

# **UK manufactured heating and cooling for today's most demanding buildings**



## A brief introduction to radiant heating



Heating by radiant energy is observed every day—for example the warmth of the sun.

Radiant panels work by delivering heat directly from the panel surface to people and objects in the room via infrared radiation.

Radiant heating is therefore more efficient and effective because the heat transfer is direct rather than indirect via air. This is especially beneficial where there is a large volume of air, large air change rates or where the air is subject to drafts.

## Advantages of radiant heating panels for your project

Radiant panels present three key advantages over other forms of heating:

1

### Reduced whole life costs

- Efficient heat distribution
- Low cost per kW
- Easily controlled
- Suitable for constant and variable temperature systems
- Works well with green energy sources such as heat pumps
- Low running and maintenance costs

2

### Flexibility and space efficiency

- Panels types for every situation
- Modular or bespoke designed panels
- Frees up floor and wall space
- Heating and cooling on same device
- Easy to access

3

### Greater occupant well being and better working environment

- Hygienic: no places for bacteria to hide
- No forced convection, hence no circulation of dust and allergens
- Safe: no sharp edges and heated surfaces are out of reach
- Noise free
- Availability of special security features: anti-ligature, vandal proof, and NOMS approved panels.
- Multi-service rafts, with lights.



## The leading UK manufacturer of radiant panels

With over 100 years' experience in manufacturing and installing radiant heating panels and the widest range of panels on the market, Solray's capability in the radiant panel market is second to none.

Based just outside Swansea, we design and manufacture our panels entirely in house in our purpose-built factory.

Our highly experienced design and manufacturing team will work with you to ensure the best solution for your particular situation from our wide range of products and installation services. Our technical expertise and flexible manufacturing enable us to design and build panels that range from standard modules right through to totally bespoke.

We can meet needs from a single standard panel right up to complex bespoke systems for any type of building. We specialise in designing and providing solutions for demanding applications. These include but certainly aren't limited to cases such as hospitals, prisons, schools, and historic buildings.

We can 'supply only' or 'supply and install' and guarantee both elements for ten years with the ability to extend the guarantee to twenty five years.





## Widest range of radiant panels in the UK

We offer the widest range of radiant panel types in the UK, including:

Aluminium or steel faceplates, Wall-mounted, Ceiling mounted, Free hanging, Perimeter, Strip, NOMS approved, Electric, Acoustic, Multi service (integrated lighting, sensors, sprinklers etc). We have our own employed team of installers.



## Unique bespoke design and manufacturing capability

In addition to our range of standard panel types and sizes, and unlike the majority of other suppliers, we have extensive experience of designing and manufacturing bespoke panels to suit your specific project needs, giving you full control over the size and appearance of the panels:

- ◆ We can create panels in custom sizes to meet any project specification
- ◆ We can design and manufacture radiant panels in shapes to fit into unusual and challenging spaces
- ◆ We can also manufacture panels in a variety of materials and finishes and powder coat to any BS or RAL colour.

Our panels can therefore blend seamlessly into the building or be designed as an attractive feature.



## UK accessibility and responsiveness

All aspects of our operations are based in the UK, from design and engineering to manufacture and installation. This enables us to provide an accessible and responsive service at all stages of your project.



## Convenient, hygienic and safe

Unlike most heating systems our panels take up little or no usable space. Often concealed in the ceiling they have no corners, ledges or joints where dirt or bacteria can collect. Being completely flat they are easy to clean when needed. The absence of bulky protruding units, edges or corners make Solray panels a safe choice – especially for hallways and sports halls.

In addition, we are one of only a very small number of suppliers of steel panels whose anti-ligature design and practically indestructible construction is approved by the Ministry of Justice for custodial and high-security situations ("NOMS approval").



## High quality – guaranteed

All Solray systems are designed and manufactured to the highest standards. Our proven track record and our experienced and responsive technical service team provides you with the assurance of a life time's performance with minimal maintenance.

We back the quality and longevity of our products with our standard 10 year guarantee. This covers both manufacture and installation when carried out by our installation team and which you can opt to extend to 25 years.



## Low cost and high flexibility

Our panels offer all of the benefits of radiant heating, with optimum heat distribution and the warming of people and objects enabling lower temperature operation than other forms of heating. Solray's panels can be used with chilled water, low or medium temperature hot water, steam or electricity. They generally require no maintenance. All of this combines to deliver low life time costs.

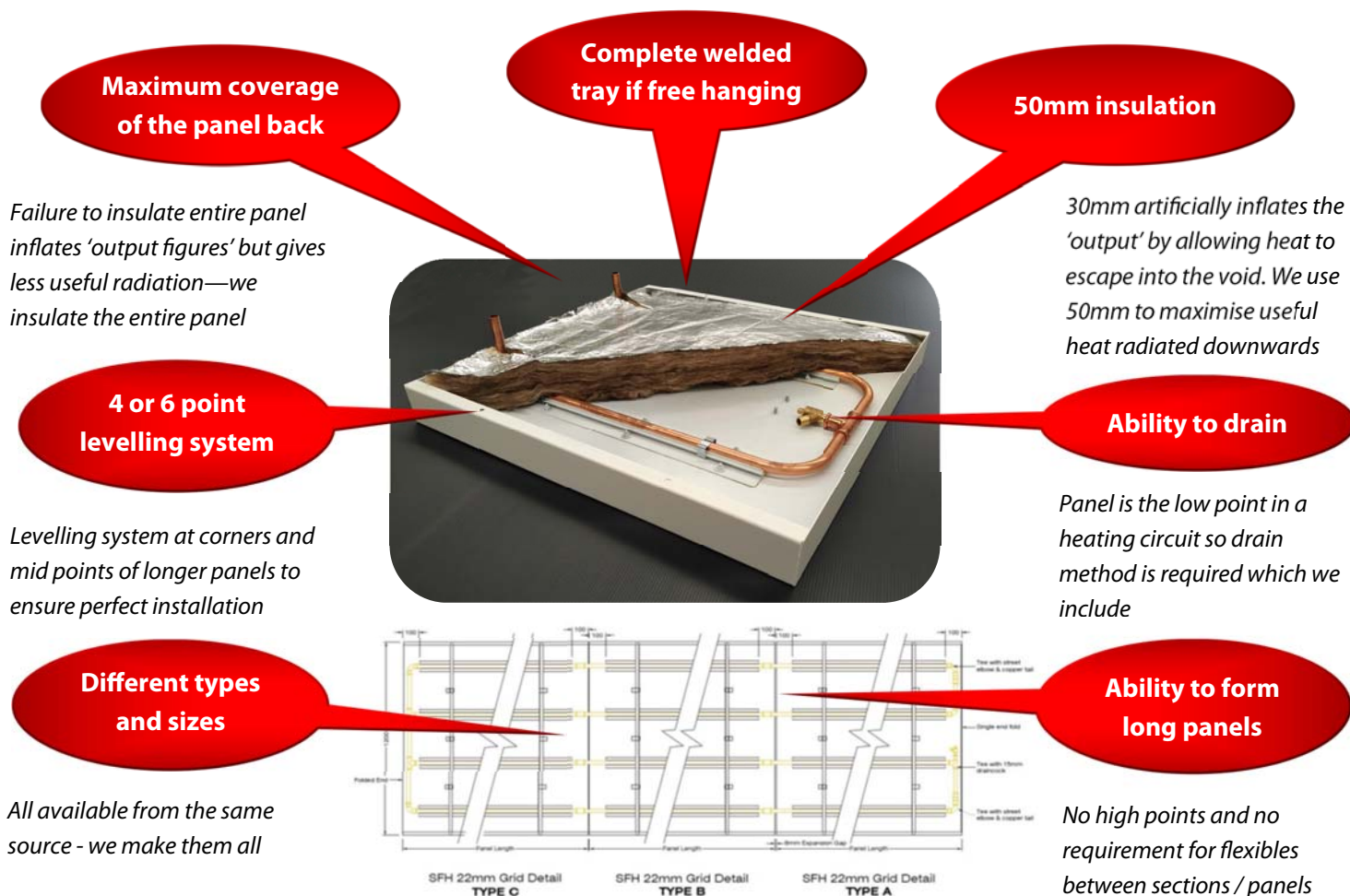


# What to look for in a good radiant panel



## Solray panel key features

We are justifiably proud of the quality of our panels. Below are just some of the reasons why we guarantee our panels for 10 years and will happily extend this to 25 years (subject to a small additional premium).



Radiant panels tend to look superficially similar but there can be important differences. Key areas include the coverage, thickness and type of insulation, whether or not a method of draining is provided, levelling systems, and the ability to source different panel types from the same supplier. The ability to form long runs of panels without high points and flexibles is also a potential key consideration.

The thickness of the aluminium or steel is also important as thicker material is stronger and a better emitter of radiant heat. Thinner material is

cheaper and lighter, but is more prone to impact damage (eg balls in sports halls) and can impair both heat output and distribution. Really thin panels (1mm or sometimes even less) can result in hot spots on the panel face rather than a proper even distribution of heat all across the panel.

In our experience 1.6mm is the optimum balance between strength/output and weight/cost for most situations. Solray panels are 1.6mm thick except for our anti-vandal/custodial panels which are 2mm thick steel.

Sales@solray.co.uk

01792 89 22 11

[www.solray.co.uk](http://www.solray.co.uk)

Comyn Ching & Co. (Solray) Ltd.  
Phoenix Way, Garngoch Ind Est, Gorseinon, Swansea SA4 9WF  
Registered in England No 01254878



## Custom built panels to suit your exact needs

Panel sizes ordinarily tend to be modular: nominal 600mm wide and lengths that are multiples of 600mm up to 3 metres . Modular lengths can be joined up to meet requirements of larger spaces.

In addition to the availability of standard modular panels, we can design bespoke panels to meet the specific requirements of your project – for example, where panels need to act as a feature or blend in seamlessly to the surroundings.

Size, specification, shape and finish can all be almost infinitely tailored to your requirements.

Different outputs can be supported within the same panel sizes which makes Solray radiant heating very flexible. Where higher outputs per linear metre are required, additional water carrier pipes (or electric elements) can be added – useful where greater output is required from fewer panels for environmental reasons (eg heat loading) or space considerations.

Integration of other services with radiant panels is also possible which is useful where ceiling space is crowded. Things like lighting can therefore be integrated for additional convenience and flexibility.



Designed by Freepik



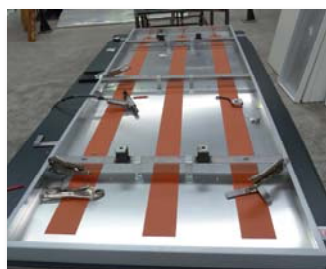
Any BS or RAL colour



Any length and width



Heat output flexibility



Electric panels



Service integration



Shaped panels



## Nationwide fully-integrated installation service

Through our teams of highly experienced employed fitters and carefully selected and trained sub-contractors, Solray offers a full installation service for all of our panels.

We cover all of the UK and Ireland managed through our 'North' and 'South' regional installation managers.

All of our fitters have product-specific knowledge which makes them faster and better able to respond to site-specific situations.

Where we install our products, we offer a ten year guarantee on both the product and the installation. For added peace of mind, the guarantee period can be extended for a period of up to twenty five years upon payment of a small additional premium.

Solray fitters are completely integrated with the rest of our operations and are therefore the best way of achieving a seamless experience on your project.





## Panels to suit every project - a sample from the widest range in the industry



**Free hanging panels** — Open ceilings (panels suspended below soffit)



**Trident panels** — Suspended ceilings (with or without concealed grid)



**Direct mount panels** — plasterboard or solid soffits either around perimeter or in strips



**Angled wall mount panels** — Sports halls or where ceiling is not available



**Heritage** — bespoke shapes, sizes, mountings and colours for heritage or listed applications



**High security** — Vandal proof or custodial situations requiring NOMS certification



# Some of our panels at a glance



**Panels to suit every project - a sample from the widest range in the industry**



**Perimeter panels** — high efficiency and comfort leaving the ceiling centre free for other use



**Multi service panels** — integration of other services available as an option on most of our panels



**Electric heating of panels** — available as an option on all of our panels



**Combined heating and cooling panels** — available as an option on most of our panels



**Perforated faceplate** — for enhanced acoustic properties available as an option on most of our panels

**E** Sales@solray.co.uk

**T** 01792 89 22 11

[www.solray.co.uk](http://www.solray.co.uk)

Comyn Ching & Co. (Solray) Ltd.  
Phoenix Way, Garngoch Ind Est, Gorseinon, Swansea SA4 9WF  
Registered in England No 01254878



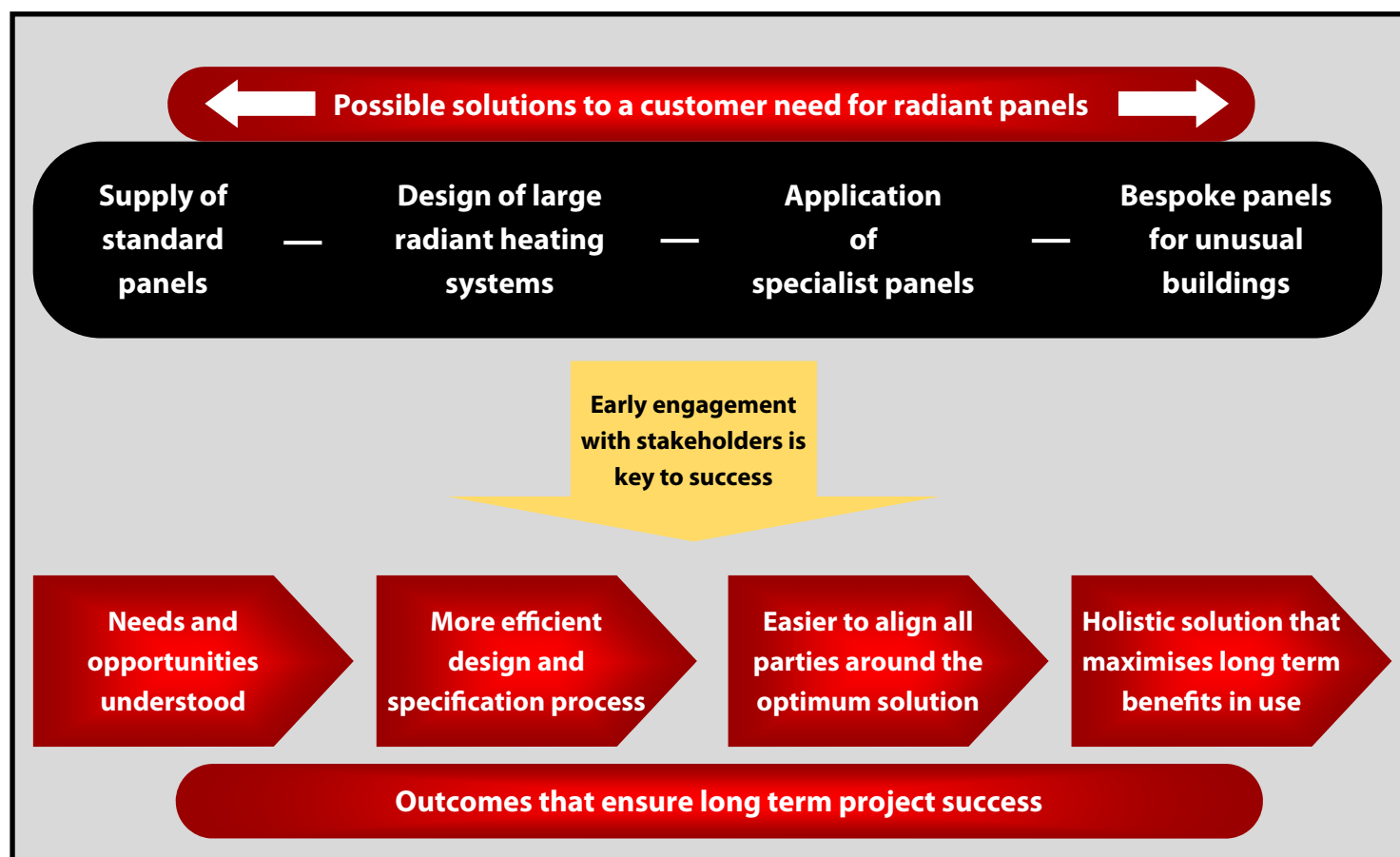
## Early engagement is key to getting the best results

In our experience, talking to stakeholders and technical experts in suppliers as early as possible in the specification process is the best way of ensuring that user needs are optimally addressed.

Solutions could encompass the supply of standard panels, through to the design of large systems, the application of specialist panels and progressively greater levels of tailoring and bespoke.

Early engagement helps ensure the full range of opportunities is considered at the right time and then quickly narrowed down to focus on working out the correct approach. This enables a more efficient specification and design process and ensures that all parties are lined up behind the preferred solution. This is key to delivering the ultimate objective of maximum value in use.

Working samples can be made for mock-ups to determine aesthetic and/or technical details.





## Support

## Where to go next

### Tools

Panel sizing and outputs tools (see website)

### Technical sales managers

Sales@solray.co.uk

South East / South West / London / Midlands /  
North / Scotland / Northern Ireland / Ireland

www.solray.co.uk/people

01792 892211

### Website

www.solray.co.uk

### Installation supervisors

Installationnorth@solray.co.uk

Installationsouth@solray.co.uk

### Design and technical support services

Sales@solray.co.uk

### BIM models

www.solray.co.uk/bim

### Sector specific expertise

Heritage@solray.co.uk (*churches and historic buildings*)

Sportshalls@solray.co.uk (*sports facilities*)

Education@solray.co.uk (*schools and colleges*)

Health@solray.co.uk (*hospitals and health facilities*)

Custodial@solray.co.uk (*prisons and secure units*)

### Detailed technical specifications

www.solray.co.uk

Sales@solray.co.uk

### Detailed product guides

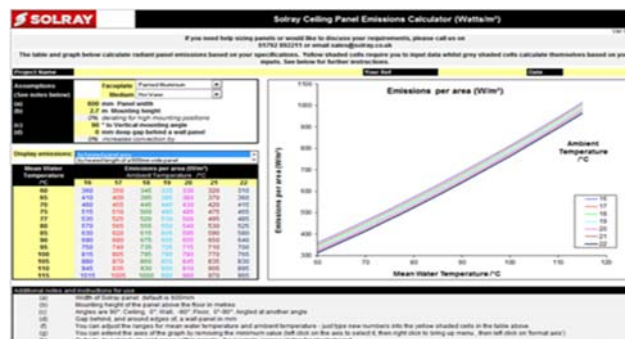
www.solray.co.uk

Sales@solray.co.uk

### Continuing Professional Development

Sales@solray.co.uk

www.solray.co.uk/cpd



Sales@solray.co.uk

01792 89 22 11

[www.solray.co.uk](http://www.solray.co.uk)

Comyn Ching & Co. (Solray) Ltd.  
Phoenix Way, Garngoch Ind Est, Gorseinon, Swansea SA4 9WF  
Registered in England No 01254878



### **Peace of mind**

You can have total peace of mind when choosing Solray because no other company is able to combine over 100 years of experience with such a unique and modern heating solution. A century of experience—a solution for tomorrow.

You can also be assured of the quality. Solray systems are designed and manufactured to the highest standards. But then you don't last 100 years without consistently delivering on quality.

### **Close to home**

Solray panels are manufactured right here in the UK. Our offices and skilled service teams are also based in the UK.

This means you benefit from a local contact and a highly responsive technical support team. Manufacturing panels in the UK also helps reduce a building's carbon footprint and makes the supply chain more robust.

### **All Solray systems are designed to suit your specific requirements**

To discuss how we could benefit your project, or if you have any questions, please call us on 01792 89 22 11.

Comyn Ching & Co (Solray) Limited

Phoenix Way, Garngoch Ind Est, Gorseinon, Swansea, SA4 9WF

**UK manufactured heating and cooling  
solutions for today's most  
demanding buildings**

