



# Radiant Heating Panels

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Engineered Solutions

## Introduction

One of the UK's leading manufacturers and distributors of heating and ventilation equipment, Price TWA works with architects, M&E consultants, building and heating contractors and facilities managers, to design, develop, supply and install high quality solutions to meet the specific needs of individual projects.

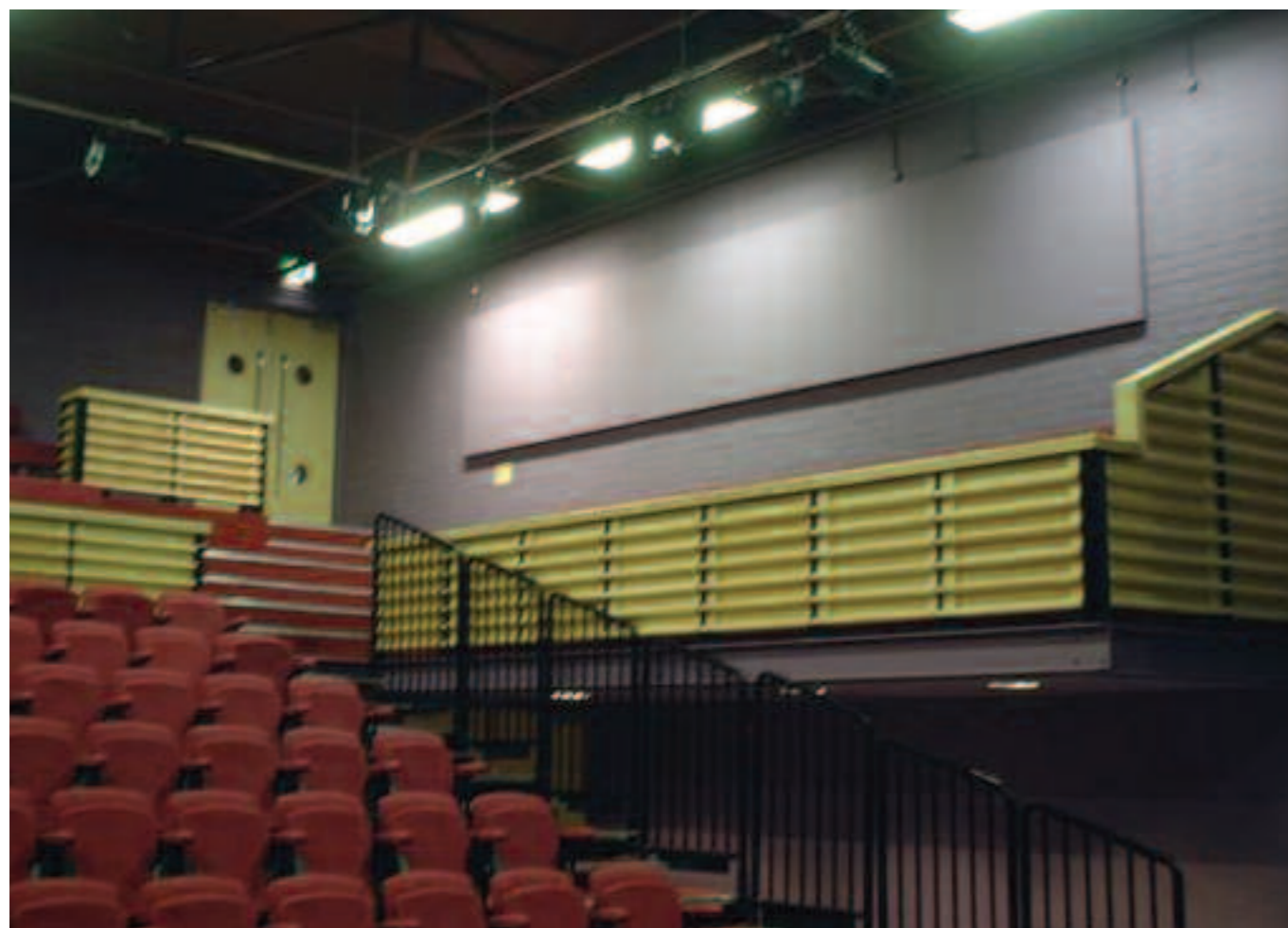
With over a decade's experience, our products and systems are proven in projects across a wide range of applications and sectors in both the public and private sector. From health to retail and education to commercial offices, our systems feature in both new-build and refurbishment projects throughout the UK.

We manufacture a wide range of systems under the Price TWA brand, supplemented by products drawn from some of Europe's leading manufacturers – including Vent Axia and KE Fibertec – allowing us to provide high quality yet cost-effective solutions for a host of applications.

For more details about any of these products call your local distributor.

As well as a wide range of radiant panels, our range also includes:

- / Natural ventilation products
- / Fabric ducts
- / Kitchen ventilation
- / Fans
- / Displacement systems
- / CAV and VAV systems
- / Grilles and diffusers



## Radiant Panels

Our Radiant (or Linear) panels are a proven solution for radiant heating, with an extruded aluminium radiant heating strip providing exceptionally high heat transfer. Suitable for both ceiling and wall mounting, the units are available with a wide range of accessories, providing both design flexibility and a clean, modern appearance.

Radiant ceiling panels create a radiant field inside the occupied space, which heats solid objects in the room without appreciably heating the room air – these then reradiate heat to give a generally warming effect. Independent tests have shown that the heat output of linear panels is equal to, or better than, other radiant heating products.

Radiant technology is perfectly suited to hospitals, schools and laboratories, providing a silent, draft-free, thermally stable environment and requiring no mechanical equipment or bacteria/ virus collectors in the heated space – ensuring an aseptic environment can be achieved and maintained.

Ideal for new build or refurbishment; where lay-in acoustic ceiling tiles are used, radiant panels can provide heat that is architecturally invisible and installation is very straightforward.

Linear panels are available in 150mm incremental widths and in any length up to a maximum of 4800mm in a single panel. With a wide range of options, the system may be easily designed into virtually any heating scheme, with installation a very straightforward process. Consequently, they may be used in a wide range of sectors including education, health, leisure, commercial, manufacturing, airports and public buildings.

### Designing with Radiant Panels

Price TWA offers a free design service for large projects. We are able to overlay panel layouts on top of client's drawings – all that we require are building layout plans to show the pipe runs and ceiling layouts. We are then able to produce a detailed design which includes the relevant panel size, position and heat output – we can also include pressure loss calculations to support the design, if required. This means not only is the optimum panel selection achieved (in terms of performance and cost) but also ensures that the delivered product is completely integrated into the whole construction of the building.

Through consultation at every stage of the project, and careful detailed design, the radiant panels which arrive on site are finished and ready to install. Our experience has shown that ceiling or mechanical services contractors can fit the panels themselves, allowing much greater control and flexibility on site and of course minimising costs. If required though we can offer a full supply and installation service.

### Benefits of Radiant Panels

Radiant panels offer a number of performance, design and cost benefits:

- / Maximise wall space – Ceiling mounted panels free up wall space, allowing useable/lettable office space to be maximised
- / Eliminate risk of contact – Ceiling mounting eliminates the need for low surface-touch temperatures a particularly benefit for schools and hospitals
- / Deliver a clean and quiet environment – with minimal induced air movement
- / Virtually maintenance free – radiant panels operate off low temperature hot water systems
- / Highly secure – radiant panels are ideal for applications where security is a key issue, integrating totally into the building fabric

# Linear Heating Panels

Linear panels deliver an established approach to radiant heating, featuring a 150mm wide extruded aluminium radiant heating strip which delivers exceptionally high heat transfer.

Available in 150mm incremental widths and any length (up to a max 4800mm in a single panel), Linear Panels provide a modern, elegant solution which are suitable for both wall and ceiling mounting. A range of mounting accessories providing flexible setup is also available.

Linear Panels are available in single panel lengths from 600mm up to 4800mm – or they may be used in multiples up to 15,000mm using spiral interconnectors. The units have a dry weight of 8.38 kg/m<sup>2</sup> and an operating weight of 10.73kg/m<sup>2</sup>.

## T-bar Mounted Linear Panels

Our smooth-faced t-bar mounted panels have been designed to elegantly fit into a standard t-bar ceiling grid and are available in single lengths up to 4200mm.

Each t-bar mounted unit is supplied with appropriate fixing clips to retain the panel into the grid, insulation, touch up paint and gloves for fast and efficient installation. Special panels may be manufactured to suit specific requirements – for example to match contour of a building, accommodate columns, light units, or sprinklers.

The panels have all been tested to EN14037-1 at the University of Stuttgart, copies of the relevant test certificates are available on request.

**Ref L-24-W**

## Plasterboard Mounted Linear Panels

These panels are designed specifically to fit flush in a standard plasterboard ceiling and are manufactured in one piece in lengths up to 4200mm.

Each panel can be manufactured with an integrated access panel for access to the flow and return connections and is supplied with a full fixing frame and accessories for fast and efficient installation.

**Ref L-30-W - with integrated access panel**

**Ref L-30-2-W - without integrated access panel**

## Linear Panels

- / Easily designed into any heating scheme
- / Wide range of dimensional options
- / Installation is fast and straightforward
- / Heat output is equal to or better than other radiant heating products
- / Perforated units may be supplied to enhance acoustic performance
- / Wide range of insulation materials may be specified
- / Available in a wide range of configurations to suit different structures

## Surface Wall Mounted Linear Panels

Designed to be conveniently surface wall mounted, these panels can be supplied with or without an access panel and for internal or external connections.

Each panel is manufactured in one piece in lengths up to 4200mm and is supplied with fixing brackets and installation kit to facilitate fast fitment.

**Ref L-35-5-W**

## Free Hanging Linear Panels

Available either in square-edged or round-edged format, these panels have been designed for free hanging in spaces where there are no ceilings. A number of different suspension options are possible to suit specific project requirements, including wire or chain hanging.

Panels are available in single unit lengths up to 4200mm and are supplied with a full installation kit.

A number of options are available for free hanging panels, including standard or sloping aluminium top covers, and surface mount brackets to enable the panels to be fixed directly to the underside of a plasterboard ceiling.

**Ref L-36-SQ-W (square-edged)**

**Ref L-36-BN-W (round edged)**

## Wall Mounted, Gymnasium Linear heating Panel

These panels have been designed specifically for use in gymnasium and sports hall environments. Manufactured with both sloping top and bottom surfaces, the panels have been developed to prevent balls and shuttlecocks getting trapped.

The panels are available in single units up to 4200mm and are supplied with insulation and a full fixing kit. If panels are required over 4200mm, then a series may be butted together with flexible copper interconnectors connecting the panels together.

A number of options are available to suit different project requirements, including 100mm or 152mm deep panels which enable mains pipes to be hidden behind the panels.

**Ref L-39-W**



## Security Panels

A relatively recent addition to radiant heating technology, smooth-faced security panels are ideally suited to applications where security is a prime concern.

Designed to meet the demanding specifications of prisons and other secure units, these panels feature an anti-ligature design and provide a robust, versatile and highly effective solution.

Security panels have been proven to be the most economical method of heating high security areas, offering an extremely flexible system which provides a virtually maintenance-free heating solution. Resistant to damage and vandalism, the working faces of the panels may be specified in 2.0mm or 3.2mm sheet steel to meet even the most demanding applications.

Panels are available in widths up to 1200mm, with maximum panel lengths up to 3000mm.

Flush mounted security  
Ref S-6-W

Surface mounted security  
Ref S-7-W

Angle mounted security  
Ref S-8-W

Surface mounted for high  
risk areas  
Ref S-10-W



## Services

Our dedicated technical and product support teams offer a comprehensive range of services – from application analysis, product advice and design, through to scheduling supply. If required we also offer a complete installation and maintenance service through our national network of specialist engineers, enabling us to take responsibility for the whole life of our products.

With an extensive product range we are able to offer standard solutions for the vast majority of applications. However, we are also able to draw on our design and development capability to develop bespoke solutions, including control systems to meet particular application requirements.

For more information on our Radiant Panel systems, or to discuss specific project requirements, **please contact your local distributor.**

## Testing

All Price TWA panels are independently tested for heat output by BSRIA in Bracknell (EN442 testing) and University of Stuttgart (EN14037 testing).

For more information, or copies of the relevant EN442 and EN14037 test certificates, **please contact our technical support team or visit our website [www.pricetwa.co.uk](http://www.pricetwa.co.uk).**

Local Distributor

For more information our range of products and systems or our technical design and support services, please contact us.

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