

Underfloor Heating  
Heat Pumps  
Smart Controls  
Ventilation

[Product Guide](#)

OMNIE

Product Guide

# OMNIE.



OMNIE® Limited  
Melrose House, Pynes Hill, Exeter, Devon, EX2 5AZ

Registered in England & Wales No. 06446222  
Registered Office: 26-28 Southernhay East, Exeter, Devon, United Kingdom, EX1 1NS

[OMNIE.co.uk](http://OMNIE.co.uk)



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**Tried systems that are innovative.  
Tested products designed for  
the future. Trusted by the UK  
construction industry.**

Product research and innovation is the basis on which our company has been built. With a commitment to continuous product development, we make sure that we are always at the forefront of our industry. We take great pride in delivering the highest-quality products, systems and customer care.

The range of patented products available from OMNIE has been designed, tested and manufactured in the UK for UK constructions. Our products are tested for structural, acoustic and heating performance. They are manufactured in an environmentally responsible way, using British-made component materials wherever possible, and all work very effectively with sources of renewable energy and as part of our unique Whole House System.

We dedicate an experienced Project Manager to look after every aspect of a project, from initial enquiry through to completion and beyond.

-  **Comprehensive free design service**
-  **Dedicated project manager**
-  **Local experts that come to you**
-  **Relationship managers for trade customers**
-  **Specialist services for developers & large projects**

# Experience on tap

Tried systems that are innovative.  
Tested products designed for the future.  
Trusted by the UK construction industry.

## Technical Experts

Our team of technical experts are always on hand to help. Whether you need advice on the most suitable system for your project or require installation advice. Every project we undertake comes complete with a comprehensive handover pack including project plans, guides, manuals and commissioning details.

## 30 years' Experience

We have decades of experience delivering the best underfloor heating, ventilation and heat pumps systems money can buy – our Whole House System philosophy underpins our commitment to continually improving the indoor living environment.

## Award-Winning Products



Our TorFloor 2@ underfloor heating system scored top marks amongst builders in *Professional Builder Magazine*. Known for its ease of installation, high heat output and fast warm-up times, the floor-in-one system now benefits from AL HEX@ technology – further improving heat output and lowering the flow water temperature.

## Performance Guaranteed

All our systems are tested for heat output and fast warm-up times. To make it easy for products to be compared, either against each other or against competitors – we have set out three simple tests:

1. The water temperature for a heat output at 50 W/m<sup>2</sup>.
2. The heat output at 50°C flow water temperature.
3. Heat maps showing heat diffusion and heat output at 20-, 40-, 60- and 80-minute intervals vs. the nearest competitor product.

## Design Service

We provide a comprehensive design service for every project we undertake. This means you can be absolutely assured that the system we specify will work as designed.

## Dedicated Project Manager

Every project benefits from a dedicated project manager. Your project manager will guide you through the design process and take care of your project requirements from order to delivery on site.

# Reinvented Redesigned Re-engineered Again and again

This is the benefit of making and designing our own products. We can tinker, test and try. We get to know what works and what doesn't.

OMNIE is a pioneer in design and development of heating emitters where complex constructions, low water temperatures, high performance and ease of installation are paramount.

Decades of research and development by OMNIE has led to our most advanced and most efficient range of underfloor heating – designed to work in absolute harmony with our complementing technologies – ventilation, heat pumps and water distribution.

Our products are carefully designed by our engineers and are tested independently for performance.

This is made possible by our in-house processes, advanced in-house manufacturing and detailed expert knowledge.

OMNIE products take the guesswork and mystery out of specifying a complete whole house system. All our technologies are easy to configure with known, independently tested heat outputs.

2008

Toron system for suspended floors is launched, the first routed chipboard UFH panel for timber constructions.

2012

TorFloor is launched incorporating a new multidirectional channel pattern and pre-bonded foiled emitters.

2013

Acoustic underfloor heating panels are launched, combining sound-reducing layers into UFH panels.

2014

Total Indoor Environment is born, with systems such as heat pumps and UFH working together in complete harmony.

2015

Multidirectional pipe channel pattern is rolled out across the range, making installation decisively simple and flexible.

2021

AL HEX® super performance technology is incorporated into OMNIE products, further enhancing performance.

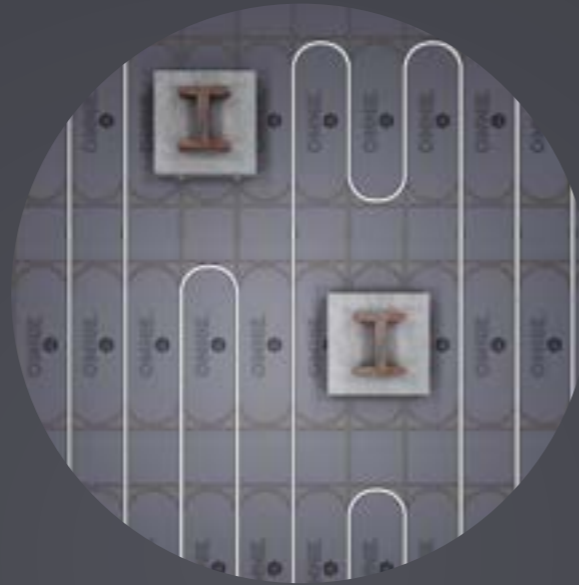
2022

Revolutionary new products TorFloor 2® and LowBoard 2® are introduced into the UK market.

2024

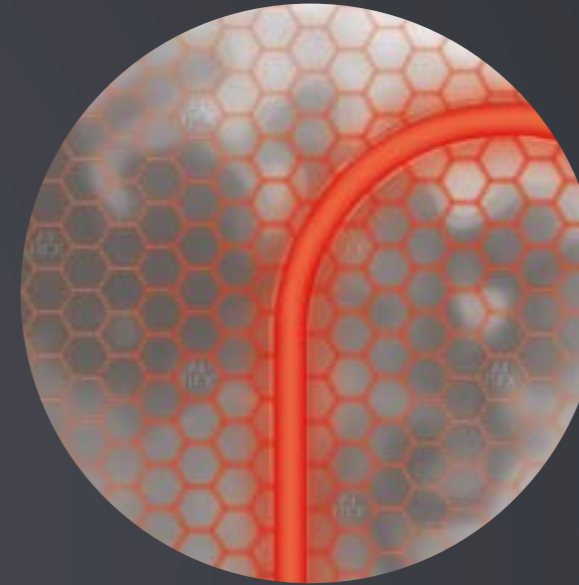
AeroX range of air source heat pumps launched alongside innovative Octo system for screeded floors.

Over a decade of innovation and inventions



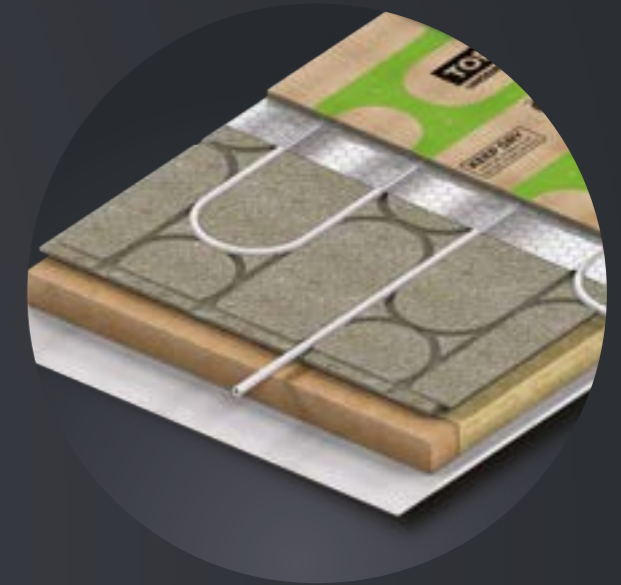
### How do you create maximum coverage in awkward spaces?

Our unique pipe channel pattern is designed to help overcome awkward spaces, nibs, recesses and even built-in furniture without the need to consider 'loops' and 'straights' when installing the underfloor heating panels. Simply install the panels as you would a floor and use the pattern to navigate the pipe around the obstructions.



### How do you ensure even and effective heat output?

Our foil-faced diffuser technology ensures an even and effective distribution of heat into the floor. This eliminates the problem of 'striping' where heat can only be felt where the pipe is. Our systems distribute the heat evenly, heating up the room faster and making the floor finish more comfortable.



### How do you make installation quicker and easier?

Our timber panel products are designed to be installed just as you would a timber floor deck – the panels work together to create a seamless pipe channel pattern. Some of our products, such as TorFloor 2®, substitute the need for a floor deck – reducing costs and installation time.

## Patently easier

Over the decades we've patented industry-leading ideas that have made performance more efficient, installation easier and coverage better. Problem solved.

**11 x Mount Everest**  
**300 x Eiffel Tower**  
**1,000 x Big Ben**  
**250 x Empire State**



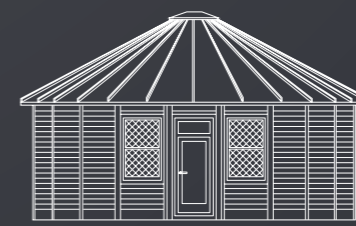
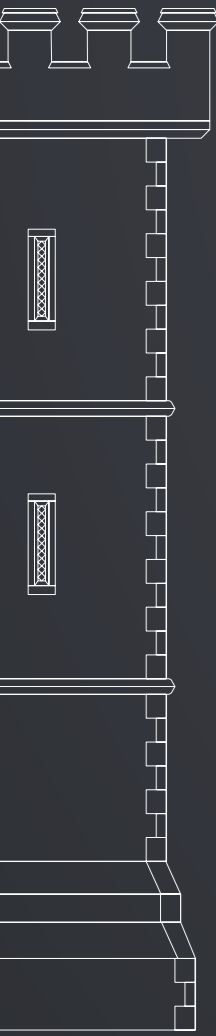
**100 x Burj Dubai**  
**9 x Marianas Trench**  
**98,500m<sup>2</sup> of product**  
**Manufactured**  
**in Britain**  
**every year**

Our manufacturing centres in the UK and Europe are amongst the most advanced in the industry. Unlike our competitors we design, engineer and manufacture the products we sell.

Our factories work 24 hours a day, seven days a week with products for the UK market being made at our UK facility using British-made component materials.

All products are manufactured in an environmentally responsible way, with an overarching commitment to sustainability at the forefront of our manufacturing philosophy.

We take great pride in delivering the highest-quality products; each product we make is carefully designed to ensure long-lasting performance.



Castles

Churches

Low-Energy Buildings

Period Properties

Yurts

New-Build Homes

# The right system for every building

There's a reason why we have the most capable range of UFH. It's because the UK has one of the world's most diverse range of housing. So we've developed unique products for every type of UK floor construction. From castle to cottage, town house to terrace.

We draw on years of experience to develop and manufacture systems that are easily installed into UK constructions, especially timber constructions such as suspended, batten or floating floors.

However, getting underfloor heating to work effectively in timber floors is not straightforward. Timber is not naturally a good conductor of heat. This means, for other brands of underfloor heating, using high-temperature water is the only way the system will be able to heat the room effectively, and as a result the efficiency of the heat pump or boiler will be reduced.

We are specialists in manufacturing UFH products for timber floors and have developed a range that works well at low water temperatures. Our systems are also designed to avoid squeaks and ticking and to maintain or improve the strength and acoustic qualities of the floor.

We always strive to meet individual customers' needs which is why when standard products don't dovetail with customers' requirements we're able to provide bespoke solutions.

We can design and manufacture products to suit the building construction, taking into consideration any acoustic details, loading requirements, services and floor fixtures.

[Read our case-studies: OMNIE.co.uk/case\\_studies](https://www.omnie.co.uk/case_studies)





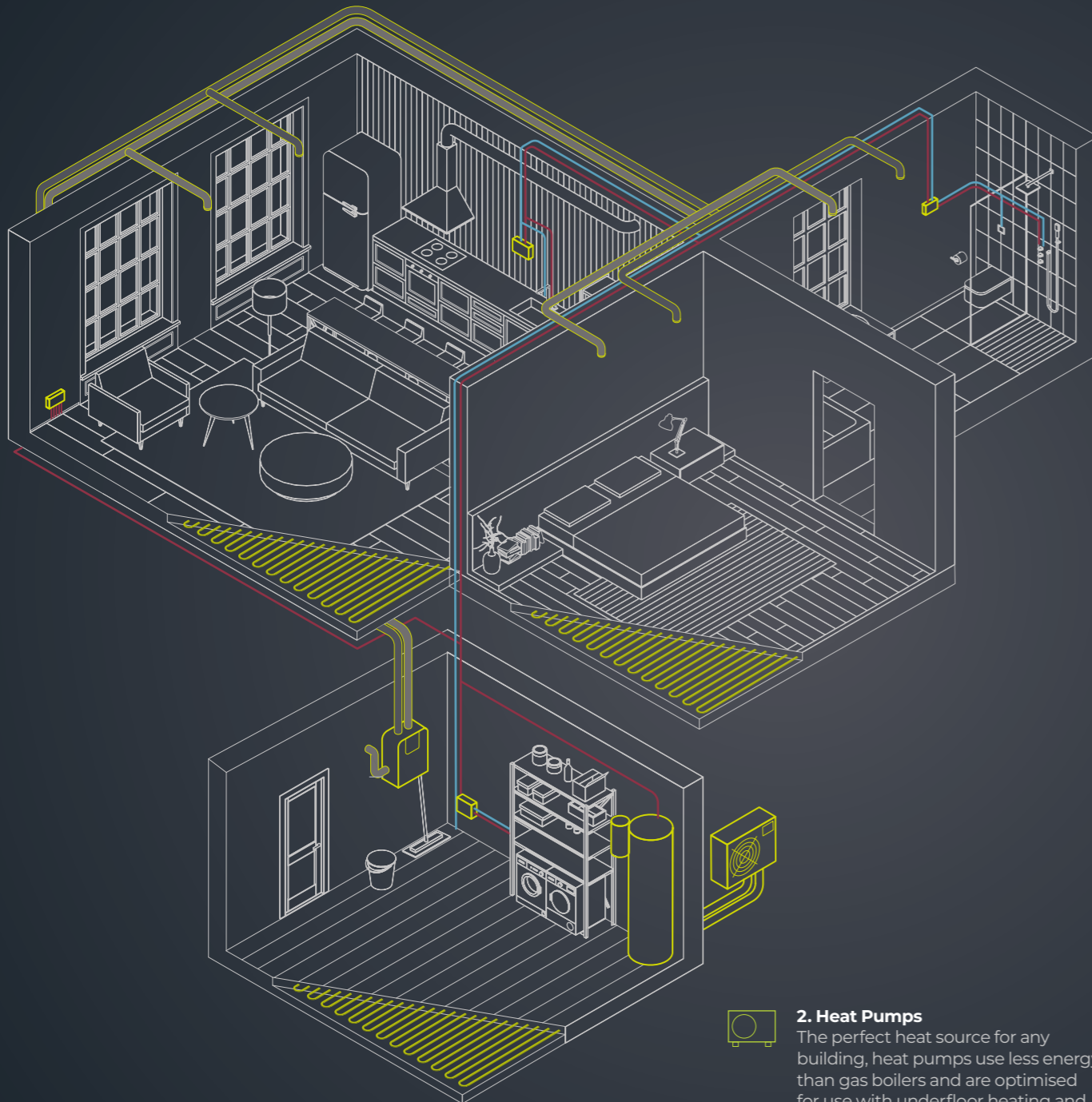
### 3. Controls

Fundamental to any efficient system are good controls. The OMNIE control system brings together the controls for the heating, domestic hot water and ventilation making the home's controls easier to install and simpler to use.



### 4. Ventilation & Heat Recovery

Using a whole house ventilation system with heat recovery not only improves air quality but pre-heats the incoming air using energy from the extract that would have otherwise been lost. Comfort conditions are improved especially when combined with a radiant underfloor heating system.



### 1. Underfloor Heating

The most efficient and effective way to control the temperature of an indoor environment. Underfloor heating warms a room using radiant heat and this is more comfortable than heating a room by air alone, as you do with radiators. We get a similar feeling of comfort from the sun.



### 2. Heat Pumps

The perfect heat source for any building, heat pumps use less energy than gas boilers and are optimised for use with underfloor heating and other technologies where lower water temperatures are required.

## Whole house One environment

Our principal four technologies are designed to work together in perfect harmony, creating what we call the Whole House System. Our project team will meet your design requirements with either independent technologies, or combine them together to create the perfect indoor environment.

The Whole House System is a concept that is at the core of the OMNIE philosophy – ensuring that the complementary technologies we bring together work effectively to achieve lower costs, both environmental and financial, whilst giving the user the comfort they want, when they want.

These technologies must be easily controllable by the individual to suit the conditions. Too often controls are independent, complicated and unintuitive which creates inefficient indoor environment systems that are too hot, too cold or on for too long.

When used in the Whole House System, any particular technology does not stand alone but is affected and influenced by other devices used in the system. A holistic view of the system is needed to ensure that the benefits of using low-carbon technologies are realised.

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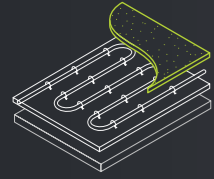
4

5



# Underfloor Heating Systems

## Screed



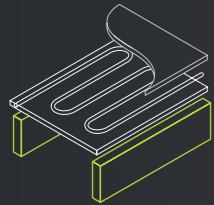
**Staple** 32 - 33  
Simple staple system for securing warm water pipes to subfloor insulation layer.



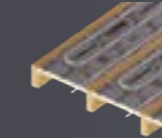
**OctoPro** 34 - 35  
Interlocking Omni-directional plastic panel system for use in screeded or concrete floors.



## Timber



**FoilBoard 25** 40-41  
Inter-joist insulated panels that sit between joists or battens.



**FoilBatten 25/50** 42-43  
Integrated insulation and heating system for battened floors.



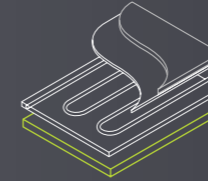
**TorFloor 2®** 48-49  
Integrated floor deck and heating system for suspended or battened floors with woodfibre surface.



**TorFloor 2® Plus** 50-51  
Integrated floor deck and heating system for suspended or battened floors with cement particle board surface.



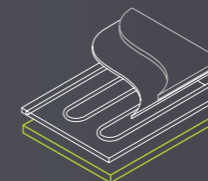
## Floating



**FoilFloat** 44-45  
Insulation panel that floats over an existing timber or concrete floor.



## Low Build-up & Overlay



**LowBoard 2®** 56-57  
Low build-up system that floats over existing insulated timber or concrete floors with woodfibre surface.



**LowBoard 2® Plus** 58-59  
Low build-up system that floats over existing insulated timber or concrete floors with cement particle board surface.



**LowBoard 2® Insulate** 61-62  
Low build-up system with insulation that floats over existing uninsulated timber or concrete floors with woodfibre surface.



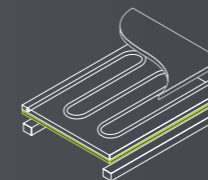
**LowBoard 2® Insulate Plus** 62-63  
Low build-up system with insulation that floats over existing uninsulated timber or concrete floors with cement particle board surface.



**OMNIE-Tile** 36-37  
Insulation panel that floats over an existing timber or concrete floor with cementitious surface for application of tile adhesive.



## Acoustic



**TorFloor 2® RdB** 52-53  
Integrated floor deck and heating system for suspended floors with integrated acoustic layer.



### Customer Information

Some products may appear differently than shown in this guide. Products may be withdrawn, replaced or the specification subject to change without notice. Please check with your project manager for further details or call us on 01392 36 36 05.

# Be floorsure. Select by floor finish.

## Underfloor Heating - for new floors.

E.g. New buildings or refurbishments.

## For existing floors.

E.g. Laid directly over an existing floor.

### In Screed

### Timber Joist

### Timber Batten

### Floating

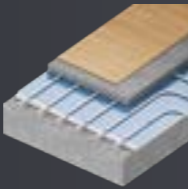
### Low build up



Structural or Solid Wood



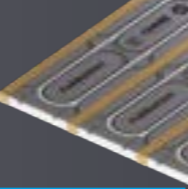
OCTOPRO



STAPLE



FOILBOARD



FOILBATTEN 50



LOWBOARD 2



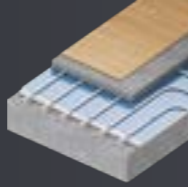
FOILBATTEN 25



Wood Strip and Laminate



OCTOPRO



STAPLE



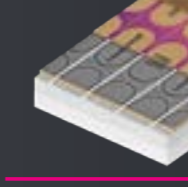
TORFLOOR 2



TORFLOOR 2



LOWBOARD 2 PLUS



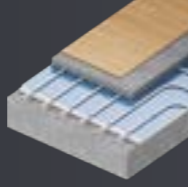
LOWBOARD 2



LVT (Vinyl)



OCTOPRO



STAPLE



TORFLOOR 2 PLUS



TORFLOOR 2 PLUS



LOWBOARD 2



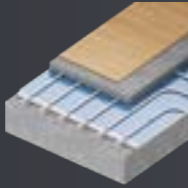
LOWBOARD 2 PLUS



Carpet



OCTOPRO



STAPLE



TORFLOOR 2



TORFLOOR 2



OMNIE-TILE



LOWBOARD 2



Tiles



OCTOPRO



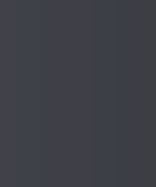
STAPLE



TORFLOOR 2 PLUS



TORFLOOR 2 PLUS



OMNIE-TILE



OMNIE-TILE

# Underfloor heating that overperforms

Our underfloor heating products offer the fastest warm-up times and best heating performance on the market.



## Warm-up

Underfloor heating systems can be designed to react very quickly to heating demands. The warm-up time of the system depends upon several factors:

## Product

The time taken for the underfloor heating system to emit heat is dependent on the underfloor heating product and system. Underfloor heating with pipe embedded in a thick concrete slab will have a longer warm-up time than dry construction systems, such as TorFloor 2® or LowBoard 2® in suspended, batten or floating floors. This is recognised in SAP on ground floors with timber floor underfloor heating having a better overall SAP rating than concrete underfloor heating.

## Heat loss

The room warm-up time is also dependent on the heat loss of the building. The underfloor heating system must be sized to overcome the heat losses of the building but also have additional capacity to ensure a good response time from cold.

## Heat output

The underfloor heating output is based on a number of variables:

## Floor finish

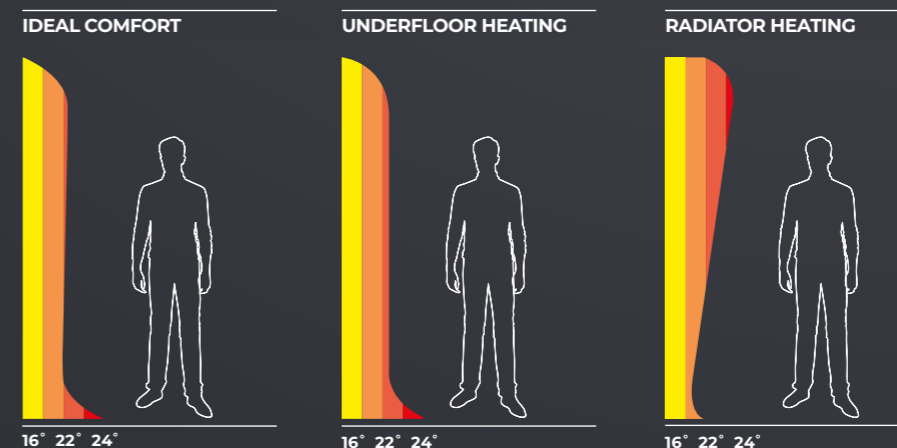
Floor finishes have different thermal resistances. Tiles, for example, are very conductive whilst a combination of carpet and underlay is less conductive. Also, the thicker the material, the lower the heat output will be.

## Water temperature

The higher the water temperature used in underfloor heating, the higher the heat output. However, a balance is needed as using low water temperatures reduces running costs.

## The underfloor heating product and the construction

OMNIE products are designed to have a good conductive pathway from pipe to the floor surface. Some competitor products have an air gap which reduces the heat output.



Underfloor heating is much closer to the ideal room comfort profile than radiator heating.

## Precision routing for any route

Omni-directional channelling means you can easily and efficiently work your way around the most complex of arrangements.

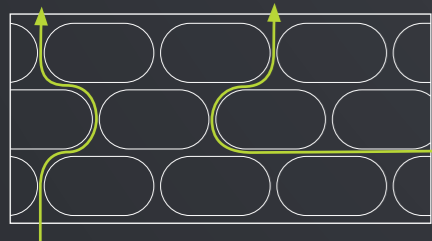
Our underfloor heating systems benefit from our unique pipe lay pattern and ball-routed channels helping you to lay our systems faster and easier than ever before.

Our technology has been perfected thanks to 30 years of experience in the underfloor heating industry, enabling our systems to be installed quicker and easier than ever before.

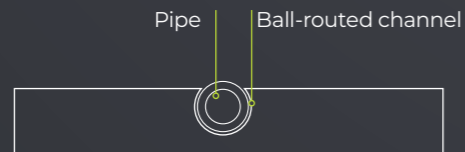
Our trusted omni-directional technology makes the most of our patented and completely unique pipe channel pattern. This pattern not only allows for panels to be laid in a similar method to flooring panels, but enables almost infinite flexibility as to where the pipe can be laid. This means you can easily work around complex unheated areas, room shapes and better manage flows and returns.

Combined with the pipe channel pattern, omni-directional technology has led to the development of the ball-routed pipe channel. This means that the pipe, when inserted into the channel, doesn't pop out, especially when laying around return loops or when working around complex shapes.

Omni-directional technology is available across our product range. You can find out more by contacting your local OMNIE representative for a hands-on demo, or alternatively visiting our website.

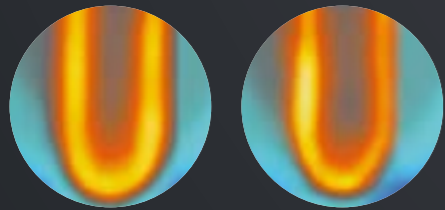
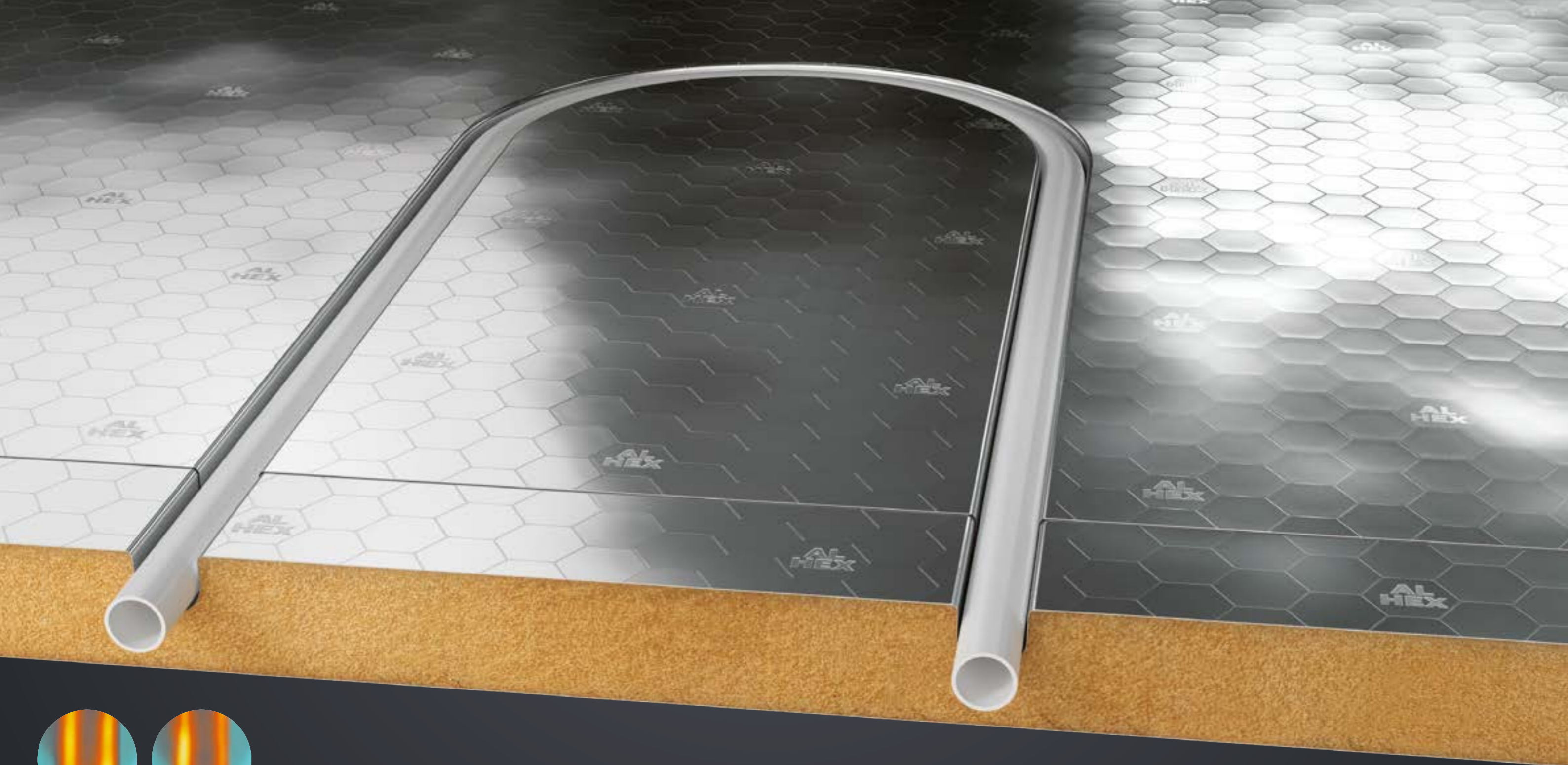


Omni-directional panel channelling



Ball-routed channels eliminate pipe pop out





**AL HEX®**

The heat from the warm water pipe is effectively and evenly transferred across the panel with minimum energy loss.

**Without AL HEX®**

The heat transfer is not as effective, it is uneven and is warming the floor at different temperatures. The effect of this is known as 'striping' – where the heat stays where the pipe is laid as opposed to diffusing across the panel.

OMNIE systems benefit from the AL HEX® foil diffuser. This unique diffuser technology significantly improves the in-channel foiled surface area that is in contact with the warm water pipe. This means that the heat is more effectively transferred from the pipe into the foil, which in turn improves heat transfer into the floor.

The AL HEX® system eliminates the effects of 'striping' – where heat remains in the warm water pipe and doesn't diffuse out into the UFH panel effectively. Striping within the floor

means that hot spots and hot lines can be felt on the floor surface finish. Prolonged effects of striping can lead to damage in the floor finish as well as in the subfloor, especially if attempts to improve diffusion using high water temperatures are used.

The AL HEX® system is included as standard on all OMNIE products that incorporate a foil diffuser.



## Patented foil technology

Spreads heat quicker and more efficiently, making sure of fast warm-up times and lower water temperatures.

Many people want underfloor heating simply because it is the most comfortable form of heating, completely unobtrusive, safer and more hygienic.

But we go much further.

Our underfloor heating products have also been designed (and extensively tested) to absolutely minimise the amount of energy a building's heating system requires in order to provide effective heating, and to make it realistic for this energy to come from renewable sources either straight away or at some stage in the future life of the building.

Two crucial aspects to the design of our products make this possible.

The first is our products minimise the temperature of the heating system water required in order to provide effective heating. The lower this water temperature can be, the more efficiently a heat source can run and the more likely it is that water at this temperature can come from a truly renewable source.

With any heating system the larger the area of the emitter, the cooler the surface temperature needs to be to achieve the same heating effect. This is why underfloor heating runs at a much lower water temperature compared to radiator systems. The use of lower water temperatures better utilises the condensing mode in boilers and allows heat pumps to have a greater efficiency.

Studies have demonstrated that using underfloor heating rather than radiators with a ground source heat pump can make the heating system up to 30% more efficient.

Radiator heating systems and even some poorer forms of underfloor heating must be supplied with high-temperature (60–85°C) water. This makes such buildings more dependent on having a gas or oil boiler because a boiler is the most common and reliable way of producing water this hot.

All our underfloor heating products are effective using much cooler water (32–55°C) which not only enables a gas or oil boiler to run much more efficiently but also maximises utilisation of water heated by renewable energy.

The second is the speed with which our products respond to changes in heating power demand. High thermal mass, pipe-in-screed underfloor heating cannot respond quickly to demand-changes, and can waste energy as a result.

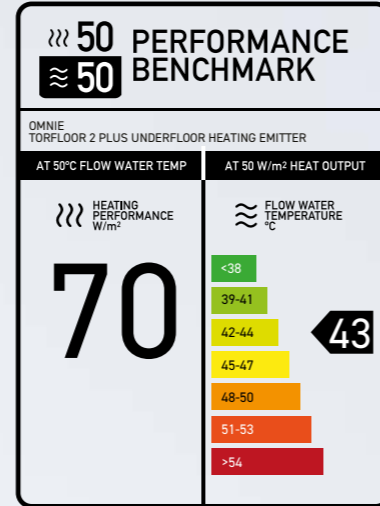
OMNIE products have been designed with low thermal mass and this enables them to respond very quickly and efficiently to changes in heating demand.

**Lower water temperatures reduce operating costs, are kinder to the environment and enable the use of renewable heat sources.**

**So you can see how effective our products are at delivering these commitments, we have devised two simple measures:**

- 1 The water temperature for a heat output at 50 W/m<sup>2</sup>**
- 2 The heat output at 50°C flow water temperature**

**This information is shown under each product in this product guide.**



Radiator heating systems and poorer forms of underfloor heating work between 55–85°C

OMNIE works between 30–55°C



**Perfect for heat pumps.**

# Lower temperatures Lower emissions Lower costs



### Complete Flexibility

Flexible pipe can be installed at 150mm to 300mm spacing

### Staple Gun Installation

A staple gun can be used to make installation easier and faster



### In-Screed Conduction

Screed is poured over which provides good heat conduction.

### Secure Fast Fixings

Staples fix pipe securely to the insulation (not supplied).

Suitable for screeded floors with insulation to affix the pipe to.

Floor finish\*

Screed\*

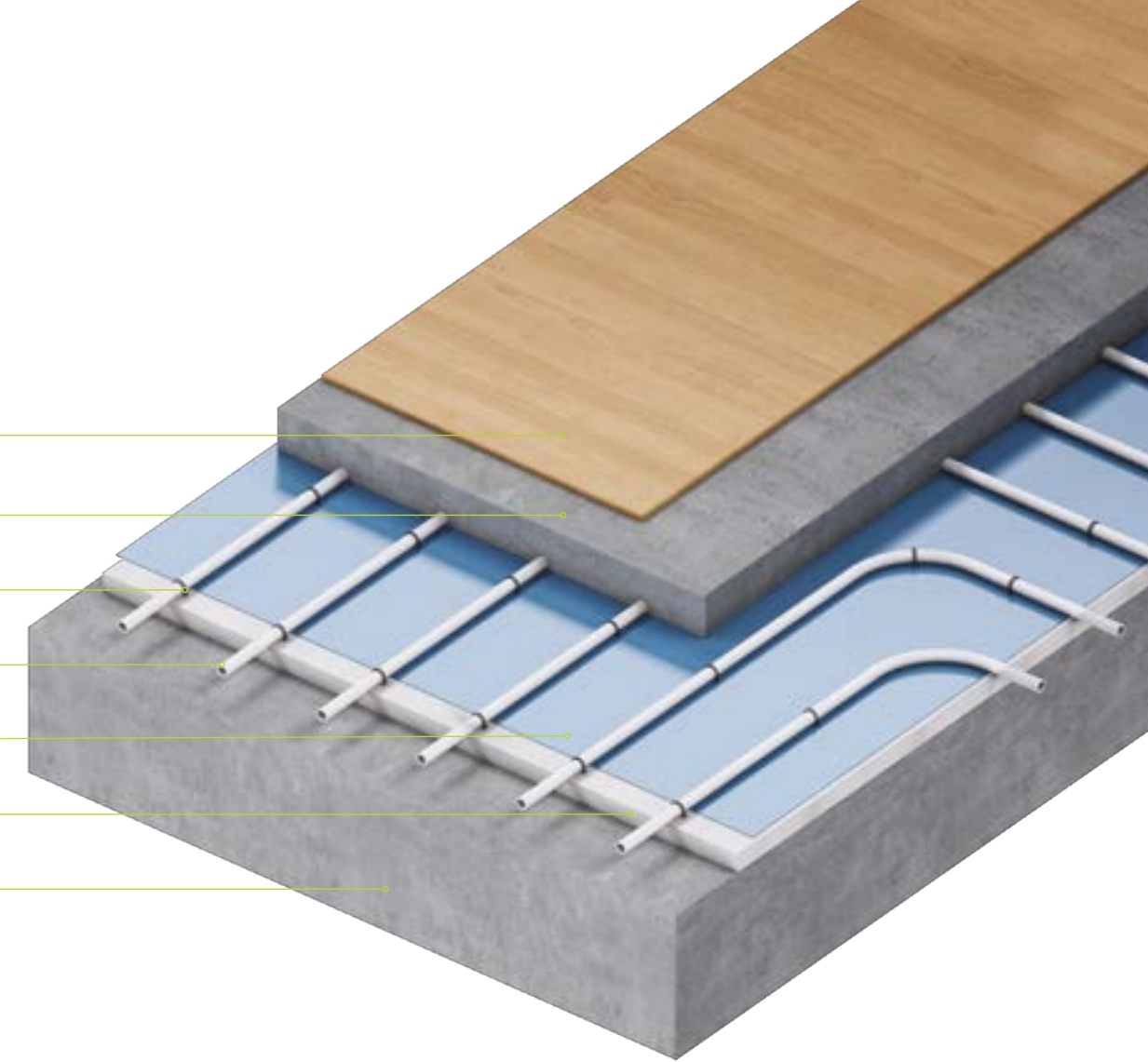
Staple

OMNIE 16.5 mm Pipe

Vapour control layer\*

Insulation layer\*

Subfloor\*



**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

For Screed & Concrete Floors

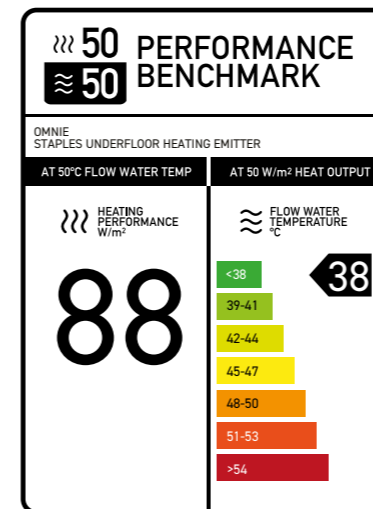
# Staple

The OMNIE staple system provides a quick, flexible and simple method of installing underfloor heating in a screeded floor. The pipe is easily held using staples. The staples have a barbed end which fixes into the insulation.

To speed up the process further, a pipe stapler is available making installation easier and faster. A polythene sheet/membrane may be required over the insulation prior to stapling the pipe. Please seek advice from insulation and screed suppliers. Shorter 40mm staples are also available for fixing to thin insulation.

### Upgrade?

Consider OctoPro as an alternative product for screed floors. The OctoPro panels provide protection for the pipe as well as removing the need to mark out the pipe spacings.



50/50 Performance Benchmark Testing  
Information can be found at:  
[www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-USFS0150-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- USFS0150 Box of Staples
- UPI6xxxx\* OMNIFLO Pipe
- USFS0101 Pipe Stapler Tool
- USEF0125 Edgefoam

\*Product (code) as required depending on coil length required.

## Specifications

**Panel thickness:**  
N/A

**Weight with water:**  
N/A

**Suitable for:**  
Solid floors - screed or concrete laid over insulation.

**Pipe centres:**  
Flexible, dependent on design.

**Pipe size:**  
16.5 mm

**Dimensions:**  
N/A

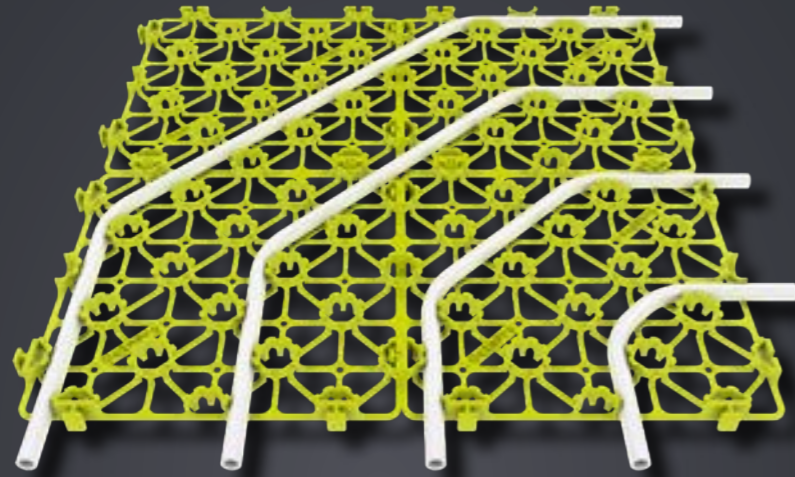
**Screed Flow Technology**

Screed flows freely through the panels to bond with the subfloor.



**Clip Together, Self Adhesive Panels**

Panels clip together quickly and are self adhesive to stick to the subfloor.



**Pipe Protection**

Pipe held firm by castellations without staples or clips.



**Octo-directional**

Pipe is able to turn 45° or 90° easily between the castellations.



Suitable for any screed floor.

For Screed & Concrete Floors

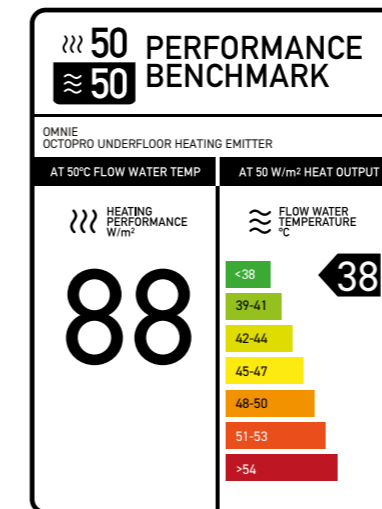
# OctoPro

OMNIE OctoPro is an innovative new system to hold underfloor heating pipes in precise position ahead of a covering screed. OctoPro's unique design removes the risk of air pockets forming during the pour and ensures the screed is in direct contact with the subfloor.

The individual plates are 300mm x 300mm and clip together to cover the required heated area. Each panel features a peel-off self-adhesive layer on the underside to adhere the panel to the subfloor. The OctoPro panels can be laid over an existing concrete floor or insulation with polythene sheet.

The flexible 16.5mm pipe is held securely and can be installed as close as 50mm spacing.

Our Octo system improves installation time, gives ultimate flexibility and maintains pipe location accuracy for in-screed applications.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-USPS0116-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- USPS0116 OctoPro (10m2 box)
- UPI6xxxx\* OMNIFLO Pipe
- USEF0125 Edgefoam

\*Product (code) as required depending on coil length required.

**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

## Specifications

**Panel thickness:**  
20mm

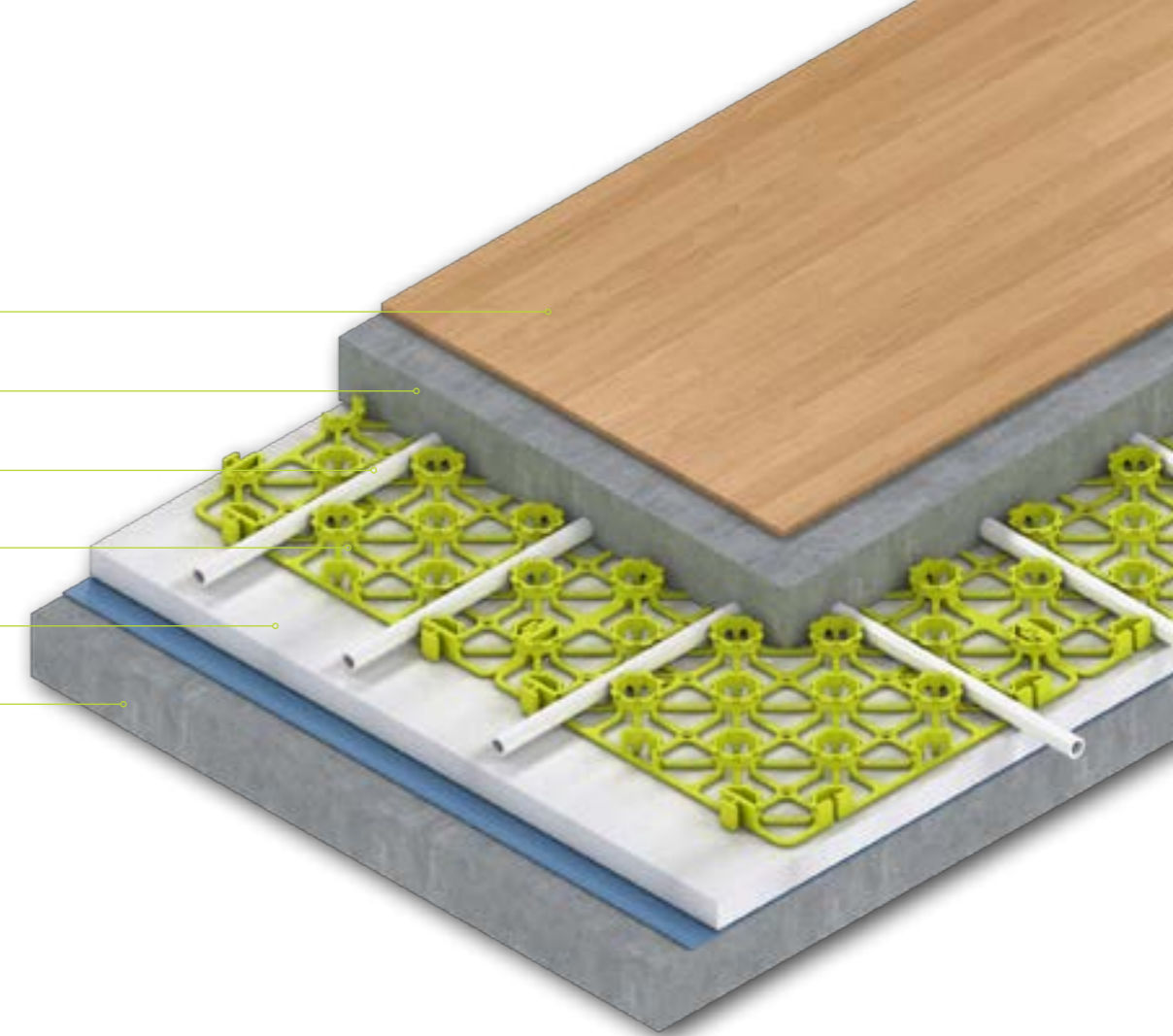
**Weight with water:**  
8 kg/m²

**Suitable for:**  
Screeded floors

**Pipe centres:**  
Flexible - up to 200mm

**Pipe size:**  
16.5 mm

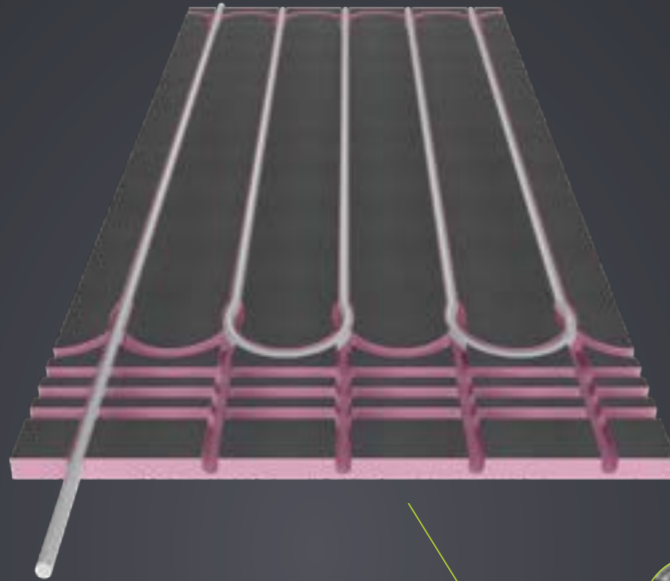
**Dimensions:**  
Supplied as 4 panels 600mm x 600mm  
Supplied in pack of 10m²



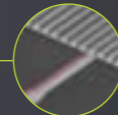
**Built-in Insulation**  
Reduces installation time and eliminates need for subfloor to be insulated.



**Easy Cut & Trim**  
Straightforward to cut and trim on site, speeding up installation time.



**Cementitious Covering**  
Provides a strong and even bond between the panel and tile adhesive.



Suitable for existing floors and tile floor finish.

For Low Build Up Applications

## OMNIE-Tile

OMNIE-Tile is a low build-up UFH product manufactured by OMNIE. Using 20mm extruded polystyrene insulation (XPS) faced with cementitious material, the tiles can be laid with confidence on a firm tried and fully tested floor build-up.

The OMNIE-Tile panels are routed with 12mm channels with loops at either end of the board to make installation easy to manage with the minimal amount of cutting.

The panels are simply fixed or bonded to the subfloor and, in turn, tiles are adhered to the board. As the tiles and adhesive are conductive the heat output and warm-up are sufficient without needing an aluminium diffuser, however, high water temperatures should be avoided as this will lead to noticeable cold spots on the tiled floor where there is no pipe. The product cannot be used with any other floor finish.



Watch product features video.

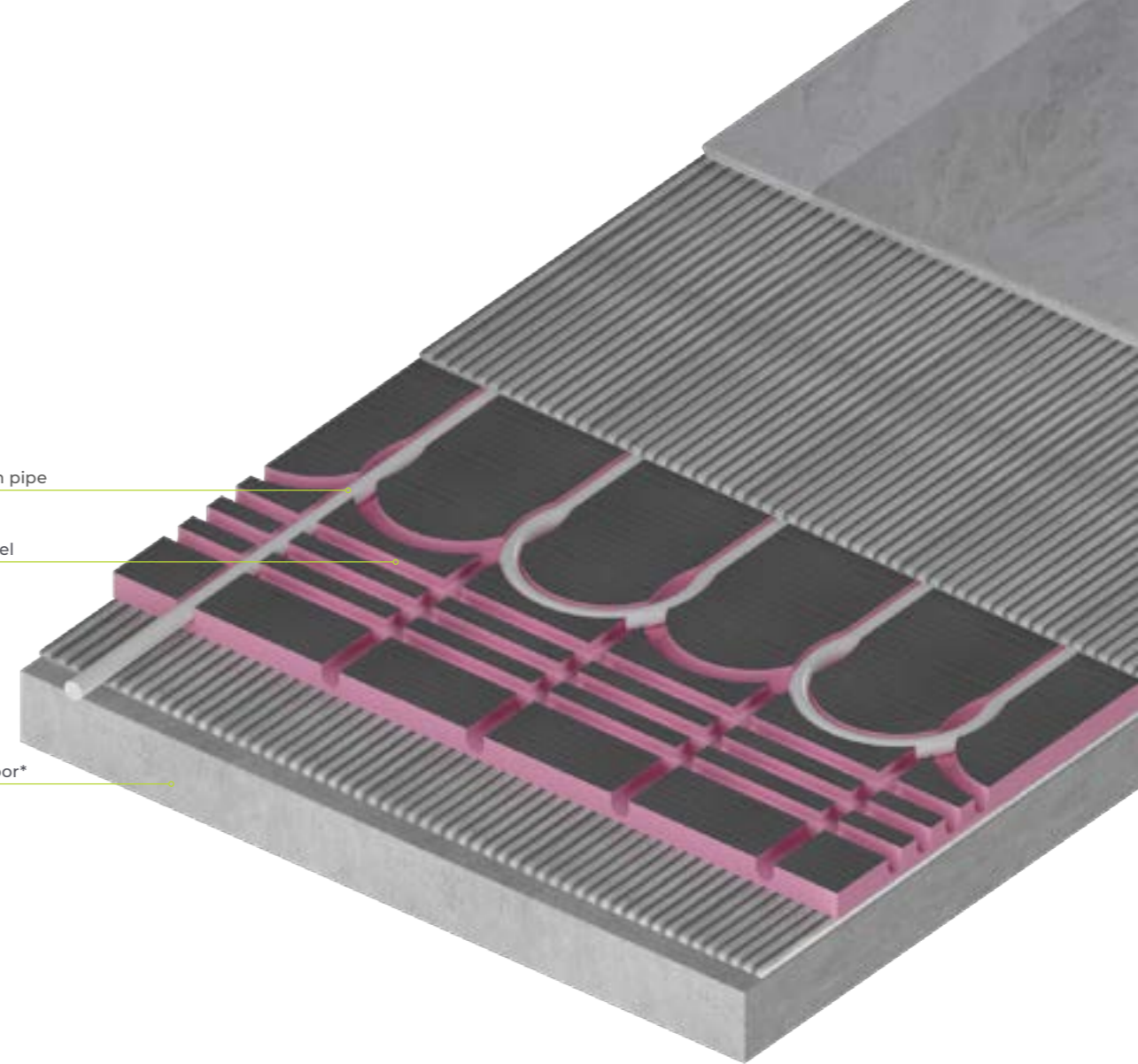


Watch product installation video.

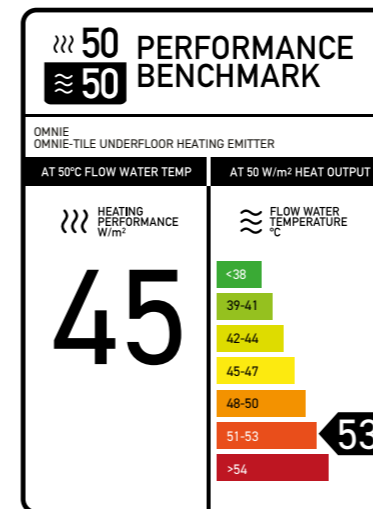
OMNIFLO 12mm pipe

OMNIE-Tile panel

Concrete subfloor\*



**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

Note: The Performance Benchmark is based on 1.0 TOG finish.

## Documents

TPG-ULOT0120-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

ULOT0220 OMNIE-Tile panel  
UPI2xxxx\* OMNIFLO Pipe

\*Product (code) as required depending on coil length required.

## Specifications

**Panel thickness:**  
20mm

**Weight with water:**  
1.5 kg/m<sup>2</sup>

**Suitable for:**  
Uninsulated solid floors

**Pipe centres:**  
Standard: 120mm (12mm pipe)

**Dimensions:**  
1200 x 600mm

# Foil System

## Emitter and insulation in one

Our Foil range delivers exceptional heating performance when the customer is supplying their own floor deck.

FoilBoard, FoilBatten and FoilFloat systems provide excellent heating performance and fast warm up times without creaking or noise common with rigid (diffuser) plates. They also come with the insulation layer built in and are designed to fit directly into the floor construction with no change to the overall floor build up. All the foil systems are designed for when the floor deck is being provided by others as part of a new build or retrofit project.

**FoilBoard** p 40-41  
Insulation & heat diffuser in one, for suspended floors and where others are supplying the floor deck.

**FoilBatten 25/50** p 42-43  
Insulation & heat diffuser in one, for battened floors and where others are supplying the floor deck.

**FoilFloat 25** p 44-45  
Insulation & heat diffuser in one, for floating floors and where others are supplying the floor deck.



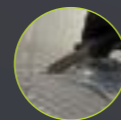
#### AL HEX Diffuser

Fully foiled AL HEX heat diffuser to maximise heat output and fast warm up times.



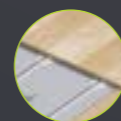
#### Built-in Insulation

Reduces installation time and eliminates need for subfloor to be insulated.



#### Easy Cut & Trim

Straightforward to cut and trim on site, speeding up installation time.



#### Deck to Deck Design

Designed to be in direct contact with the floor deck.

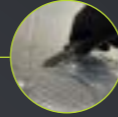


#### No Warm Up Noise

No noise on heat up and cool down due to no use of rigid plates.

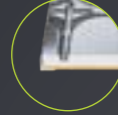


**AL HEX Diffuser**  
Fully foiled AL HEX heat diffuser to maximise heat output and fast warm up times.

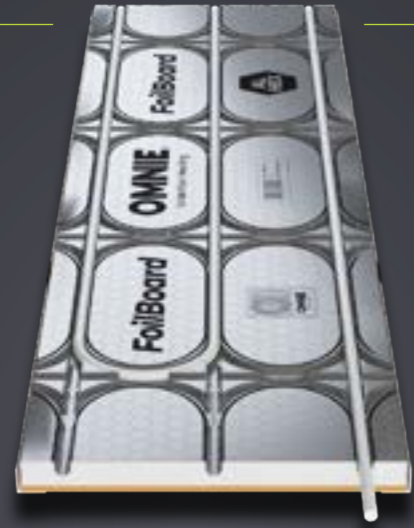


**Easy Cut & Trim**  
Straightforward to cut and trim on site, speeding up installation time.

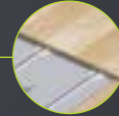
**Built-in Insulation**  
Reduces installation time and eliminates need for subfloor to be insulated.



**In-Construction Profile**  
Fits neatly into the floor construction without any additional build up.

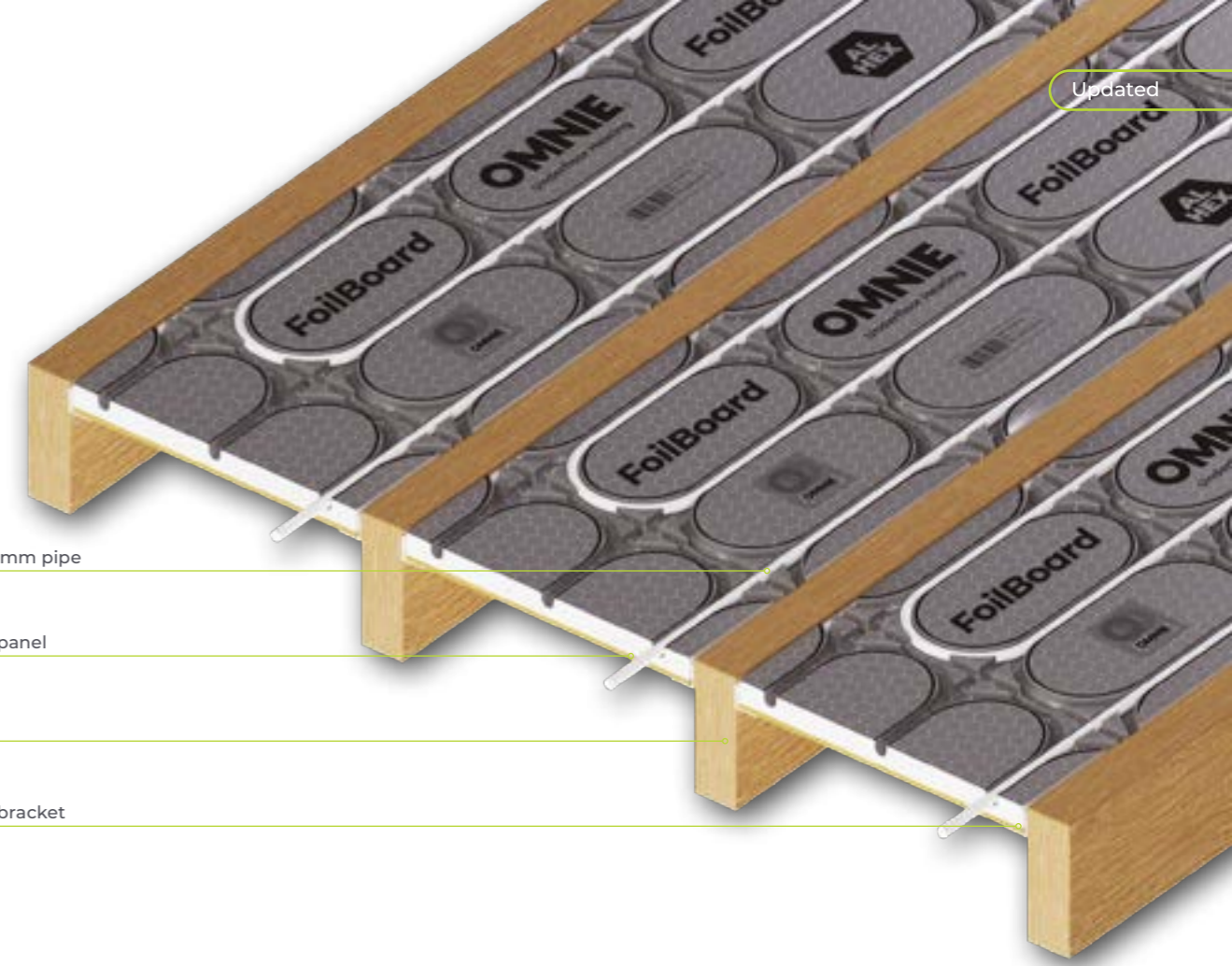


**No Warm Up Noise**  
No noise on heat up and cool down due to no use of rigid plates.



**Deck to Deck Design**  
Designed to be in direct contact with the floor deck.

Suitable for timber suspended floors at 400mm centres.



OMNIFLO 12mm pipe

FoilBoard® panel

Floor joist\*

FoilBoard® bracket

**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

For Timber Suspended Floors

# FoilBoard®

Insulation & heat diffuser in one, for suspended floors.

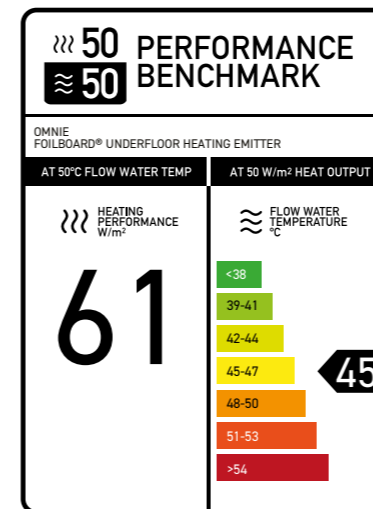
FoilBoard® from OMNIE is an underfloor heating panel for timber suspended floors. Manufactured by OMNIE, the panel is made from insulation with a soft temper aluminium heat diffuser pre-bonded to the surface making it easier to trim than rigid plates as well as removing the clicking and creaking that comes from plates when they warm-up. 'L' shaped brackets can be supplied which leave the top of the joist free for fixings as well as ensuring the panel is in direct contact with the floor improving the heat output, often a problem with thick aluminium diffuser plates.



Watch product features video.



Watch product installation video.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-UFFB0126-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- UFFB0126 FoilBoard panel
- UPI2xxxx\* OMNIFLO Pipe
- UFF0125 FoilBoard Angle Bracket

\*Product (code) as required depending on coil length required.

## Specifications

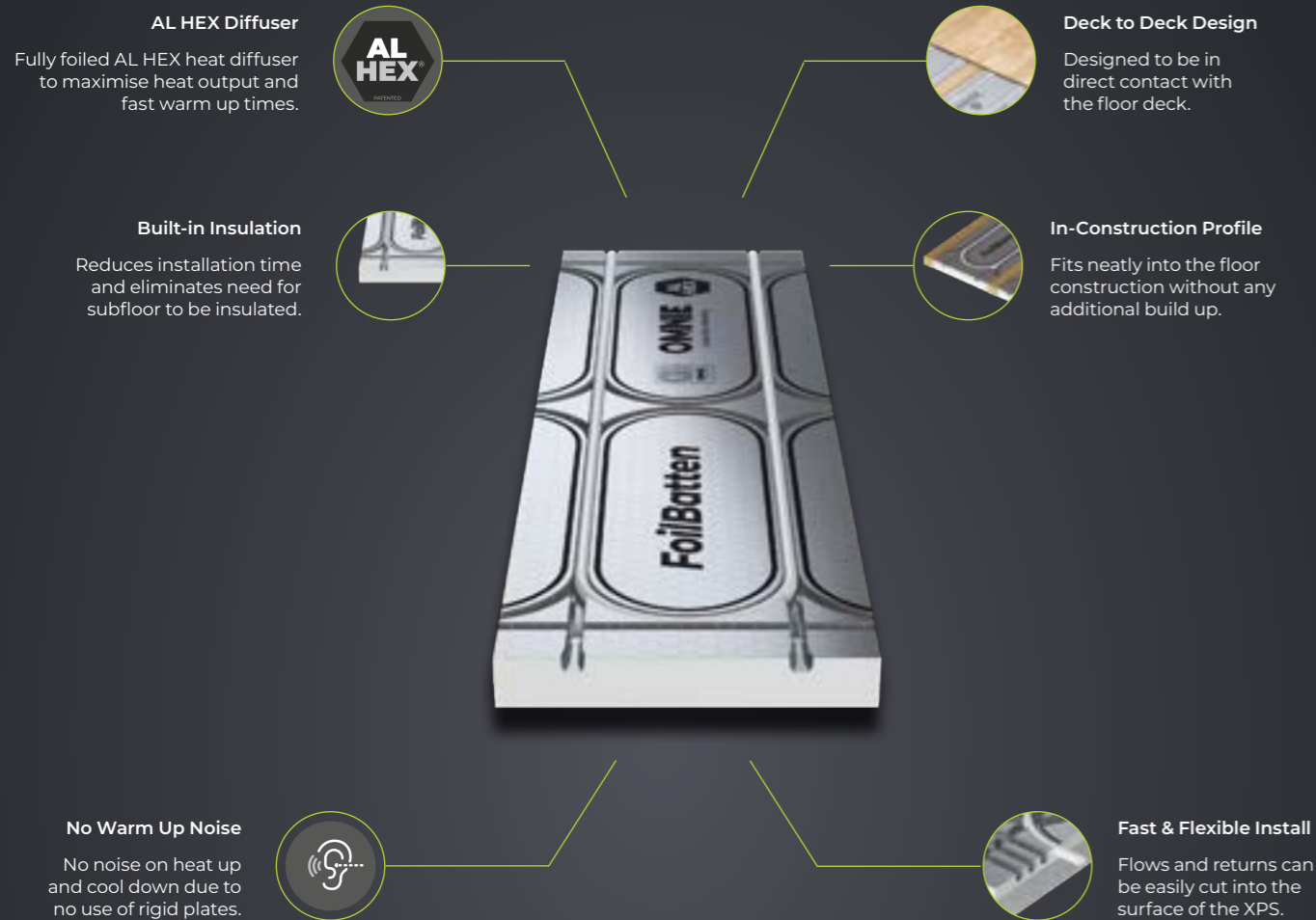
**Panel thickness:**  
25mm

**Weight with water:**  
1.5 kg/m²

**Suitable for:**  
Suspended timber or batten floors with centres up to 400mm

**Pipe centres:**  
133mm using 12mm pipe

**Dimensions:**  
340mm x 1200mm



Suitable for batten (25mm and 50mm) floors.

For Timber Batten Floors

For Low Build Up Applications (25)

# FoilBatten 25/50

Insulation & heat diffuser in one, for batten floors.

FoilBatten from OMNIE is an underfloor heating panel for timber batten floors. Manufactured by OMNIE, the panel is made from insulation with a soft temper aluminium heat diffuser pre-bonded to the surface making it easier to trim than rigid plates as well as removing the clicking and creaking that comes from plates when they warm-up. As the panels fit neatly in the batten space, unlike aluminium diffusers, the top of the batten is free from fixings. The panels ensure good contact with the floor removing the possibility of sagging plates and poor heat output.



Watch product features video.

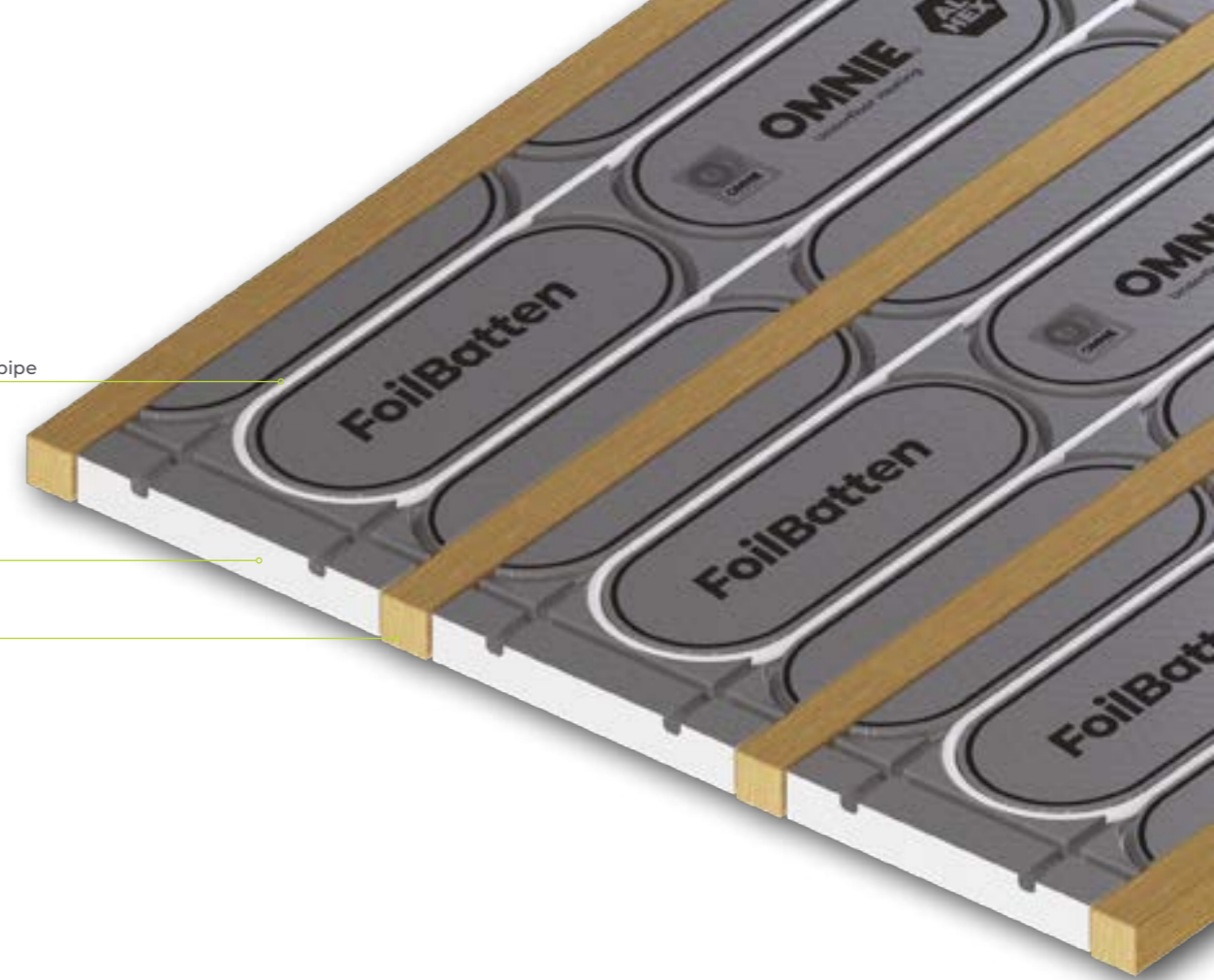


Watch product installation video.

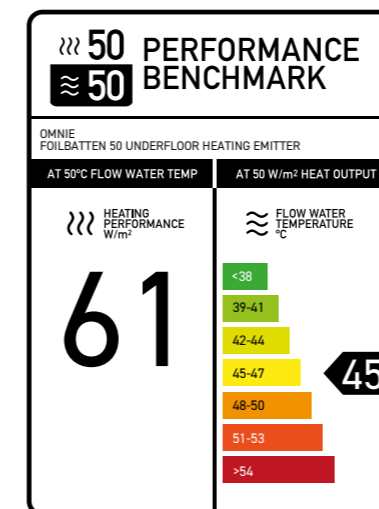
OMNIFLO 16.5mm pipe

FoilBatten panel

Batten\*



**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-UFBPX125-0124 (25)  
TPG-UFBPX150-0124 (50)



Visit our resources finder to download technical guides.

This system is made up of the following components;

UFBPX125 FoilBatten 25 panel  
UFBPX150 FoilBatten 50 panel  
UPI6xxxx\* OMNIFLO Pipe

\*Product (code) as required depending on coil length required.

## Specifications

**Panel thickness:**  
25mm or 50mm

**Weight with water:**  
1.5 kg/m²

**Suitable for:**  
Batten floors & Low build up applications

**Pipe centres:**  
200mm using 16.5mm pipe

**Dimensions:**  
1200mm x 340mm

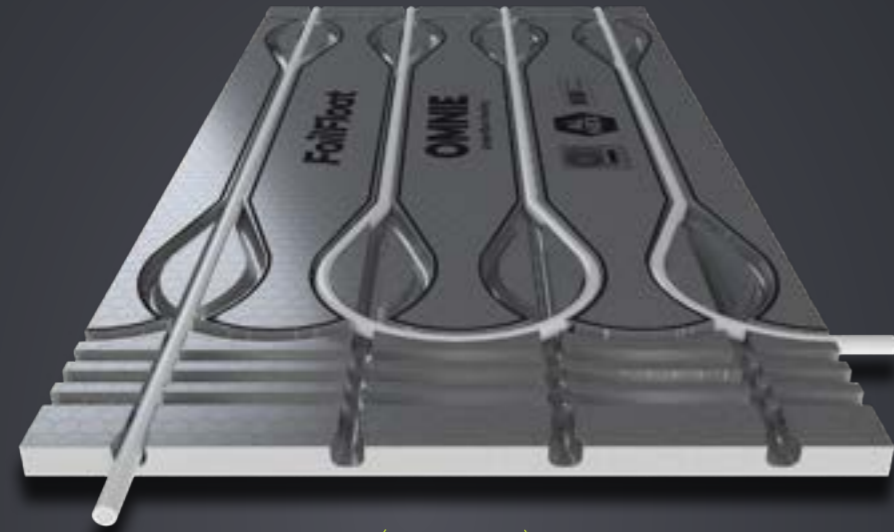
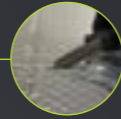
**AL HEX Diffuser**

Fully foiled AL HEX heat diffuser to maximise heat output and fast warm up times.



**Easy Cut & Trim**

Straightforward to cut and trim on site, speeding up installation time.



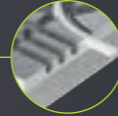
**No Warm Up Noise**

No noise on heat up and cool down due to no use of rigid plates.



**Fast & Flexible Install**

Flows and returns can be easily cut into the surface of the XPS.



Suitable over existing floors for a fully floating floor.

For Floating Floors

# FoilFloat 25

Insulation & heat diffuser in one, for floating floors.

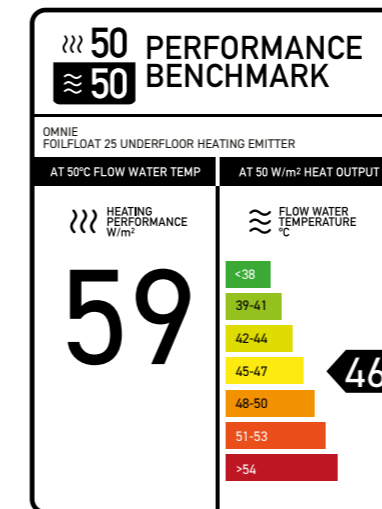
FoilFloat from OMNIE is an underfloor heating panel for fully floating floors. Manufactured by OMNIE, the panel is made from expanded polystyrene (EPS) which has a high compressive strength making it perfect to support the tongue and groove floor deck that is laid over. The FoilFloat panel has soft temper aluminium heat diffusers pre-bonded to the panel making it easier to trim than rigid diffusers as well as removing the clicking and creaking that comes from rigid plates when they warm-up and cool down.



Watch product features video.



Watch product installation video.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-UFFPX125-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- UFFPX125 FoilFloat 25 panel
- UPI6xxxx\* OMNIFLO Pipe

\*Product (code) as required depending on coil length required.

**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

## Specifications

**Panel thickness:**  
25mm

**Weight with water:**  
1 kg/m²

**Suitable for:**  
Floating floors

**Pipe centres:**  
150mm using 16.5mm pipe

**Dimensions:**  
1200mm x 600mm

OMNIFLO 16.5mm pipe

FoilFloat panel

Concrete subfloor\*



# TorFloor 2<sup>®</sup> System

## Twice as easy

Our TorFloor 2 range for timber floor constructions encapsulates the pipe to achieve best in class heating performance.

TorFloor 2<sup>®</sup> is an integrated floor deck and underfloor heating system that shows exactly where the pipes are, reducing installation risk and delivering the best possible heating performance.

TorFloor 2<sup>®</sup> evolves the market-leading TorFloor<sup>®</sup> UFH panel by adding a cover panel with pre-foiled aluminium heat diffuser. Both panels are routed with matching channels that perfectly align around the pipework.

### TorFloor 2<sup>®</sup> Standard

Structural underfloor heating panel which replaces the floor deck used in constructions. Cover panel is 6mm woodfibre.

p 48-49

### TorFloor 2<sup>®</sup> Plus

Cover panel is manufactured from high-grade 8mm cement particle board providing greater strength over its woodfibre equivalent.

p 50-51

### TorFloor 2<sup>®</sup> RdB

Deck panel features an additional 8mm layer bonded to the underside to reduce vibration and attenuate airborne and impact noise.

p 52-53



Watch product features video.

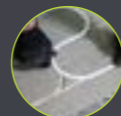


Watch product installation video.



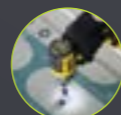
#### Locator Technology

Pipe is encapsulated by upper and lower panels for maximum heat output.



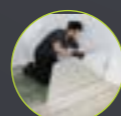
#### Omni-directional Pipe Channel Pattern

Fast and flexible installation - lay the pipe in any direction.



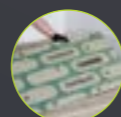
#### Fixing Locators

Clearly marked fixing locations to speed up panel installation.



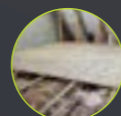
#### AL HEX Heat Diffuser

High heating performance and fast warm up times as the diffuser wraps around the warm water pipe.



#### Printed Cover Panel

Risk free installation as pipe channel pattern is visible on top surface layer.

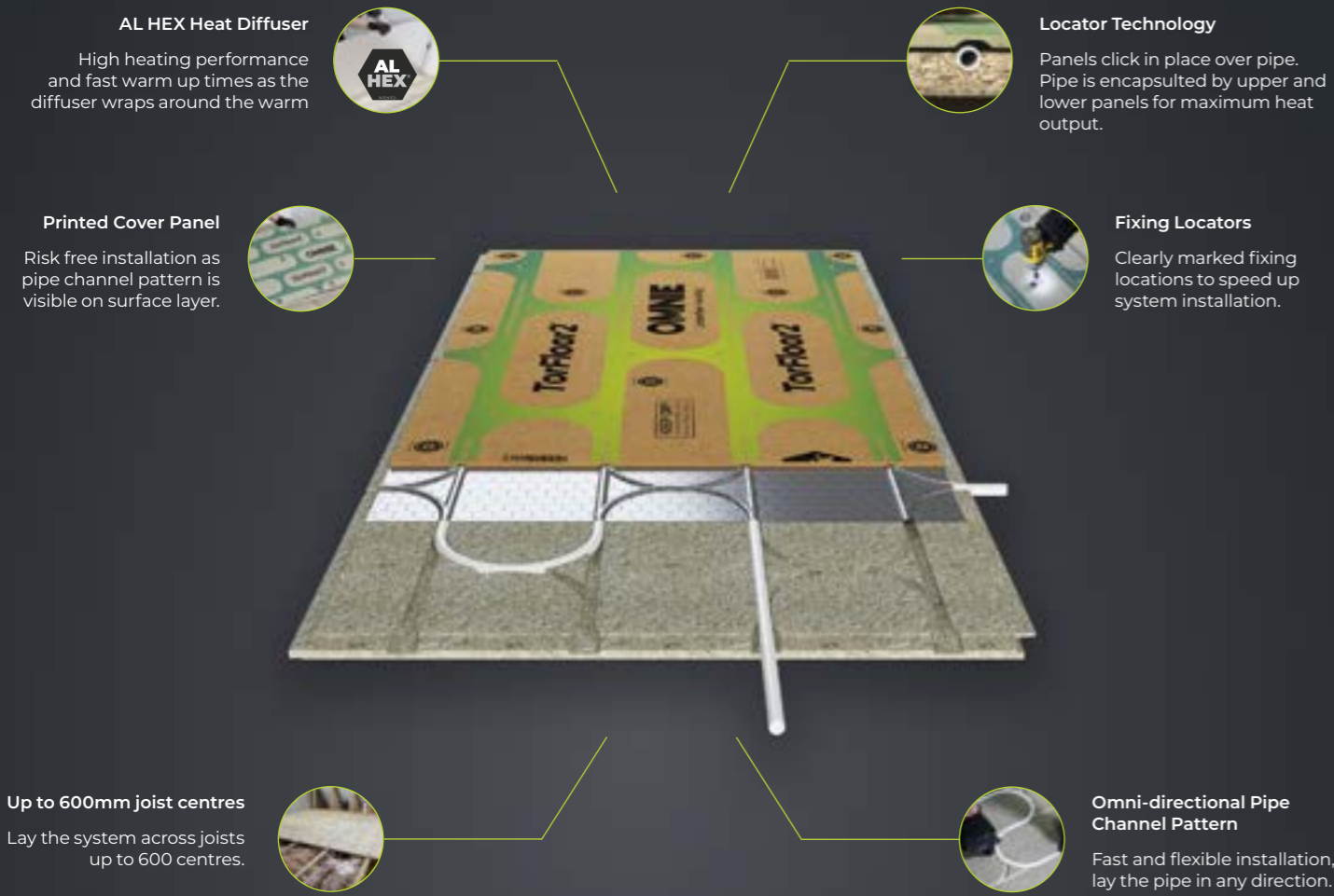


#### Up to 600mm joist centres

Lay the system across joists up to 600 centres.







Suitable for timber suspended floors and replaces floor deck.



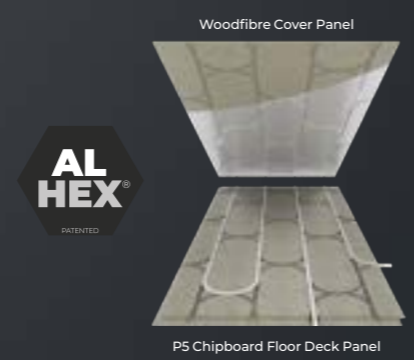
**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

For Timber Suspended or Batten Floors

# TorFloor2®

Standard deck panel with woodfibre cover panel.

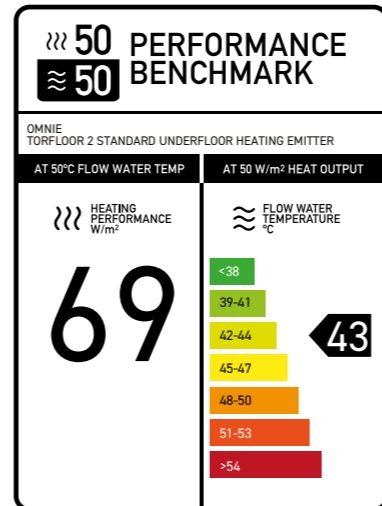
TorFloor 2® is the market-leading underfloor heated flooring panel, and is the only panel to be independently tested at TRADA for structural performance. The 22mm TorFloor 2® panel, manufactured by OMNIE, has a unique multi-directional panel which means the panels are laid in the same way as conventional chipboard without the need for separate 'straight' and 'loop' panels, and the need for hand-routing channels – which weakens the floor. The pipe channels are spaced at 150mm centres for fast warm-up and high heat output. The 6mm woodfibre cover panel is secured to the deck panel to complete the floor.



Watch product features video.



Watch product installation video.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-OMKT0001-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- UTCD0122 TorFloor 2 CHIPBOARD DECK panel
- UTCW0106 TorFloor 2 WOODFIBRE COVER panel
- UP12xxxx\* OMNIFLO Pipe

\*Product (code) as required depending on coil length required.

## Specifications

**Panel thickness:**  
28mm

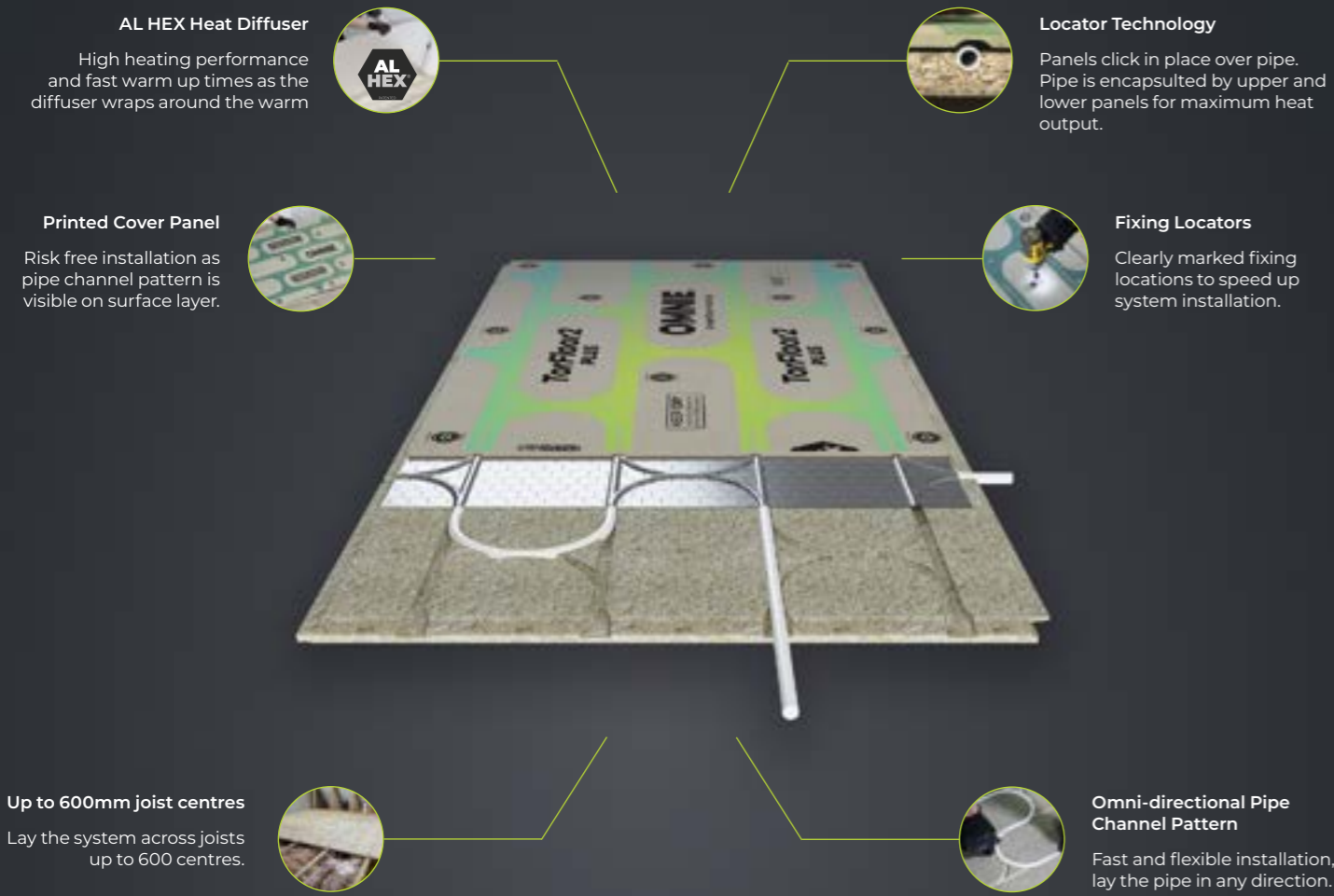
**Weight with water:**  
18.9kg/m²

**Suitable for:**  
Suspended timber or batten floors with centres up to 600mm

**Pipe centres:**  
150mm using 12mm pipe

**Dimensions:**  
Cover Panel: 1200mm x 600mm  
Deck Panel: 2400mm x 600mm

This product is structurally tested to conform to BS EN 1195:1998 and BS EN 12871:2013. Independent Test Report: UK22439 (QT-63802/1/AS) - (400mm centres) UK231449 (QT-69277/3/AS) - (600mm centres)



Suitable for timber suspended floors and replaces floor deck.



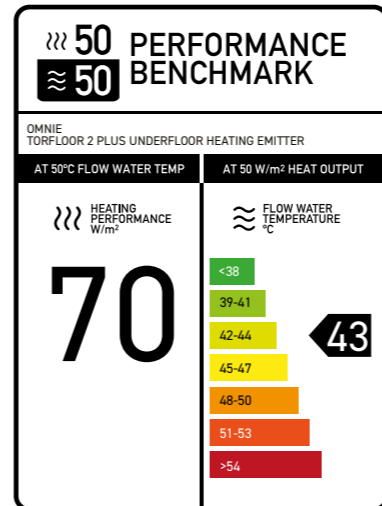
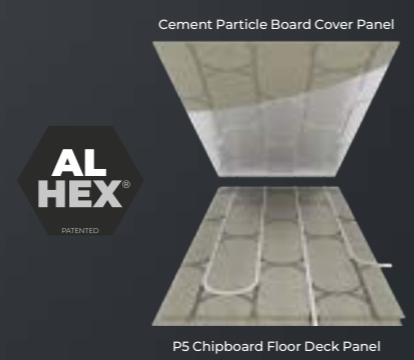
**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

For Timber Suspended or Batten Floors

# TorFloor2<sup>®</sup> PLUS

Standard deck panel with cement particle board cover panel.

TorFloor 2<sup>®</sup> Plus is the market-leading underfloor heated flooring panel, and is the only panel to be independently tested at TRADA for structural performance. The 22mm TorFloor 2<sup>®</sup> Plus panel, manufactured by OMNIE, has a unique multi-directional panel which means the panels are laid in the same way as conventional chipboard without the need for separate 'straight' and 'loop' panels, and the need for hand-routing channels – which weakens the floor. The pipe channels are spaced at 150mm centres for fast warm-up and high heat output. The 8mm cement particle board cover panel is secured to the deck panel to complete the floor.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-OMKT0002-0124



This system is made up of the following components;

- UTCD0122 TorFloor 2 CHIPBOARD DECK panel
- UTCH0108 TorFloor 2 CPB COVER panel
- UPI2xxxx\* OMNIFLO Pipe

\*Product (code) as required depending on coil length required.

## Specifications

**Panel thickness:**  
30mm

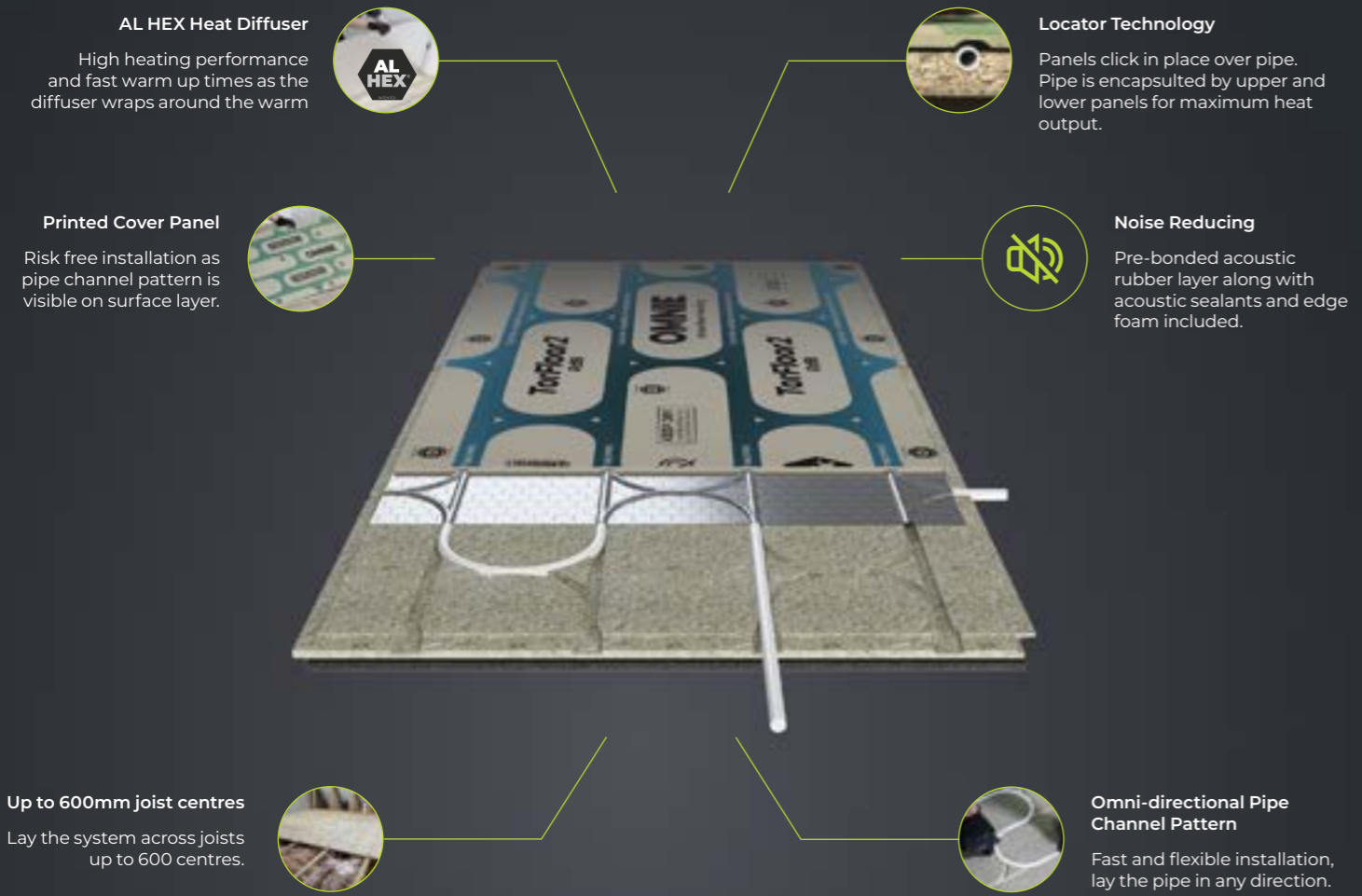
**Weight with water:**  
21 kg/m<sup>2</sup>

**Suitable for:**  
Suspended timber or batten floors with centres up to 600mm

**Pipe centres:**  
150mm using 12mm pipe

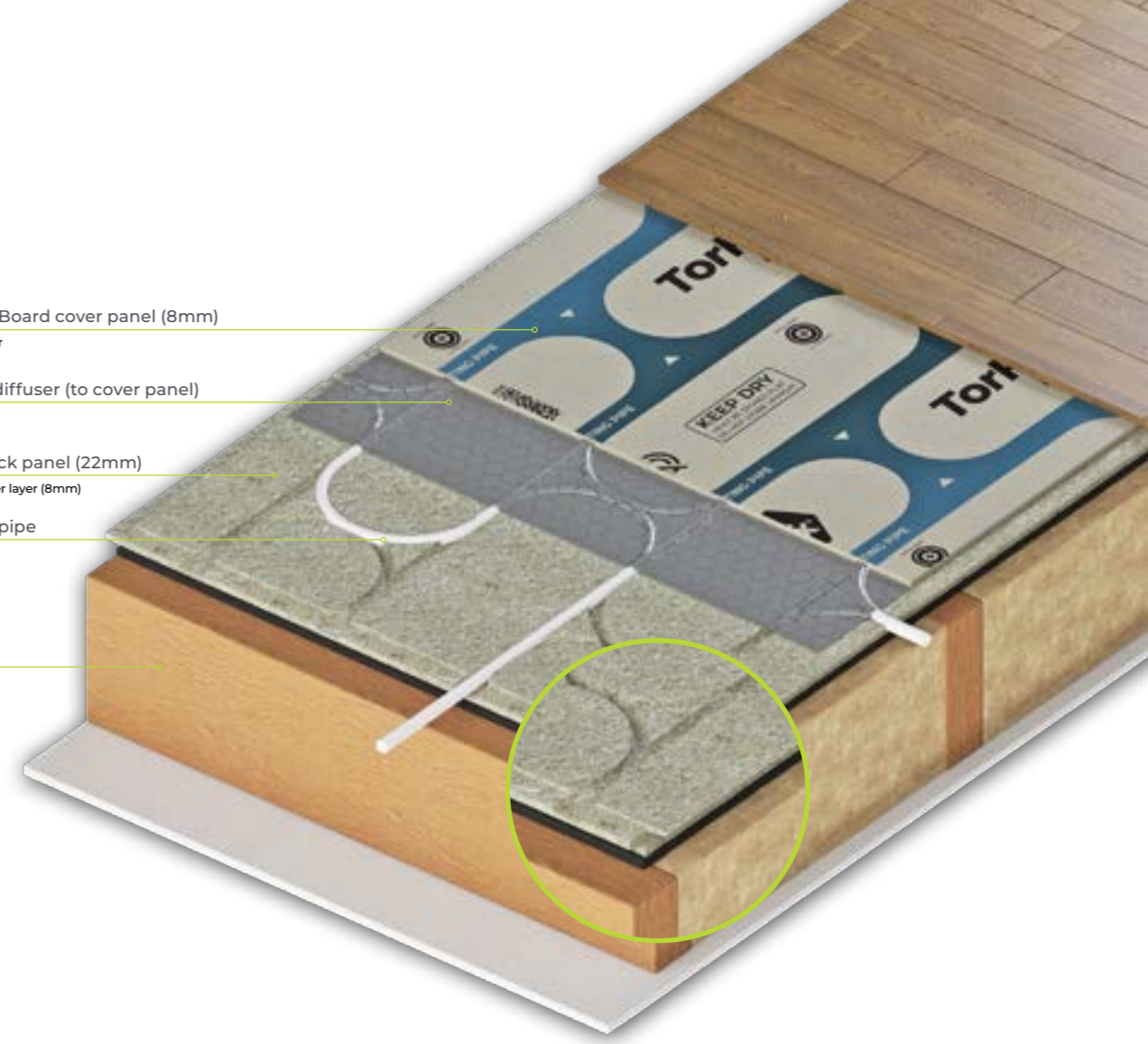
**Dimensions:**  
Cover Panel: 1200mm x 600mm  
Deck Panel: 2400mm x 600mm

This product is structurally tested to conform to BS EN 1195:1998 and BS EN 12871:2013. Independent Test Report: UK22439 (QT-63802/1/AS) - (400mm centres) UK231449 (QT-69277/3/AS) - (600mm centres)



Suitable for timber suspended floors and replaces floor deck.

- Cement Particle Board cover panel (8mm) with AL HEX Foil Diffuser
- Pre-bonded foil diffuser (to cover panel)
- P5 Chipboard deck panel (22mm) with RdB acoustic rubber layer (8mm)
- OMNIFLO 12mm pipe
- Joisted subfloor\*



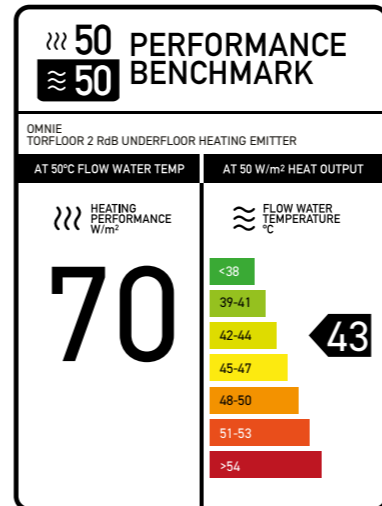
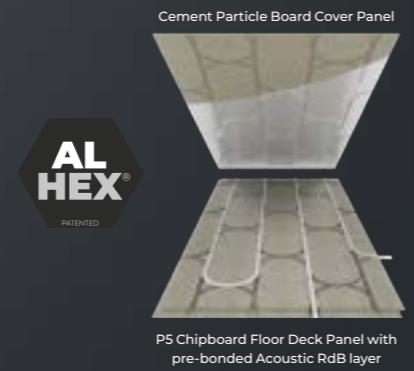
**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

For Acoustic Timber Suspended Floors

# TorFloor2<sup>®</sup> RdB

Acoustic deck panel with cement particle board cover panel.

The TorFloor 2<sup>®</sup> RdB system is in principle, the same as the standard Torfloor 2 system but the TorFloor 2<sup>®</sup> RdB panel has an additional layer bonded to the underside to reduce vibration and attenuate airborne / impact noise passing through floors.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-OMKT0003-0124



This system is made up of the following components;

- UTCR0128 TorFloor 2 RDB CHIPBOARD DECK panel
- UTRH0108 TorFloor 2 RDB CPB COVER panel
- UTRT0106 RdB isolation tape
- UTRA0101 RdB joint adhesive
- UPI2xxxx\* OMNIFLO Pipe

\*Product (code) as required depending on coil length required.

## Specifications

**Panel thickness:**  
38mm

**Weight with water:**  
21 kg/m<sup>2</sup>

**Suitable for:**  
Suspended timber or batten floors with centres up to 600mm

**Pipe centres:**  
150mm using 12mm pipe

**Dimensions:**  
Cover Panel: 1200mm x 600mm  
Deck Panel: 2400mm x 600mm

This product is structurally tested to conform to BS EN 1195:1998 and BS EN 12871:2013.  
Independent Test Report:  
UK22439 (QT-63802/1/AS) - (400mm centres)  
UK231449 (QT-69277/3/AS) - (600mm centres)

# LowBoard 2® System

## Our thinnest panel ever

Reduces installation risk and delivers the highest heat output with the lowest possible build-up.

14% thinner than our previous model, LowBoard 2® offers a build-up height of just 18mm for a fully encased underfloor heating system to lay over an existing insulated floor.

LowBoard 2® features two distinctive routed panels that perfectly align around the water pipe, providing a surface ready for the floor finish to be laid over.

### LowBoard 2® Standard

Low build-up woodfibre lower panel with self-aligning 6mm woodfibre cover panel. Panels can be floated or mechanically fixed to solid or timber subfloors.

p 56-57

### LowBoard 2® Plus

Cover panel is manufactured from high-grade 8mm cement particle board providing greater strength over its woodfibre equivalent.

p 58-59

### LowBoard 2® Insulate

Lower panel is made from 16mm expanded polystyrene (EPS) to provide an insulated layer. Cover panel is 6mm woodfibre.

p 60-61

### LowBoard 2® Insulate Plus

Lower panel is made from 16mm expanded polystyrene (EPS) to provide an insulated layer. Cover panel is 8mm cement particle board providing greater strength over its woodfibre equivalent.

p 62-63



Watch product features video.



Watch product installation video.



18mm



Finished floor ready. No additional covering layers needed.



#### AL HEX Heat Diffuser

High heating performance and fast warm up times as the diffuser wraps around the warm water pipe.



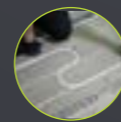
#### Locator Technology

Panels click in place over pipe. Pipe is encapsulated by upper and lower panels for maximum heat output.



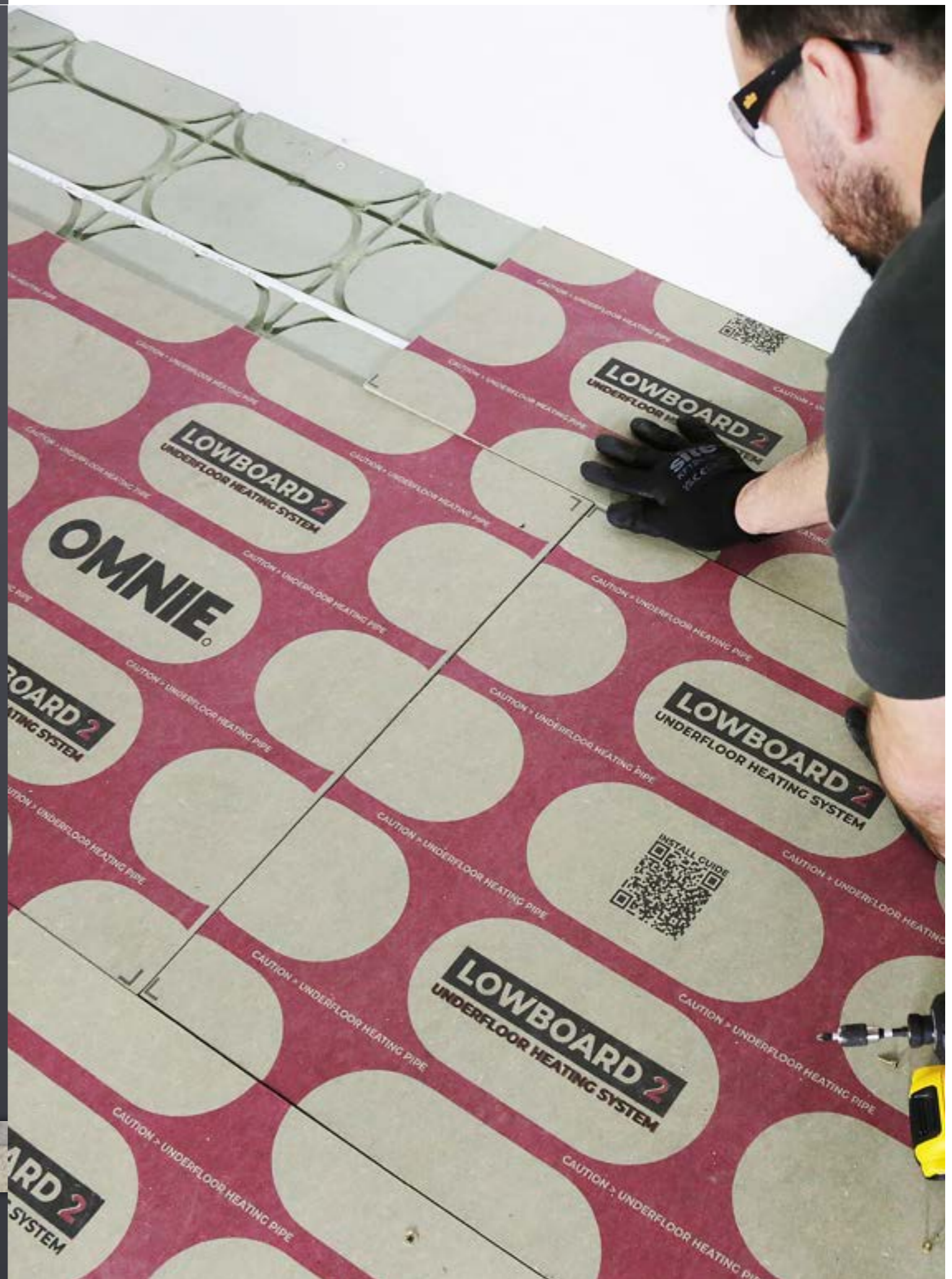
#### Printed Cover Panel

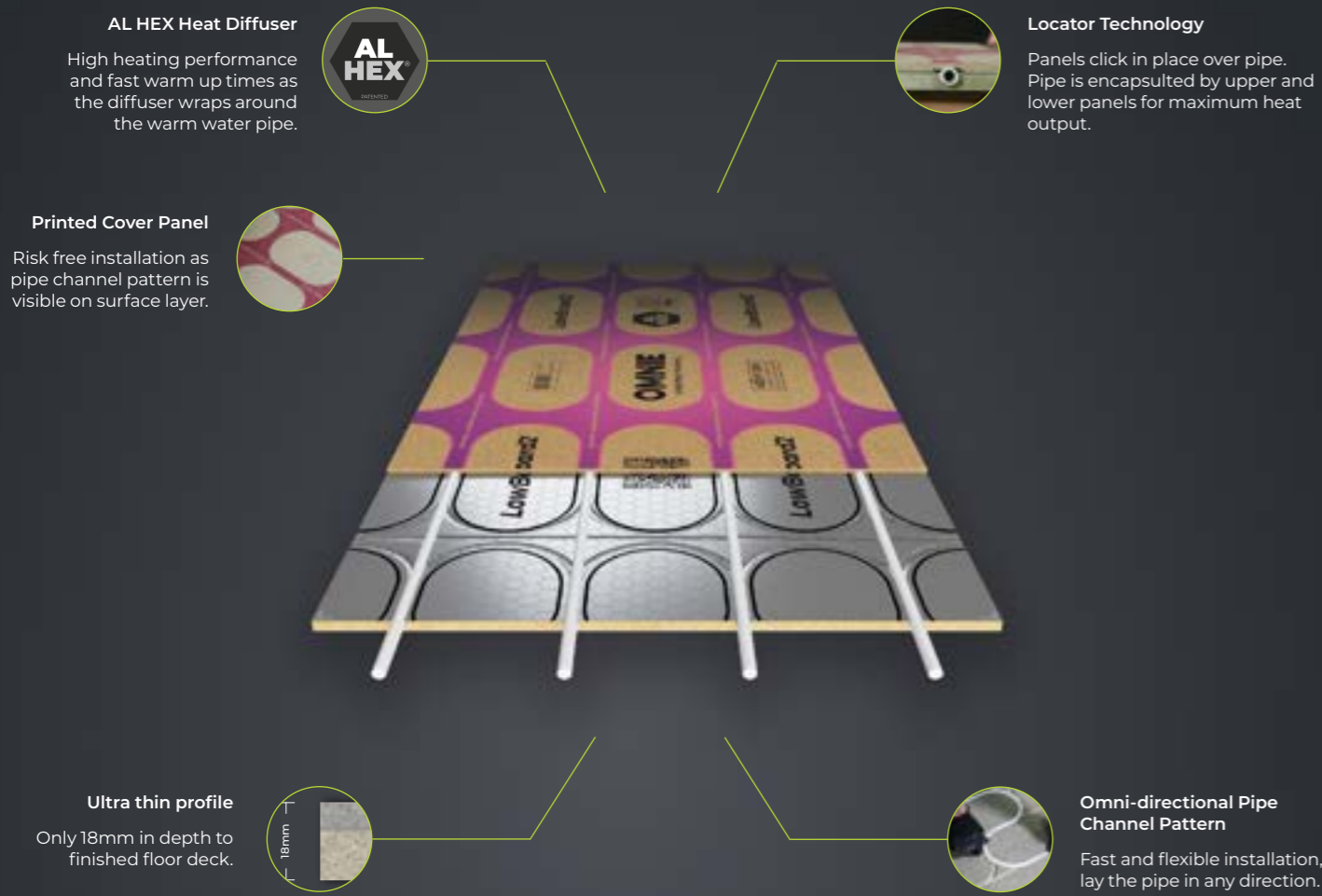
Risk free installation as pipe channel pattern is visible on surface layer.



#### Omni-directional Pipe Channel Pattern

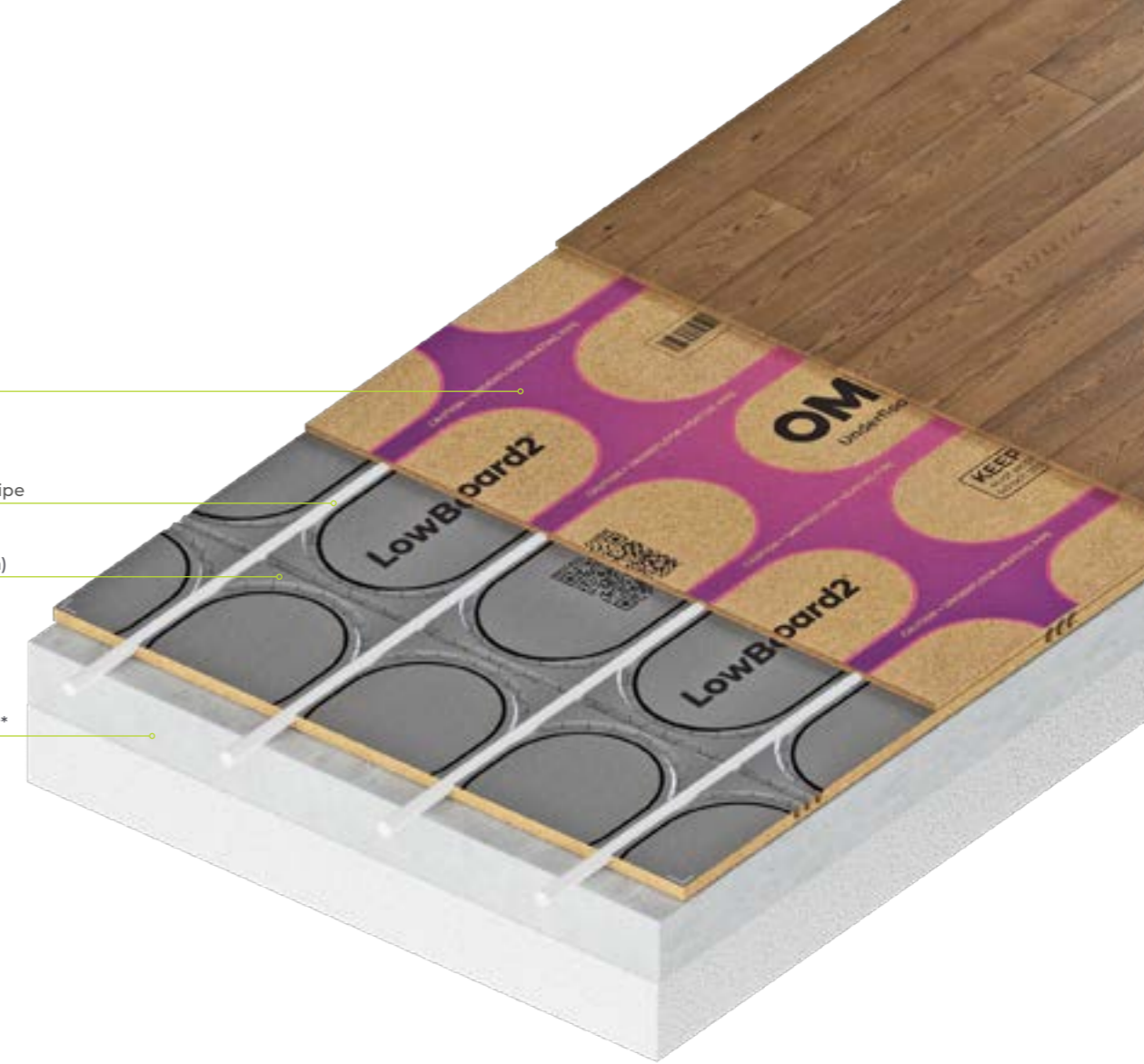
Fast and flexible installation, lay the pipe in any direction.





Suitable for existing floors.

- Cover panel  
Woodfibre (6mm)
- OMNIFLO 12mm pipe
- Deck panel (12mm)  
with AL HEX Foil Diffuser
- Insulated Subfloor\*



**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

For Suspended Floors

## LowBoard2®

Standard deck panel with woodfibre cover panel.

LowBoard 2® is a low build-up underfloor heating system laid over an existing floor. The system provides a way for underfloor heating to be installed in the lowest possible build-up, minimising the impact on floor-to-ceiling height. LowBoard 2® Standard features a 12mm woodfibre deck panel with a 6mm woodfibre cover panel. These perfectly align around the water pipe providing a surface ready for the floor finish to be laid over.

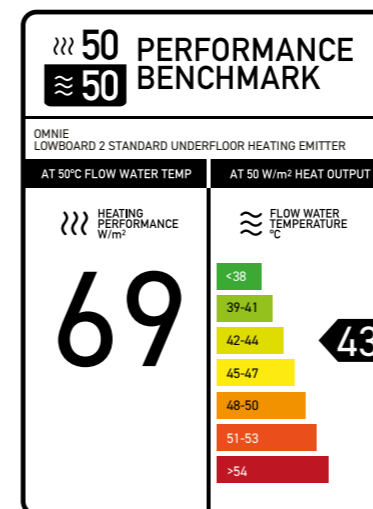
The design of LowBoard 2® places the water pipe closer to the floor surface to deliver a fast warm up time. AL HEX diffuser technology improves the spread of heat across the floor.



Watch product features video.



Watch product installation video.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-OMMKT0004-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- ULLW0212 LowBoard 2 WOODFIBRE DECK panel
- ULUW0206 LowBoard 2 WOODFIBRE COVER panel
- ULSW0216 Panel screws for COVER panel
- UPI2xxxx\* OMNIFLO Pipe

\*Product (code) as required depending on coil length required.

## Specifications

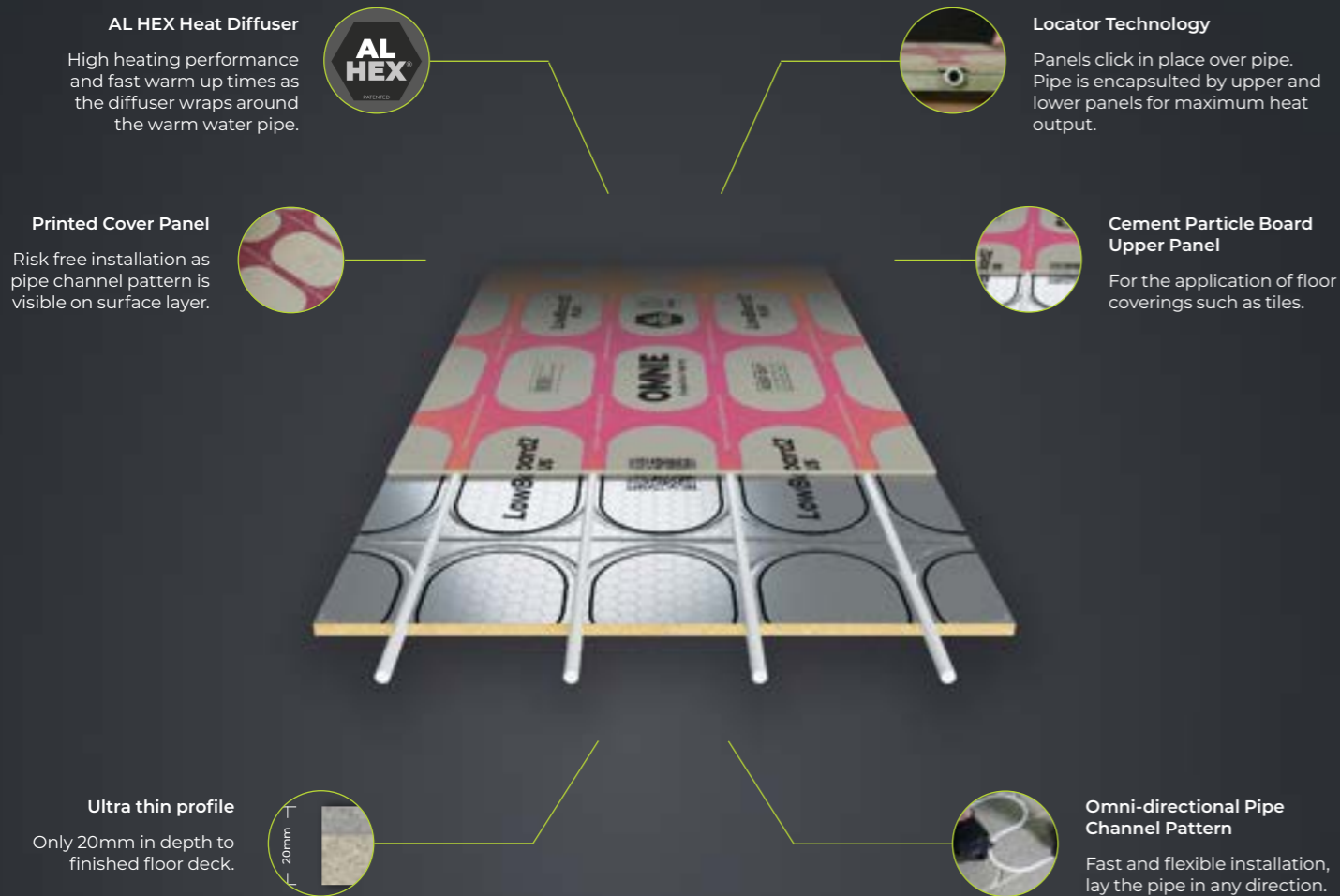
**Panel thickness:**  
18mm

**Weight with water:**  
15 kg/m²

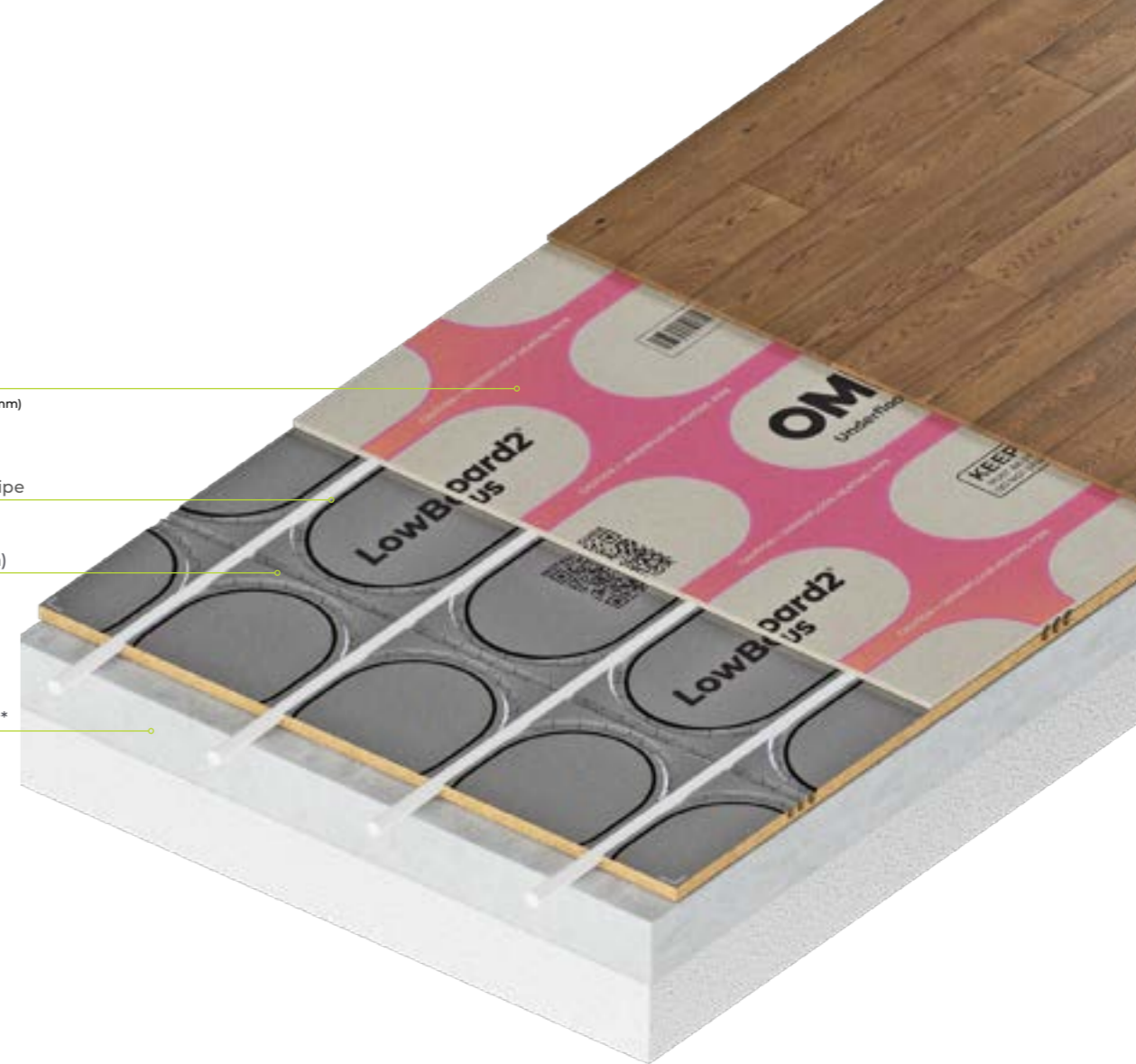
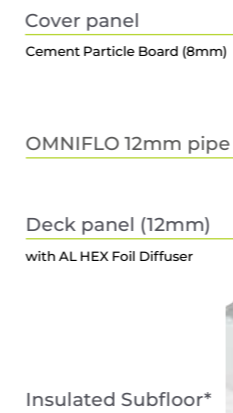
**Suitable for:**  
Low build up and overlay applications

**Pipe centres:**  
150mm using 12mm pipe

**Dimensions:**  
Cover Panel: 1200mm x 600mm  
Deck Panel: 1200mm x 600mm



Suitable for existing floors.



**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

For Low Build Up Floors

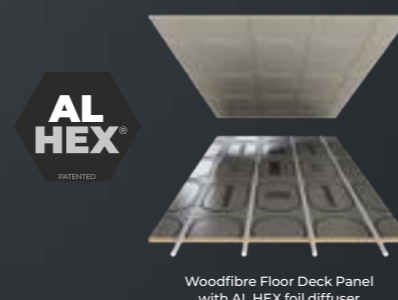
## LowBoard2<sup>®</sup> PLUS

Standard deck panel with cement particle board cover panel.

Introducing LowBoard 2<sup>®</sup> Plus, an innovative underfloor heating solution designed for minimal build-up over existing floors. This system offers a low-profile installation, ensuring a minimal impact on floor-to-ceiling height. Featuring a 8mm cement particle board cover panel, placed over a standard 12mm woodfibre deck panel, LowBoard 2<sup>®</sup> Plus delivers superior strength, acoustic insulation, and thermal efficiency.

The design of LowBoard 2<sup>®</sup> Plus places the water pipe closer to the floor surface, resulting in a rapid warm-up time. Enhanced by AL HEX diffuser technology, this system ensures an even and efficient distribution of heat across the floor.

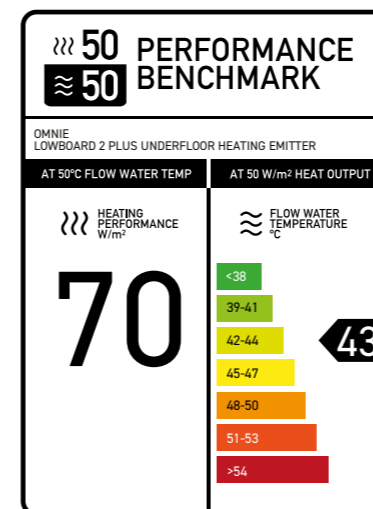
Cement Particle Board Cover Panel



Watch product features video.



Watch product installation video.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

### Documents

TPG-OMKT-0005-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- ULLW0212 LowBoard 2 WOODFIBRE DECK panel
- ULLH0208 LowBoard 2 CPB COVER panel
- UTSC0120 Panel screws for COVER panel
- UPI2xxxx\* OMNIFLO Pipe

\*Product (code) as required depending on coil length required.

### Specifications

**Panel thickness:**  
20mm

**Weight with water:**  
18.9kg/m<sup>2</sup>

**Suitable for:**  
Overlay to existing insulated subfloor

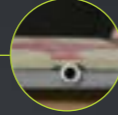
**Pipe centres:**  
150mm using 12mm pipe

**Dimensions:**  
Cover Panel: 1200mm x 600mm  
Deck Panel: 1200mm x 600mm



### AL HEX Heat Diffuser

High heating performance and fast warm up times as the diffuser wraps around the warm water pipe.



### Locator Technology

Panels click in place over pipe. Pipe is encapsulated by upper and lower panels for maximum heat output.

### Printed Cover Panel

Risk free installation as pipe channel pattern is visible on surface layer.



### Ultra thin profile

Only 22mm in depth to finished floor deck.



### Built-in Insulation

Reduces installation time and eliminates need for subfloor to be insulated.

Suitable for existing timber floors.

For Low Build Up Floors

# LowBoard2<sup>®</sup> INSULATE

## EPS deck panel with woodfibre cover panel for uninsulated subfloors.

LowBoard 2<sup>®</sup> is a low build-up underfloor heating system laid over an existing floor. The system provides a way for underfloor heating to be installed in the lowest possible build-up, minimising the impact on floor-to-ceiling height. LowBoard 2<sup>®</sup> Insulate provides an insulated layer by using a 16mm expanded polystyrene (EPS) deck panel with the standard 6mm woodfibre cover panel so is suitable to be laid over uninsulated subfloors.



Woodfibre Cover Panel

EPS Floor Deck Panel with AL HEX foil diffuser

### Cover panel

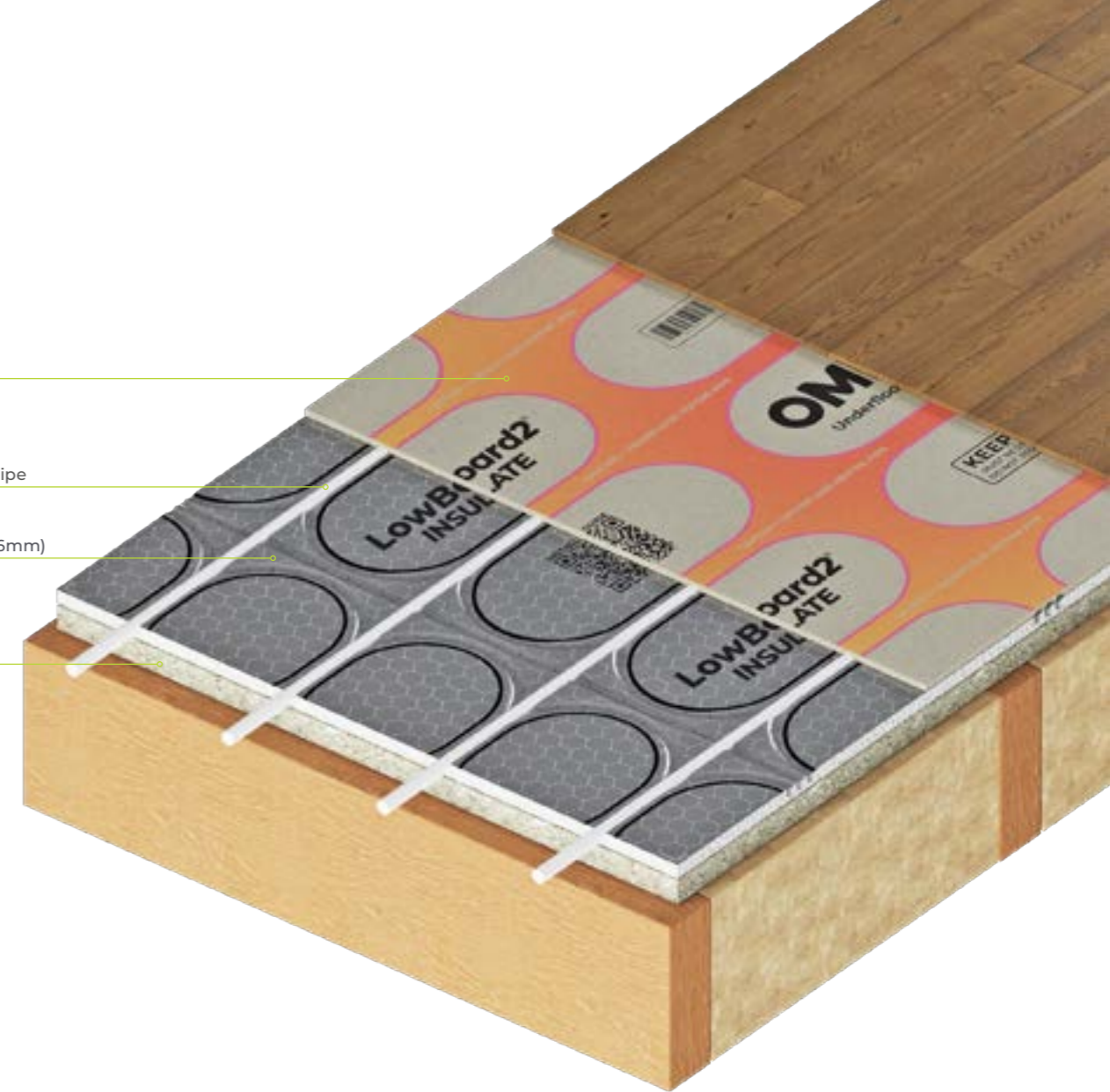
Woodfibre (6mm)

### OMNIFLO 12mm pipe

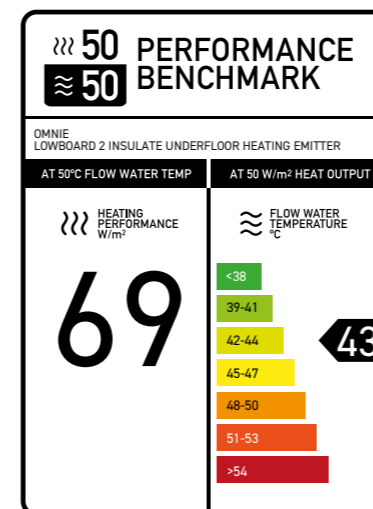
### EPS deck panel (16mm)

with AL HEX Foil Diffuser

### Subfloor\*



**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-OMKT0006-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- ULHD0116 LowBoard 2 INSULATE DECK panel
- UPI2xxxx\* OMNIFLO Pipe
- ULHW0206 LowBoard 2 INSULATE COVER panel
- ULSH0240 Screws for DECK panel

\*Product (code) as required depending on coil length required.

## Specifications

**Panel thickness:**  
22mm

**Weight with water:**  
7.8 kg/m<sup>2</sup>

**Suitable for:**  
Overlay to existing timber suspended floor

**Pipe centres:**  
150mm using 12mm pipe

**Dimensions:**  
Cover Panel: 1200mm x 600mm  
Deck Panel: 1200mm x 600mm



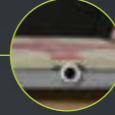
**AL HEX Heat Diffuser**

High heating performance and fast warm up times as the diffuser wraps around the warm water pipe.



**Locator Technology**

Panels click in place over pipe. Pipe is encapsulated by upper and lower panels for maximum heat output.



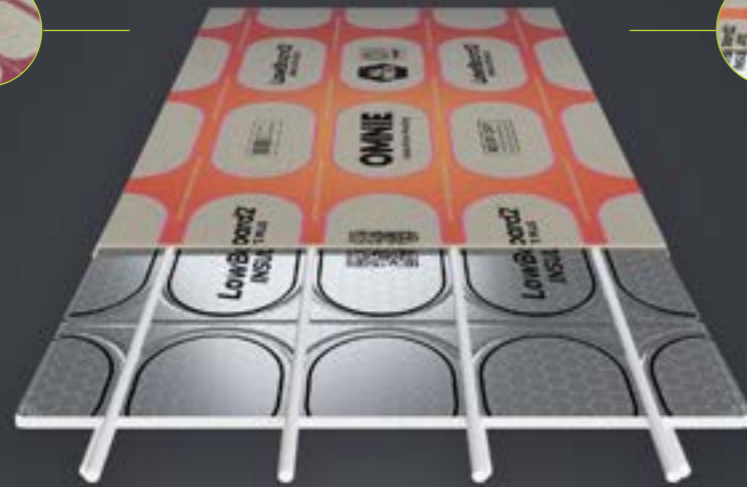
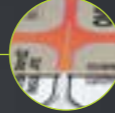
**Printed Cover Panel**

Risk free installation as pipe channel pattern is visible on surface layer.



**Cement Particle Board Upper Panel**

For the application of floor coverings such as tiles.



**Ultra thin profile**

Only 24mm in depth to finished floor deck.



**Built-in Insulation**

Reduces installation time and eliminates need for subfloor to be insulated.



Suitable for existing timber floors.

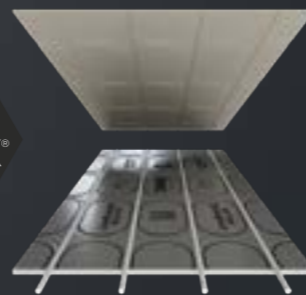
For Low Build Up Floors

# LowBoard2<sup>®</sup> INSULATE PLUS

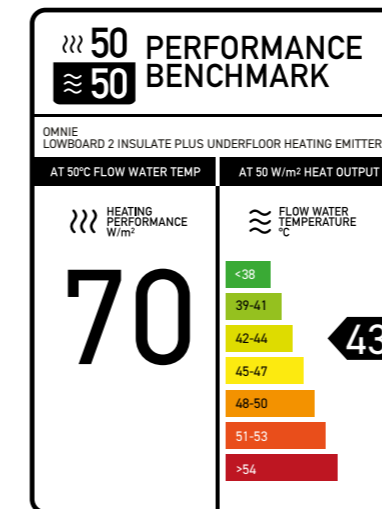
EPS deck panel with cement particle board cover panel for uninsulated subfloors.

LowBoard 2<sup>®</sup> is a low build-up underfloor heating system laid over an existing floor. The system provides a way for underfloor heating to be installed in the lowest possible build-up, minimising the impact on floor-to-ceiling height. LowBoard 2<sup>®</sup> Insulate Plus provides an insulated layer by using a 16mm expanded polystyrene (EPS) deck panel with the standard 8mm cement particle board cover panel.

Cement Particle Board Cover Panel



EPS Floor Deck Panel with AL HEX foil diffuser



50/50 Performance Benchmark Testing Information can be found at: [www.omnie.co.uk/5050](http://www.omnie.co.uk/5050)

## Documents

TPG-OMKT0007-0124



Visit our resources finder to download technical guides.

This system is made up of the following components;

- ULHD0116 LowBoard 2 INSULATE DECK panel
- UP12xxxx\* OMNIFLO Pipe
- ULHP0108 LowBoard 2 INSULATE CPB COVER panel
- ULSH0240 Screws for DECK panel

\*Product (code) as required depending on coil length required.

**Construction Information:**  
Product is shown in a standard UK floor construction. Areas highlighted with an asterisk (\*) are designed and specified by others.

## Specifications

**Panel thickness:**  
24mm

**Weight with water:**  
13.6 kg/m<sup>2</sup>

**Suitable for:**  
Overlay to existing timber suspended floor

**Pipe centres:**  
150mm using 12mm pipe

**Dimensions:**  
Cover Panel: 1200mm x 600mm  
Deck Panel: 1200mm x 600mm



# OMNIE

## Competes on performance Beats on cost

OMNIE not only provide UFH systems for every type of building. We also cater for every scale of project.

We have applied our years of expertise to create a range of products for smaller-budget builds and projects that may only require a handful of rooms or areas to be heated.

Here a full system design is often not needed, with the build requiring just a straightforward and robust underfloor heating system that will do an effective job.

This is where the OMNIE Circoflo system comes in. We have four low-cost systems with good heating performance, suitable for all floor constructions and almost any floor covering.

**CircoDeck** p66  
Integrated floor deck and heating system for joist and batten floors.

**LowDeck** p66  
Low build-up UFH panel that can be laid over existing floors.

**TileDeck** p67  
Low build-up underfloor heating panel designed specifically for tiling over.

**ClipRail** p67  
Simple system to hold pipe in precise position ahead of a covering screed.



**Omni-directional Pipe Channel Pattern**  
Fast and flexible installation – lay the pipe in any direction.



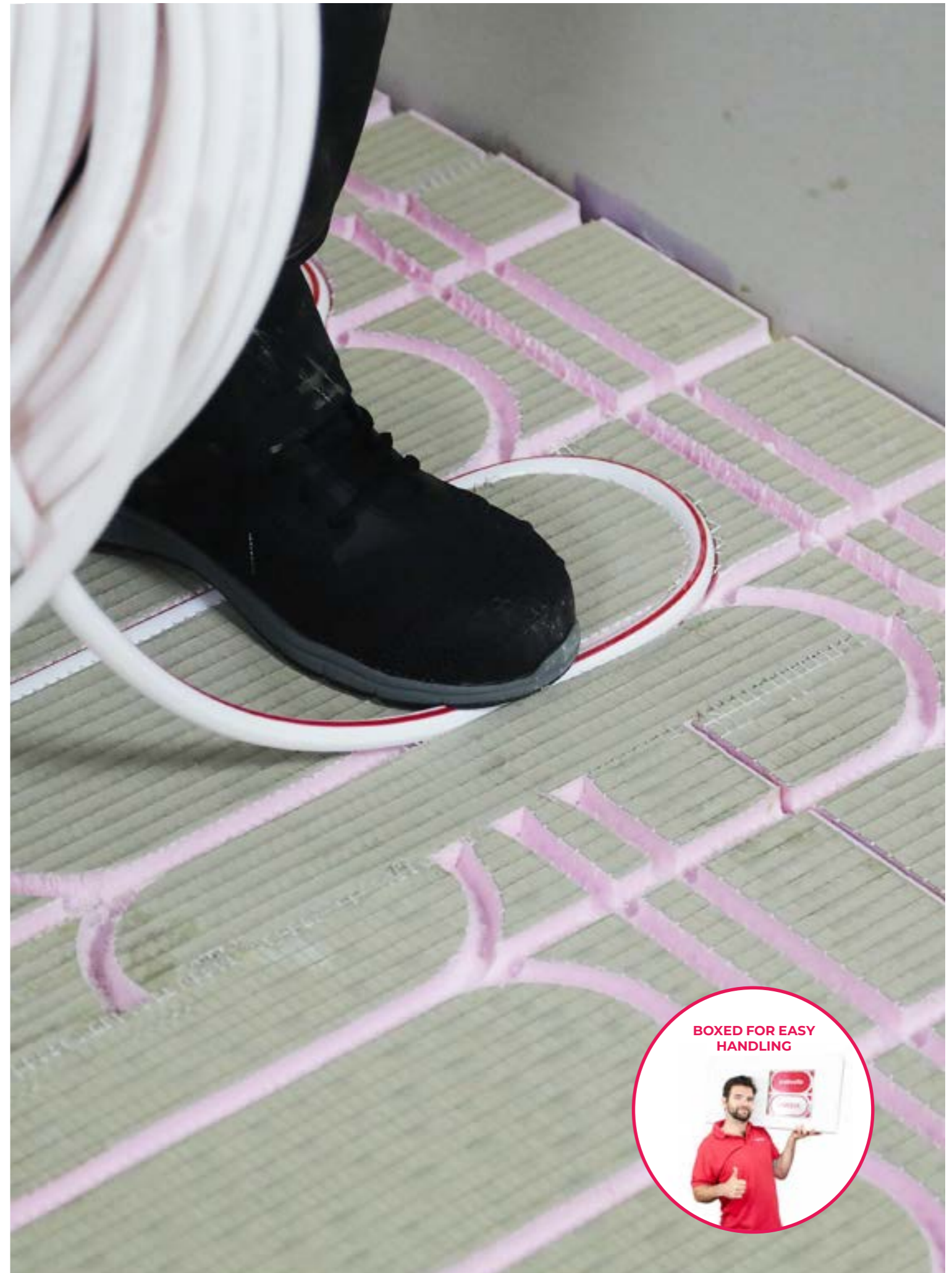
**Compact panel size**  
Small, lightweight panels are easy to handle on site.



**Standard 13.2mm pipe**  
All Circoflo systems use standardised 13.2mm pipe.



**Proven performance**  
Tested for high heat output and fast warm-up.



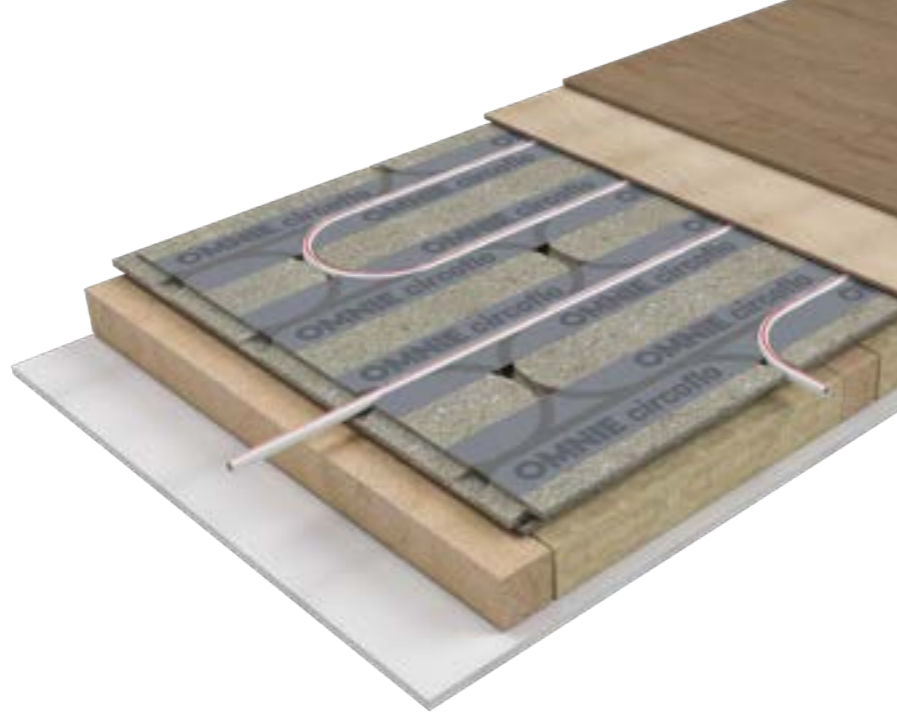
# CircoDeck

Integrated floor deck and heating system for joist and batten floors.

The 22mm T&G-edged chipboard panels ensure the 13.2mm pipe is close to the floor finish as possible. Factory fitted aluminium diffuser strips further improve performance and provide a method for detecting the pipe. The panels are universal meaning no separate loops and straights need to be laid. The panels require a 6mm flooring grade Ply screwed and glued to complete the structural deck.

**Panel thickness:** 22mm (+6mm Ply)  
**Suitable for:** Suspended timber or batten floors  
**Pipe centres:** 150mm using 13.2mm pipe  
**Dimensions:** 2400mm x 600mm

 TPG-CFCD0122-0124



# LowDeck

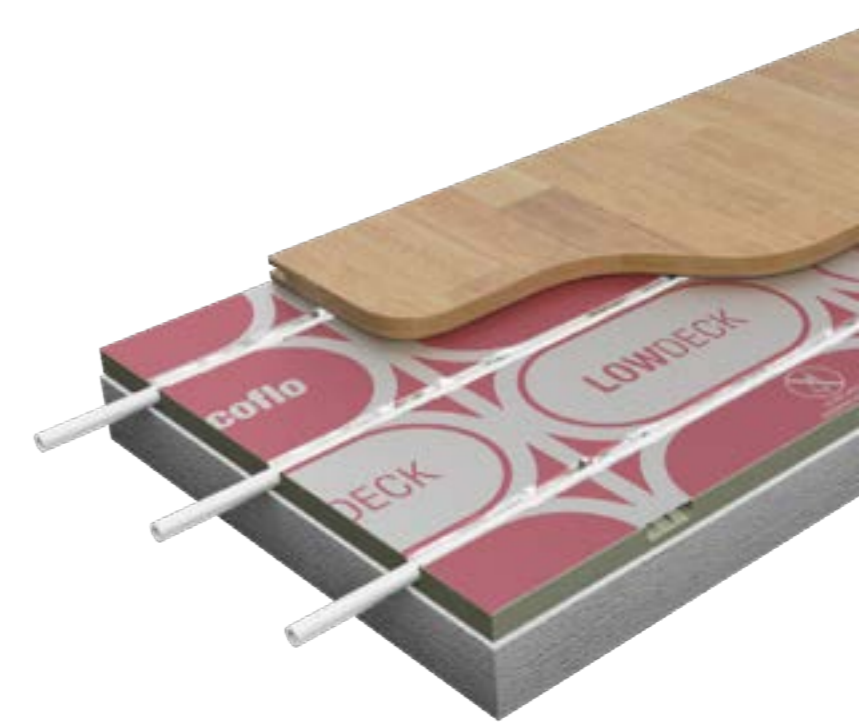
Low build-up UFH panel that can be laid over existing floors.

The extruded polystyrene panel (XPS) is only 18mm in height and pre-routed at 133mm centres for use with CircoFlo 13.2mm pipe. Panels feature an adhesive layer on the underside for ease of installation, simply peel and place onto the subfloor, lay pipe and screed over.

Panels are universal and multi-directional meaning no separate loops and straights need to be laid.

**Panel thickness:** 15mm  
**Suitable for:** Low build-up applications  
**Pipe centres:** 133mm using 13.2mm pipe  
**Dimensions:** 800mm x 400mm

 TPG-CFLD0115-0124



# TileDeck

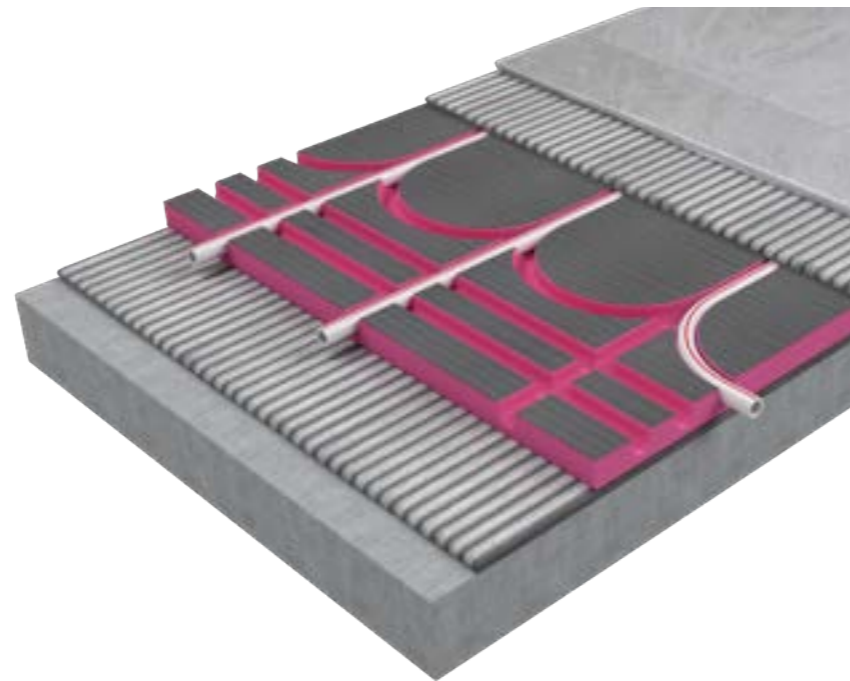
Low build-up underfloor heating panel designed specifically for tiling over.

OMNIE TileDeck panel design combines a 20mm extruded polystyrene (XPS) insulation panel with a 1.5mm scrim reinforced cementitious layer to top and bottom, making for easier installation and excellent heat output. The lightweight panels are easy to cut and the 13.2mm pipe fix easily in the pre-routed channels. The panels are universal meaning no separate loops and straights need to be laid.

TileDeck provides an extremely strong support for the tiled floor covering, preventing sagging over time and protect the system from being damaged during installation.

**Panel thickness:** 20mm  
**Suitable for:** Solid and timber floors  
**Pipe centres:** 133mm  
**Dimensions:** 600mm x 400mm

 TPG-CFTD0120-0124



# ClipRail

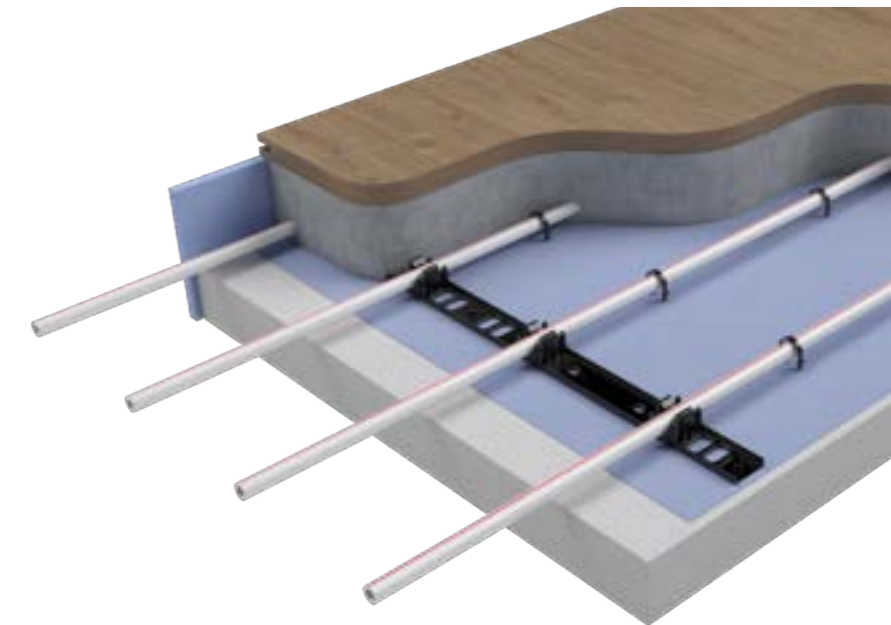
The quick and simple system to hold pipe in precise position ahead of a covering screed.

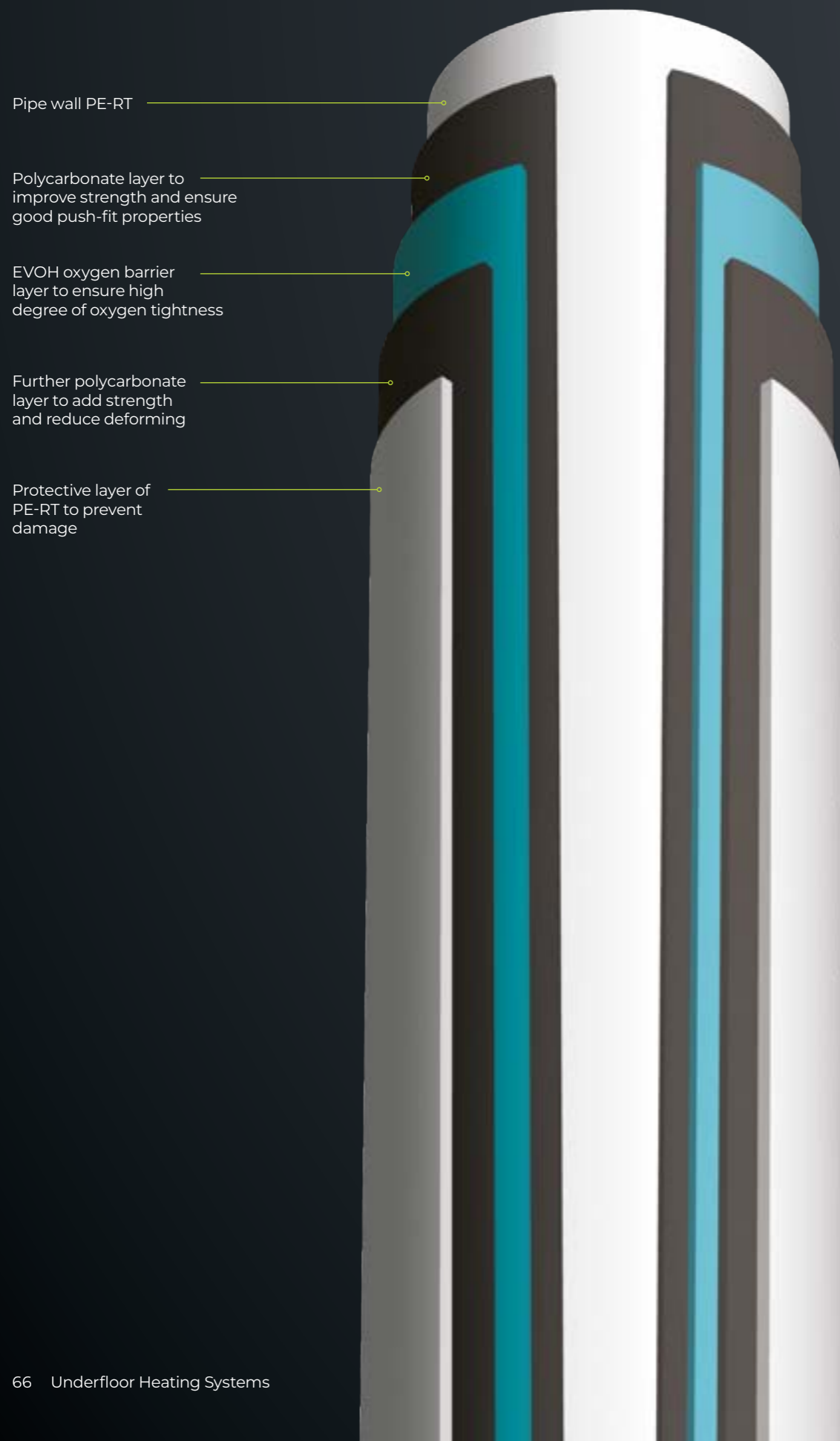
The ClipRail mounting units interlock and feature a barbed end to fix into the insulation. The flexible pipe is held at 133mm centres.

An additional vapour control layer / membrane may be required over the insulation prior to fixing the ClipRail units.

**Panel thickness:** N/A  
**Suitable for:** Screed Floors  
**Pipe centres:** Flexible normally 150mm  
**Dimensions:** N/A

 TPG-CFCR0130-0124





Pipe wall PE-RT

Polycarbonate layer to improve strength and ensure good push-fit properties

EVOH oxygen barrier layer to ensure high degree of oxygen tightness

Further polycarbonate layer to add strength and reduce deforming

Protective layer of PE-RT to prevent damage

## Omniflo. 5 times the pipe

Our pipes aren't just pipes, they have superior molecular structure that ensures very good thermal stability and exceptional mechanical strength.

The five-layer structured pipe achieves a high degree of oxygen tightness. The entire range is backed by decades of experience in plastics processing. A specially modified polyethylene of medium density is used for the underfloor heating pipe, the molecular structure and composition of which ensures very good thermal stability and superior mechanical strength.

The pipe is manufactured by means of extrusion in one single process. The EVOH layer provides a very good oxygen barrier while the outer PE-RT layer protects the entire structure against damage. Only the best quality materials from renowned manufacturers are used.

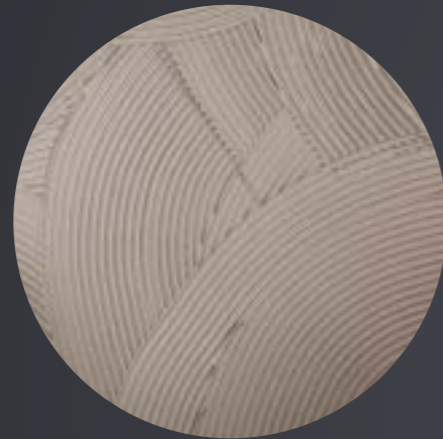
Thickness range:  
12mm & 16.5mm

DIN 4721	MAX 60°C	MAX 6bar
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# Floor finishes and underfloor heating

Underfloor heating has a floor surface temperature of approximately 26°C for most applications. However, some systems, where the building heat loss is high, will require a surface temperature up to 29°C.

This is dependent on the floor finish manufacturer's instructions as they may stipulate a maximum floor temperature. The underfloor heating system should be designed to suit these requirements, although this may mean a reduction in heat output.



## Adhesives

Our products have been designed and tested to work effectively with a tiled or decorative floor finish using adhesive and anti-fracture matting. When installed correctly as per the manufacturers instructions, a secure and flexible bond that will not deteriorate, break or lead to an uneven floor finish once tiles have been applied can be achieved.



## Engineered wood floors and timber

OMNIE has long experience of how UFH is the best way of caring for a hardwood floor. Timber changes dimension due to changes in its moisture content, and this varies naturally throughout the year. The challenge is to keep the moisture content of the upper and lower surfaces of the timber the same. If they do, the timber floor will stay perfectly flat. If they don't, it will crown or cup.

The first step is to lay the timber floor with a moisture content of 8–10%. The second is to ensure the UFH turns on gradually at the beginning of each heating season, which can be assured by using programmable room thermostats and leaving the heating on.



## Ceramic and stone

These materials have a low thermal resistance that makes them very suitable for underfloor heating. Consideration must be given to expansion gaps and the suitability of adhesives used to bond the tiles to the subfloor.

Underfloor heating is suitable for use under any ceramic or natural stone floor tiles, including slate, marble, porcelain, terracotta and limestone. Ceramic tiles and stone finishes are both good conductors of heat and as a result are very well suited to underfloor heating. Care must be taken when laying over suspended or batten floors. The tiles should be properly supported and the tile manufacturer's instructions must be followed.



## Carpets

Our general advice is to avoid carpets and underlay having thermal resistance greater than 1.5 Tog.

Underfloor heating is more effective when used with carpets and underlay with lower combined Tog values. This enables heat to be transferred to the emitting surface of the carpet more easily. The higher the Tog value of the carpet and underlay, the greater the reduction in output from the underfloor heating system.

If your intended finish is greater than 1.5 Tog then please call us and we will check the performance of your underfloor heating system.



## Linoleum and vinyl tiles or sheet

Vinyl is usually suitable for underfloor heating, although this is dependent on thickness. Thick rubber tiles may inhibit heat output.

Advice should be sought from the manufacturer on the maximum surface temperature the vinyl can reach.

# Precision-Flo High-Performance Manifold

The central point of any OMNIE underfloor heating system

The manifold distributes the primary warm water into each underfloor heating circuit. It is the central point for the underfloor heating system and brings together the warm water feed from a heat source, the pipe work from the floor and the thermostat wiring.

A manifold can serve areas up to 200m<sup>2</sup> but installation is easier if a manifold is installed in an accessible central location on each floor. The size of the manifold depends on the area it is serving.

## Manifold with mixing unit and circulator:

The manifold is supplied with a mixing unit and circulator to ensure the water temperature entering the floor does not exceed the design temperature. This manifold configuration is essential if the heat source is able to supply high temperature water.

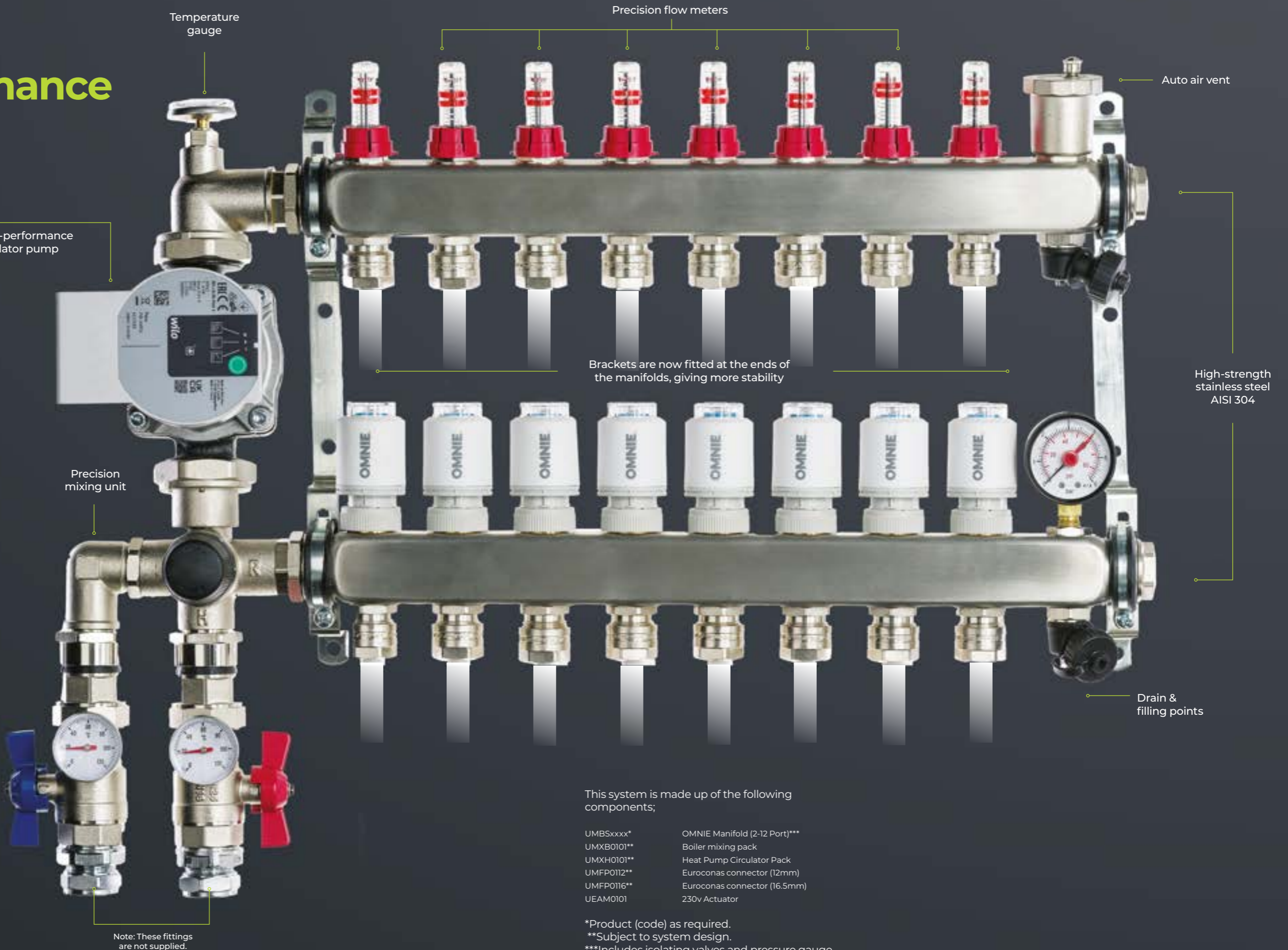
## 'Branch' manifold:

If the water is supplied at the correct temperature then the mixing valve is unnecessary. Also, if there is a primary circulator installed then this can be removed from the manifold assembly too.

## Specification

Sizes available: 2 to 12 Port  
Suitable for: Water, Water/Glycol mixtures  
Temperature range: -10°C to +95°C  
Max system pressure: 6 bar

TPG-OMKT0009-0124



This system is made up of the following components;

UMBSxxxx*	OMNIE Manifold (2-12 Port)***
UMXB0101**	Boiler mixing pack
UMXH0101**	Heat Pump Circulator Pack
UMFP0112**	Euroconas connector (12mm)
UMFP0116**	Euroconas connector (16.5mm)
UEAM0101	230v Actuator

\*Product (code) as required.

\*\*Subject to system design.

\*\*\*Includes isolating valves and pressure gauge.

---

### Introduction

- 4 Experience on tap
- 6 Patently easier
- 8 Reinvented, redesigned
- 10 Manufactured in Britain
- 12 The right system for every building
- 14 Whole house, one environment

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### Underfloor Heating Systems

- 18 Underfloor heating product range
- 20 Be floorsure - select via floor finish
- 22 Underfloor that overperforms
- 24 Precision routing for any route
- 26 Patented foil technology
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- 30 Product information
- 66 Five times the pipe
- 68 Floor finishes and underfloor heating
- 70 Precision-Flo High-Performance Manifold

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### Heat Pump Systems

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# Make savings on energy costs and improve performance with our heat pumps

## Why buy from OMNIE?

Air-to-water heat pumps are becoming increasingly more popular across the UK and are being looked at as an alternative to traditional fossil-fuel central heating systems, due to their running cost savings, lower carbon emissions and precise temperature control.

## Quality engineering

The heat pumps we supply are designed and manufactured by us and are ideally paired with our high performance underfloor heating. Our heat pumps have a reputation for high standards of engineering performance, making them both efficient and extremely durable.

## Design

OMNIE have an experienced technical team who are on hand to provide comprehensive technical support, ensuring that our design will meet your project requirements.

## Why heat pumps?

### Renewable energy

A heat pump takes energy from the air even at sub-zero temperatures. The absorbed energy is then transferred, at higher temperatures, to the home's heating and hot water system. The energy taken from the air or the ground is then replaced by energy from the sun.

### Saving money

Although some electricity is needed to run a heat pump, it is up to five times more efficient than fossil-fuel systems. This saves money on running costs and reduces greenhouse gas emissions.

### Cooling

Where cooling is needed, a heat pump can work in reverse cycle to produce chilled water. The chilled water can be used in conjunction with the UFH or chilled ceiling panels to provide mechanical cooling.

### Incentives

Heat pumps also benefit from the government's Boiler Upgrade Scheme (BUS) designed to help homeowners, self-builders and landlords upgrade their properties from a gas/oil boiler (or electric heating) to an Air Source or Ground Source heat pump. The scheme works by offering a grant towards the work needed to upgrade.

[OMNIE.co.uk/bus](https://www.omnie.co.uk/bus)

## Our AeroX range

OMNIE has applied years of knowledge and experience to the process of capturing heat energy, to create the AeroX range of air-to-water heat pumps.

AeroX perfectly pairs with all our UFH products to provide homeowners with an outstanding low-carbon heating and hot water system.

Easy to install and maintain A+++ rated heat pump

Monoblock type models throughout with single fan 6kW, 9kW & 12kW. Double fan models of 15kW & 19kW

Fully tested and compliant with BS 14511 (product) and BS 15450 (system design)

MCS certified

Range of servicing options arranged directly between us and the end user, reducing the risk for installers and developers

Peace of mind with our 7 year comprehensive warranty



# AeroX Heat Pumps

## Perfect partners for our underfloor heating

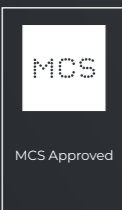
Perfectly designed for heat pumps, OMNIE underfloor heating can reduce running costs and work at low water temperatures.

AeroX provides reliable, quiet and powerful heating for the indoor environment. It can operate in extremely cold weather as low as -25°C while delivering a water temperature of up to 55°C.

The compact and sleek monobloc design contains innovative efficient technologies to reduce energy consumption and optimise heat output.

# 7

SEVEN YEAR WARRANTY



### Control intelligence

Advanced control for the compressor running speed optimises energy use, minimises noise and extends the compressor's operating lifespan.

### Full DC inverter

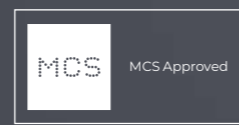
All moving components including the compressor, water pump and fan motor are DC Inverter type that enhance the performance of the entire system while balancing the unit output and energy demand.

### High quality evaporator

Specially coated evaporator prevents frost build-up which helps reduce the energy waste for defrosting by 10%







## AeroX 6, 9 & 12 kW

TPG-OMKT0010-0124

AeroX provides reliable and powerful heating for the indoor environment. It can operate even at extremely cold weather like -25°C. Moreover, it can offer leaving water temperature of 55°C at maximum.

**For installers**  
All-in-one heating solution with built-in main components allows rapid installation without additional refrigerant piping work  
Pre-configured programming  
Operating settings easily adjusted via touchscreen control panel  
Easy access to components for servicing and inspection  
Comprehensive system status reporting via codes

- 6kW HUAX1106
- 9kW HUAX1109
- 12kW HUAX1112

**For end users**  
Compact design  
Quiet operation  
A+++ rated  
Intelligent operating system for optimised energy use  
Easy to activate holiday settings  
Seasonal single and dual mode options



## AeroX 15 & 19kW

TPG-OMKT0011-0124

The larger 'twin-fan' AeroX units share the same uncomplicated design of the smaller models but with a higher level of performance to meet the increased demands of larger properties.

**For installers**  
All-in-one heating solution with built-in main components allows rapid installation without additional refrigerant piping work  
Pre-configured programming  
Operating settings easily adjusted via touchscreen control panel  
Easy access to components for servicing and inspection  
Comprehensive system status reporting via codes

- 15kW HUAX1115
- 19kW HUAX1119

**For end users**  
Compact design  
Quiet operation  
A+++ rated  
Intelligent operating system for optimised energy use  
Easy to activate holiday settings  
Seasonal single and dual mode options

# AeroX Heat Pumps Warranty Information

## Product Support before Delivery

Dedicated phone helpline for technical support on product application

### MCS Package - optional

For an additional fee

MCS design package and administration  
MCS Compliance Pack  
MCS Registration, Certificate, and Insurance.

### Technical training programme - for installers - optional

For an additional fee

System dimensioning and design  
Installation and maintenance – first steps to becoming an OMNIE approved engineer

### OMNIE Pro Installer

Our installer programme that rewards you for installing and commissioning OMNIE heat pumps  
Access to technical updates  
Free training at our OMNIE Pro Training Centre  
Earn 'Pipe Miles' when you install with our underfloor heating as a complete system.



## Product Support after Delivery

### Standard Warranty

2 year parts only when successfully commissioned by any third party

### OMNIE Commissioning Package

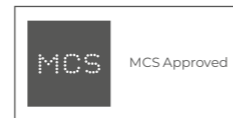
Additional fee may be charged

Commission and sign off by an OMNIE approved engineer after start up  
Automatically extends the warranty to 7 year parts only  
First year of warranty includes all labour costs  
Like for like full unit replacement throughout if any major component fails

### Annual Maintenance Contract - for homeowner (your customer).

For an additional fee payable by the homeowner in contract with OMNIE Limited.

At the end of the first year of the warranty period this becomes due, or can be paid in the months preceding due date each year  
OMNIE has remote access to the heat pump for diagnostics  
Servicing of OMNIE underfloor heating if installed  
Labour included  
Emergency call out (shorter lead time)  
Extended hours user and installer helpline  
Annual inspection (remote or on-site)



# AeroX Heat Pumps - Technical Information

Unit Name			AeroX-6	AeroX-9	AeroX-12	AeroX-15	AeroX-19
Model No.			HUAX1106	HUAX1109	HUAX1112	HUAX1115	HUAX1119
IP rating		IPXX	IPX4	IPX4	IPX4	IPX4	IPX4
Power supply							
Power supply - Outdoor unit	Outdoor unit	V / Hz / Ph	220-240v/50Hz/1Ph				
	Fuse Outdoor unit	A	1p/AC	1p/AC	1p/AC	1p/AC	1p/AC
<b>Performance</b>							
Min/max heating capacity (1)		W	3.3-7.2	5.0-9.7	5.9-11.9	5.9-16.4	6.6-18.8
El.heating power input min/max (1)		kW	0.7-1.6	1.0-2.4	1.3-2.9	1.25-3.7	1.3-4.6
C.O.P min /max (1)		kW	4.26-4.87	4.01-4.57	4.05-4.57	4.3-4.7	4.03-5.01
Min/max heating capacity (2)		kW	3.1-6.9	4.2-8.9	6.0-11.5	4.4-15.8	6.1-18.4
El.heating power input min/max (2)		W/W	0.9-1.9	1.3-2.9	1.6-3.6	1.64-4.5	1.7-5.6
C.O.P min /max (2)		kW	3.41-3.78	3.03-3.4	3.19-3.66	2.68-3.5	3.29-3.71
SCOP - Average climate, low temperature		kW	4.66	4.62	4.57	4.81	4.62
Energy class			A+++				
Min/max cooling capacity		kW	3.1-7.1	4.2-9.1	5.1-12.2	7.5-16.9	5.5-19.2
El. cooling power input min/max (3)		kW	0.82-1.9	1.2-2.9	1.34-3.4	1.34-4.0	1.3-5.0
E.E.R min/max (3)		W/W	3.32-4.25	3.28-4.24	3.33-4.33	4.23-5.6	3.81-4.71
Min/max cooling capacity (4) (A35/W7)		kW	1.8-4.8	3.1-7.9	4.2-8.9	5.1-11.2	4.7-13.1
El. cooling power input min/max (4)		kW	0.66-2.54	1.1-3.2	1.6-3.1	1.4-3.6	1.5-4.6
E.E.R min/max (4)		W/W	2.54-2.84	2.38-2.83	2.61-3.22	3.06-3.6	2.89-3.25
Ambient temperature range	heating	°C	- 25.0-43.0				
	cooling	°C	7.0-43.0				
Outlet water temperature range		°C	7.0-55.0				
Sound power level	55	db (A)	54	61	62	62	65
	35	db (A)	54	57	58	58	61
<b>Components</b>							
Fan	Set	pcs	1		2		
	Airflow	m <sup>3</sup> /h	2500	3280	3280	6200	6200
	Rated power	W	60	62	62	124	124
	Blade diameter	mm	455	550	550	550	550
Plate heat exchanger	Water press. drop	kPa	22	25	26	30	30
	Piping connection	Inch	1" external thread		1 1/2" external thread		
Refrigerant	type	/	R32				
	charge	kg	0.75	1.15	1.3	2.6	2.9
Compressor	type	/	Twin Rotary				
<b>Hydraulics</b>							
Minimum water flow		m <sup>3</sup> /h	0.5	0.8	1.03	1.29	1.64
Nominal water flow		m <sup>3</sup> /h	1	1.6	2.06	2.58	3.27
Hydraulic connections		Size	1" external thread		1 1/4" external thread		
<b>Dimensions and weight</b>							
Net Dimensions (LxDxH)	Outdoor unit	mm	1015x380x700	1175x380x845	1175x380x845	1095x405x1440	
Brutto Dimensions (LxDxH)	Outdoor unit	mm	1060x470x865	1240x470x1020	1230x470x1020	1150x470x1580	1150x470x1580
Net weight	Outdoor unit	kg	70	79	82	133	138
Brutto weight	Outdoor unit	kg	81	90	93	148	153
Included with the unit							
WiFi		Yes/No	Yes				
Communicaton cable		m	10				

Note:

- (1) Heating condition: water inlet/outlet temperature: 30 °C / 35 °C, Ambient temperature: DB 7 °C / WB 6 °C
- (2) Heating condition: water inlet/outlet temperature: 40 °C / 45 °C, Ambient temperature: DB 7 °C / WB 6 °C
- (3) Cooling condition: water inlet/outlet temperature: 23 °C / 18 °C, Ambient temperature: DB 35 °C / WB 24 °C
- (4) Cooling condition: water inlet/outlet temperature: 12 °C / 7 °C, Ambient temperature: DB 35 °C / WB 24 °C
- (5) The specifications are subject to change without prior notice.



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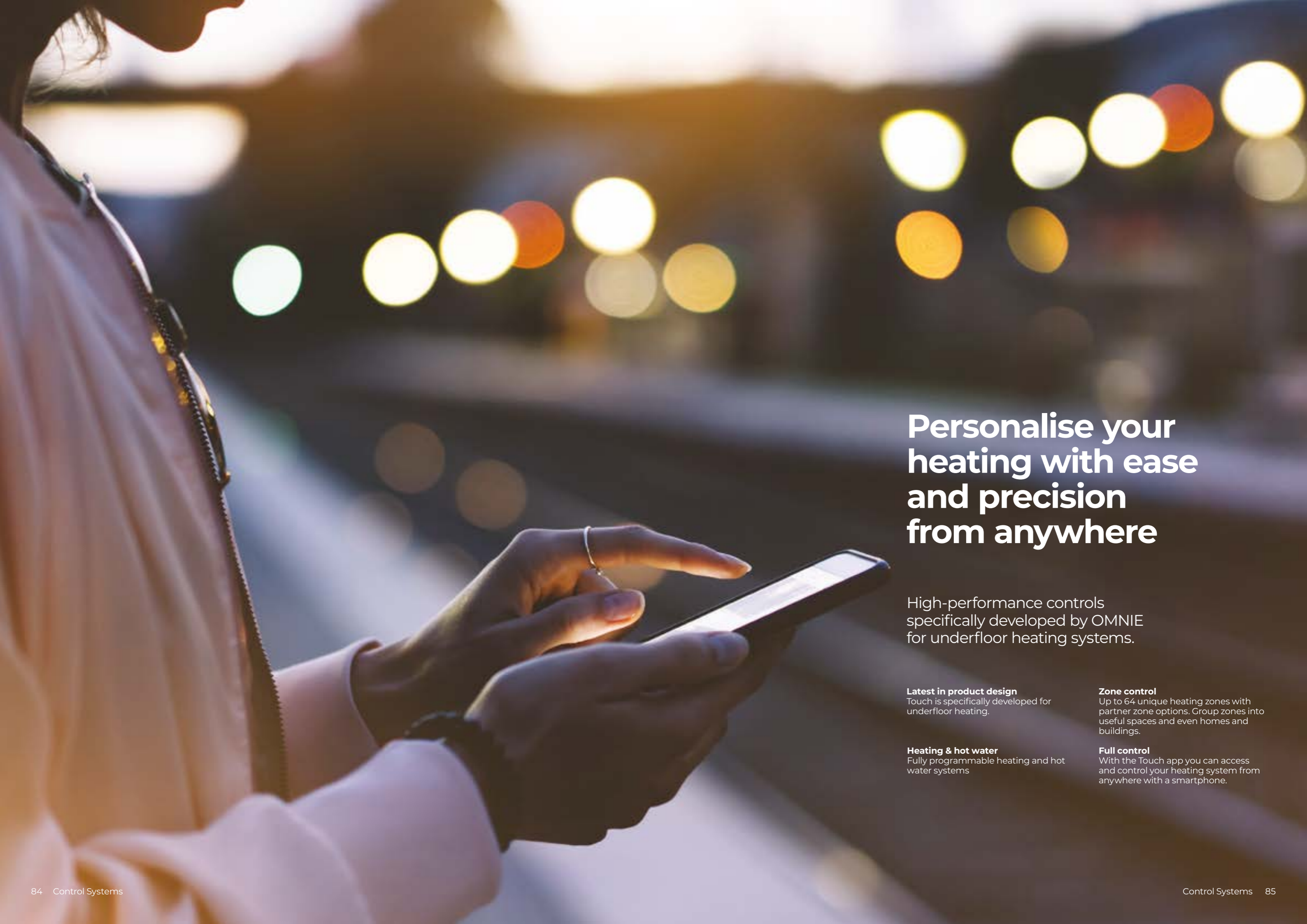
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## Personalise your heating with ease and precision from anywhere

High-performance controls specifically developed by OMNIE for underfloor heating systems.

### **Latest in product design**

Touch is specifically developed for underfloor heating.

### **Heating & hot water**

Fully programmable heating and hot water systems

### **Zone control**

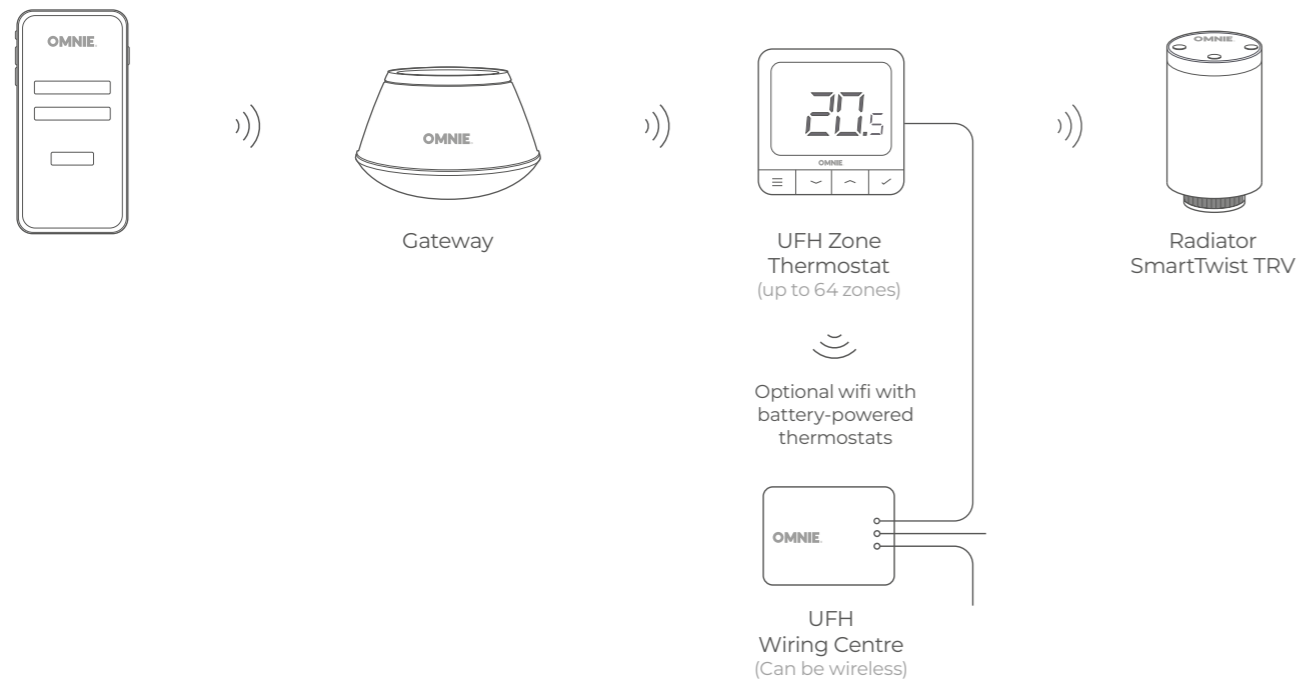
Up to 64 unique heating zones with partner zone options. Group zones into useful spaces and even homes and buildings.

### **Full control**

With the Touch app you can access and control your heating system from anywhere with a smartphone.

# OMNIE Home smart controls

Our OMNIE Home smartphone app allows you to organise and control your home heating system from anywhere. You can easily set up different homes, zones and programmes to effortlessly take control of your home environment. The app works both at home and anywhere in the world where your phone or tablet can connect to the internet.



**Remote sensors**  
Add an optional remote sensor to measure temperature across the home including partner zones, ideal for bathrooms, wet rooms and en suites.



## Smart Thermostat

### Super slim profile

The OMNIE Home Smart Thermostat has a super slim profile, to seamlessly fit in with contemporary living. Thinner than a light switch, our smart thermostat doesn't protrude off the wall like others do.

### Wireless connectivity

The OMNIE Home can connect wirelessly to our OMNIE Home Wiring Centre (to control underfloor heating, radiators and hot water). This means there is no need for bulky cables running from your manifold to every thermostat and allows you to easily retrofit the OMNIE Home system into an existing house. Moreover, you can extend the system, for example, into an extension, very easily.

### Mains & battery powered

The OMNIE Home Smart Thermostat is available in both mains-powered and battery-powered versions.

### Smart Switch

Also available with OMNIE Home is our Smart Switch – this allows you to wirelessly switch connected appliances on and off using the OMNIE Home App for your smartphone or tablet.

### Remote sensors

Add an optional remote sensor to measure temperature across the home including partner zones, ideal for bathrooms, wet rooms and en suites.



Smart Switch



Remote Sensor

## Gateway

The OMNIE Home Gateway connects your thermostats at home to your smartphone on the go. The Gateway plugs into your home router and wirelessly communicates with the OMNIE Home Smart Thermostats and remote switches so you can control each one from the OMNIE Home App.

## Smart Twist TRV

The OMNIE Home SmartTwist TRV simply replaces existing radiator TRVs so that you can control each radiator from the OMNIE Home App on your smartphone. These can be setup as zones and labelled as rooms to make controlling the temperature easy and convenient.

This system is made up of the following components;

- UEQP010M Programmable Thermostat
- UEQP010W Wireless Thermostat
- UEQR01RE Smart Switch
- UETS01SS Remote Sensor
- UEQG0101 Gateway
- UEQT01ST Smart Twist TRV

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# Why compromise? Air matters

Good air quality in the home is essential for your long-term health, especially when you consider an average person spends 90% of their time indoors, and 75% of this time at home.

A recent report stated that poor air quality was linked to more than 40,000 premature deaths in the UK every year. This is likely to affect people who live in built-up areas who experience higher levels of road traffic and subsequently harmful air pollutants. More of us are living in areas of the country which are highly polluted and will have a higher proportion of lung disease and cardiovascular problems. In addition to man-made pollutants, other particles such as bacteria, fungi and pollen can cause lung irritation and respiratory problems, especially in younger and older occupants.

Our homes offer some protection from the elements, however, we are still reliant on fresh air coming into the building through infiltration in the fabric. This approach provides limited control of the air and its quality. With this in mind, pollutants are part of our built-up environment and we need to make decisions as to how we reduce the risks within our homes and how to control the air quality.

## How OMNIE can help

Maintaining good air quality is achievable with an OMNIE comfort air system which utilises Mechanical Ventilation and Heat Recovery (MVHR). The OMNIE MVHR system has the ability to filter pollen and dust as standard. In addition to this, we have the options to provide some protection against harmful air pollutants.

The Heat Recovery Unit provides a countdown to when the filters need to be checked, ensuring that high levels of filtration are maintained. Even though the OMNIE MVHR offers some protection from pollutants and will improve air quality, no solution can provide 100% control and guarantees on air quality and prevent the associated health risks.

## Humidity

With an average family producing 18 litres of water every day, regulating this humidity is possible through the OMNIE MVHR system. High levels of humidity can lead to health issues if mould occurs on cold surfaces and there is poor ventilation. One of the main benefits of the OMNIE solution is that it will extract more moisture over a longer period when compared with a conventional intermittent ventilation system.

## Key Features

- Up to 90% efficient at heat recovery
- Ability to control humidity levels within the building
- Improves air quality and reduction in some pollutants
- Regulates comfort level and provides some cooling effect with greater air movement and modulating summer bypass
- MVHR essential for low-energy building design





#### Benefits to end user

- Control from your smartphone
- Remote monitoring
- Easy maintenance
- Cooling option available
- Demand-based ventilation sensors

#### Benefits to installers

- Step-by-step start-up wizard
- Simply type in the required airflow rates
- Right and left handing can be modified on-site easily
- Simple installation process

- Outside air
- Supply air
- Extract air
- Exhaust air



## How it works

### Supply of fresh air

Fresh air is fed into the system via an external wall vent. The fresh outside air can optionally flow through a sub-soil heat exchanger beforehand which uses geothermal energy to pre-temper the outside air.

### Ventilation unit

Up to 96% of the heat is recovered from the extracted air and transferred to the fresh air. This can be humidified, dehumidified, heated and cooled using optional components.

### Air distribution

The air distribution system channels fresh air at the right temperature to individual rooms as needed and vents the extracted air to the outside. The air volume can be individually adjusted for each room.

# Understanding the mechanics

Heat Recovery Performance is an important factor in unit specification as it has a direct impact on the heating load and offers savings to the homeowner. When comparing two MVHR units with 87% and 94% heat recovery efficiency you can achieve up to a 25% reduction in heating costs (from ventilation loss) when selecting the higher performing unit.



### Temperature Control

The pre-heater adapts its operation taking into consideration temperature, air flow and humidity to ensure consistent supply air temperature is achieved no matter what is going on outside. Thanks to its large surface and delta shape, the level of pressure loss is negligible – and that also reduces the power consumption.



### Air Volume Balancing

Innovative sensor technology Automatically ensures balanced supply air and extract air volumes. This flow control guarantees maximum heat recovery. What's more, you save time during commissioning because there is no need to adjust the speed manually and the air volumes are balanced automatically.



### Heat Exchanger

The unique diamond heat exchanger features an especially large surface, which allows it to achieve a higher level of efficiency. Variable channel heights ensure a constant flow and lower pressure loss. As a result, less energy is required to overcome the air resistance.



### Fan Technology

The flow grid, scroll housing and impeller ensure the best possible air flow. This guarantees not only extremely quiet operation, but also particularly low power consumption. A high-quality, future-proof solution, based on tried-and-tested technology.

# 25%

reduction in heating costs (from ventilation loss) when selecting the higher performing unit.

# Optimum indoor ventilation

The ComfoAir Q from OMNIE is the NEW generation of heat recovery ventilation units, with state-of-the-art design and intelligent technology. Regardless of whether you are working on a new-build or an old building, with OMNIE comfortable ventilation you have an innovative, tried and tested complete system.

OMNIE ventilation systems' innovative technology make for less complexity, increased heat recovery efficiency, lower specific fan power and significant noise reduction.

A perfect combination of outstanding technical performance and excellent features makes ComfoAir Q the best in class achieving top efficiency ratings.

- 3 models available – 350m<sup>3</sup>/hr, 450m<sup>3</sup>/hr and 600m<sup>3</sup>/hr
- Suitable for medium and large size properties
- All units have been certified as an official Passive House Component by the Passive House Institute
- Left or right-hand unit configuration combined in one device for installation flexibility
- Wall mounted or free standing on mount options
- All units – dimensions 850mm (h) x 725mm (w) x 570mm (d)



### Installation wizard facilitates ease of set-up

The start-up wizard guides you step by step through the set-up process including an automatic self-test. Using the design drawings you can simply type in the required airflow rates for low, medium and boost, and the system automatically sets these across the installed system.



### On-site interchangeable orientation

Right and left handing can be modified on-site easily when required helping save time and money on-site and reducing risk of incorrect installations.



### Ensuring an optimum room temperature – at all times

The most important feel-good factor is comfort, through regulation of temperature and humidity. OMNIE ComfoAir Q's intelligent temperature control factors-in the varying outdoor temperature at different times of the year, to ensure ideal comfort conditions indoors.

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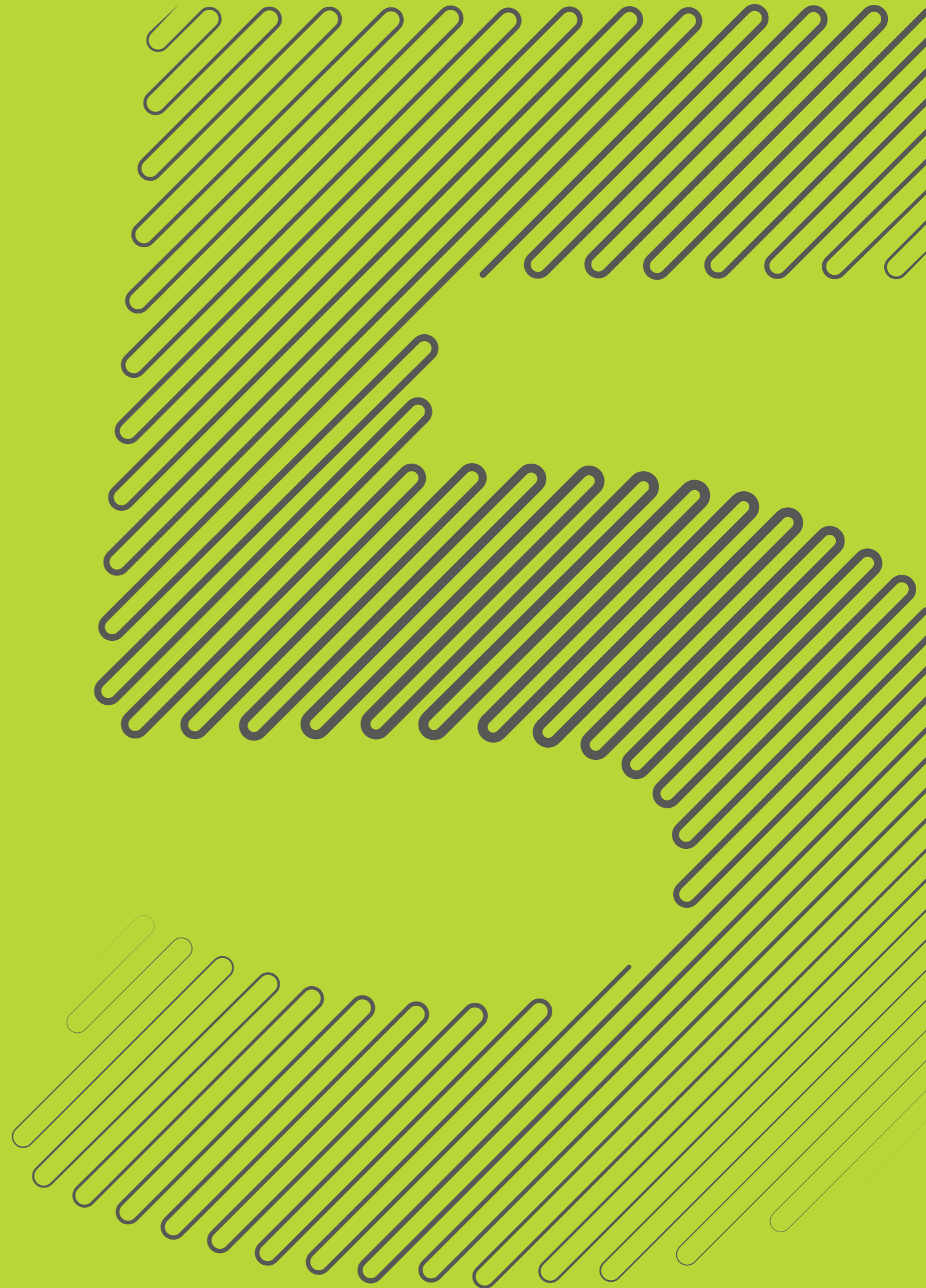
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# Contact your local expert

Our local area managers are happy to help with any aspects of your project, whether you are new to underfloor heating or looking to use our products across multiple homes and buildings.

**To get a quote please visit**  
**[OMNIE.co.uk/quote](https://www.omnie.co.uk/quote)**

01392 36 36 05  
[projects@OMNIE.co.uk](mailto:projects@OMNIE.co.uk)  
[OMNIE.co.uk](https://www.OMNIE.co.uk)

For technical help and support please call us on the number above or speak directly to your project manager or area manager.

## For Developers

If you are a developer and thinking about using OMNIE products in your projects please ask to speak with our specialist team, dedicated to design and specification.



# Help and support

## Architects & developers

Up-to-date information on product specification and performance is available on our website. Please visit [OMNIE.co.uk/resources](https://www.omnie.co.uk/resources) and select the appropriate product category. You can find datasheet reference numbers for each product within this guide and the information is available both electronically as a PDF. If you require annotated images of the products for the purposes of specification, these are also available on each product datasheet.

Information on product performance and suitability can be supplied by our projects team who are available via our technical support line – 01392 36 36 05. Alternatively please speak to your local area manager who will happily talk you through our product range and also arrange for samples you may require.

If you need information on complex constructions such as those with specific acoustic properties, or you have a specialist requirement that is not covered by our standard product range, please call 01392 36 36 05.

## For end users

If you are an end user and would like help using your OMNIE underfloor heating system, a range of user guides are available on our website [OMNIE.co.uk](https://www.omnie.co.uk)

Alternatively please give us a call on 01392 36 36 05 and we can arrange for a guide to be sent to you.

## Installers & heating professionals

We recommend that you contact us so that you obtain the most appropriate system and performance specification for the project.

**To get a quote please visit [OMNIE.co.uk/quote](https://www.omnie.co.uk/quote) and enter your postcode or call 01392 36 36 05, alternatively take your plans to the trade counter.**

You can order our products directly through your local retailer, plumber or builders merchant and if you contact us for a quotation, we will always give you the option of trading through your preferred merchant or retailer.

Detailed installation instructions and a layout plan of the system is included in every system that gets dispatched to site. If you require any additional information at the time of installation we recommend you visit our resources library on our website. This can be accessed directly by visiting [OMNIE.co.uk/resources](https://www.omnie.co.uk/resources)

## Self builders & home owners

We recommend that you order your OMNIE underfloor heating system in conjunction with an installer, heating professional or architect.

**To get a quote please visit [OMNIE.co.uk/quote](https://www.omnie.co.uk/quote) and enter your postcode.**

We have a range of information available to self builders and home owners who are looking to install an OMNIE underfloor heating system in their home or extension. Information on all our products including the suitability of our systems for different floor constructions can be found on our website.

We recommend that a professional plumbing and heating engineer is appointed to fit and commission all of our underfloor heating products.

If you have hired an installer to fit an already specified system, an installation guide and manifold balancing and commissioning instructions will be included in your system pack, along with the plans for the pipe layout.

### Knowledge Guides

A range of useful knowledge guides for both professionals and homeowners are available to download from our website

[omnie.co.uk/knowledge-guides](https://www.omnie.co.uk/knowledge-guides)

## Common questions

### Is my property suitable for underfloor heating?

Underfloor heating can be used in any property. Just like any other heating system, the heat output from the floor should be sufficient to satisfy the building heat losses.

### How much does it cost to run an underfloor heating system?

The running costs will depend on the heat losses from the house. However, an underfloor heating system that is designed correctly – especially when used with renewables – will be cheaper to run compared to radiators.

### How do I maintain my underfloor heating system?

Underfloor heating requires very little maintenance. The manifold contains all the moving parts, such as pump and zone valves, and these will need to be from time to time.

### How fast does an underfloor heating system warm-up?

The speed at which an underfloor heating system works is dependent on the thermal mass of the floor and the design of the system. High thermal mass floors, such as concrete floors, will take longer to heat up. Also, if the underfloor heating system has a high heat output it will have a faster warm-up time.

### Can I have underfloor heating upstairs?

Underfloor heating is straightforward in a concrete screed floor. However, timber first-floor constructions require the right products for the system to be effective. OMNIE has developed a comprehensive range of underfloor heating products for timber first floor constructions.

## RIBA-approved CPD courses



### Using underfloor heating effectively

The training explains the science behind how UFH and radiators work, and how this relates to new design principles. It describes the constituent elements of any UFH system and how these inter-relate.

### Installer training courses

Heat Pump training courses take place at the OMNIE head office in Exeter.

### Speak to an OMNIE advisor today and book your place on our next course.

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## Contact

For help & support assistance: visit [OMNIE.co.uk](https://www.omnie.co.uk) call us on 01392 36 36 05 email us [customer.service@omnie.co.uk](mailto:customer.service@omnie.co.uk)

