fitted into a suspended ceiling, freeing up valuable floor and roof space. The panels emit radiant heat which warms occupants directly and the air indirectly, resulting in lower heat losses and energy savings. Silent operation and no forced air movement mean a warm, peaceful and draught-free environment.

### THERMSAIL - Radiant Conditioning Sails

ThermaSail Radiant Conditioning Sails are a unique concept for cooling and heating that fill the gap between chilled beams and chilled ceilings, opening up an entirely new range of architectural and design possibilities, whilst combining energy efficiency and ease of installation.

### MINIB - Trench Heaters

MINIB Trench Heaters are the perfect solution for distributing heat while preventing condensation in rooms where there are large areas of glass such as hotels, schools, car showrooms, swimming pools and offices. The stainless steel floor convectors fit into a trench in the perimeter of a building close to the glass. As well as providing heat to the room they reduce the cold down draught, reducing the risk of condensation.

### BELGRAVIA - Fan Convectors

Belgravia Fan Convectors put heat where you need it, when you need it. It is the quickest and most cost-effective way of bringing a room up to temperature, ideal for intermittent use rooms with fast and effective heat generation. The Belgravia units are unobtrusive, with 20% of the wall space of an equivalent rated radiator. Ease of installation, with minimal ongoing maintenance are key design factors of the Belgravia Fan Convector.

### Coil Heat Exchangers

Coils lie at the heart of many industrial buildings and processes. SPC's range of heat exchangers include:

**Water Coils** - Coils for low, medium & high temperature hot water, steam & chilled water applications.

**Refrigeration Coils** - A range of evaporating & condensing coils to suit all common refrigerants.

**Heat Recovery** - A pump & run-around coil configuration to capture & re-use your waste heat.

### AIRDOR - Air Curtains

AIRDOR Air Curtains are designed to offer a comfortable welcome for workers and customers in a wide range of premises where the doors may remain open for long periods of time. The stylish yet powerful air curtains provide an invisible barrier of air from above or the side of entrances - whether the doors are standard, revolving or sliding designs. The air curtains restrict the loss of conditioned air and prevent incoming pollution, insects and dust. They disrupt the natural loss of warm air from the top of a doorway and its replacement by cold air at the bottom, ensuring significant energy savings.



Radiant Panel / Heat Pump - Typical Installation



ThermaTile Plus Radiant Panels



ThermaSail Radiant Conditioning Panels



MINIB Trench Heating



Belgravia Supreme Plus Fan Convector

### Heat Pipes

Over a number of years, SPC has achieved particular success in selling Heat Pipe technology in both the UK, Europe and the Middle East. In hot and humid climates Heat Pipes are utilised to both pre-cool and dehumidify while UK and European use has typically been associated with the employment of the Heat Pipes as heat recovery devices. Displacement ventilation systems provide opportunities to increase the energy efficiency of air conditioned spaces while simultaneously improving indoor air quality.

### CPD / Technical Seminars

SPC have five RIBA approved CPD seminars available:

- Efficient Use of Heat Pumps with Radiant Heating & Cooling Systems
- Understanding / Design of Energy Efficient Radiant Panel Systems
- Energy Conservation / Eliminating Draughts - Warm Air Curtains & Trench Heaters
- Energy Efficient Cooling & Heating with Radiant Conditioning Sails
- Efficient Use of Ground Source & Optimised Air Source Heat Pumps for Specific Applications