Product Guide

Underfloor heating and heat pumps

omnie.co.uk

A comprehensive guide to all our products and systems for heating professionals, installers, architects and specifiers.

2018 EDITION

OMNIE

DESIGNED & MANUFACTURED
IN GREAT BRITAIN

OMNIE.

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Welcome to OMNIE. The best in high performance underfloor heating. For every floor, for every home.

Underfloor heating is considered the most comfortable and energy efficient form of heating.

That's because the feeling we get from the radiant heat produced by an OMNIE underfloor heating system is similar to which we get from the sun.

High performance underfloor heating guaranteed.

Our products are the best performing on the market, they are independently tested and guaranteed.

We're always on hand with expert support and advice.

Our team of local underfloor heating experts will make sure you get the best performance for the best price.

Easy to install products and systems.

Our LayFast technology means fast installation with minimum fuss, saving you time and money.

We take the hassle out of underfloor heating.

Just send us your plans and we'll do the rest – from design to delivery.

Contact an expert

Your local OMNIE expert is ready to help you start your project. To find out more, visit **omnie.co.uk and enter your postcode.**

T: 01392 36 36 05
E: projects@omnie.co.uk
W: www.omnie.co.uk


OMNIE

Not only does underfloor heating create a better use of space, it's also more energy efficient.

Why choose an OMNIE underfloor heating system?

Design
With decades of experience, OMNIE has developed a range of products that take the guesswork and mystery out of underfloor heating. OMNIE products are easy to configure with known, independently-tested heat outputs.

Warmth and comfort
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.

Wellbeing
Underfloor heating provides a balanced level of radiant heat and air warming. If the heating is provided by high air temperatures this can dry the skin and eyes. Warming the floor also reduces the occurrence of dust mites that cause allergies.

Renewables
In general, renewable heat is easier to produce efficiently at low water temperatures. Good underfloor heating uses low temperature water and this is why these systems are best suited to renewable energy.

Efficiency
OMNIE products are designed specifically to work at low water temperatures, improving the efficiency of a heat pump, reducing running costs and saving you money.


Comprehensive free design service


Dedicated project manager


Local experts that come to you


Relationship managers for trade customers


Specialist services for developers & large projects


OMNIE

Take Control with OMNIE Touch.

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

New for **2018**

Personalise your heating with ease and precision.

Touch allows you to take full control of your home heating.

Our new state of the art controls allow you to take control of your home heating, wherever you may be. Using innovative wi-fi technology, our new Touch system can control as many heating zones as you need, allowing for different temperatures in different rooms throughout the home. Furthermore, Touch can control and organise heating zones into floors, spaces and even different homes, all from our new Touch app.

Touch. Home heating made better.


9:41 AM
100%
Master Bedroom
18°
25°
Program
Battery
Signal

All the features you'll need for perfect home heating.

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

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

Mains Powered
Mains powered 4" full colour touchscreen for every zone and hard wiring to standard wiring centre

Full control
With the Touch app you access and control your heating system from anywhere with a smartphone (see below)

The Touch Smartphone App
Login to your home anywhere - using the Touch smartphone app. Group together each Touch smart thermostat into bigger zones, or even floors, go further to group zones into different buildings, such as your main residence and holiday home.

The Touch app allows you to control each zone, whilst also allowing convenient setting of heating programs, holiday modes and even global programs across many zones at once. The Touch app can even send you notifications about your home temperature, such as if it gets too warm or too cold.

Capacitive Touch
Intelligent touch system with acceleration scrolling and fine touch control included as standard.

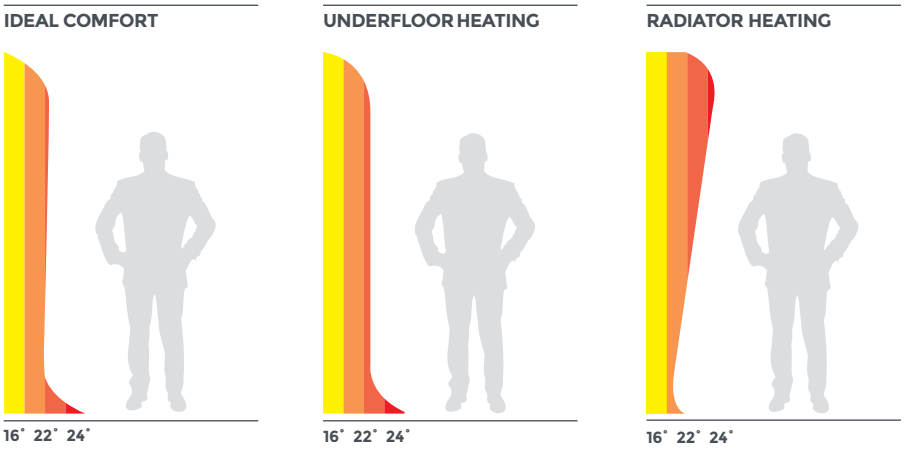
Create a comfortable home with underfloor heating.

How does underfloor heating work?

Underfloor heating works by circulating warm water through pipe embedded within the floor construction. Heat from the pipe is transferred into the floor and then into the room, providing enough warmth to heat the building all year round.

This removes the need for radiators by making more effective use of the space, as well as eliminating any high temperature surfaces. An underfloor heating system generally has a surface temperature between 25˚C and 27˚C, lower than the palm of your hand. A conventional radiator can be as hot as 75˚C.

The way in which underfloor heating transfers heat is also different to a radiator. Radiators transfer energy principally by convection, heating the air above and around the radiator causing the air to rise. As the warmed air is more buoyant than the cooler air in the room it will rise to the ceiling. The warmed air, as it crosses the ceiling, will begin to cool and then fall creating a draught.



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


OMNIE

The best in underfloor heating starts with good design.

Tried, tested, trusted

OMNIE has independently tested all of our products so that when we produce a system design we can give our clients the confidence that an OMNIE system will perform as designed.

All of our designs are based on BS1264, the British Standard for underfloor heating. Our designs show where the pipe is to be installed in the floor and are issued for approval before we despatch the materials for the project.

There are several factors that are important in a good underfloor heating design. The system must provide enough heat to keep the rooms warm, as well as responding quickly to changes in the home owner's requirements.

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 or LowBoard 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.

OMNIE has tested its systems at BSRIA (Building Services Research and Information Association) and is therefore able to provide definitive information on the heat output for your specified construction.

Did you know?

When combined with our heat pump range, our underfloor technologies can be used to cool buildings as well as heat them.

Technical Support Line: 01392 36 36 05

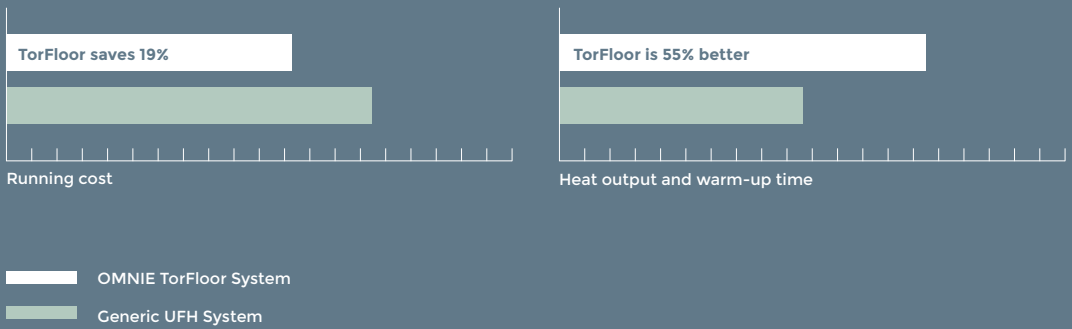
OMNIE underfloor heating systems are designed to be energy efficient, have high heat output and fast warm up time.

The system for performance

Different underfloor heating products vary in performance, so it's important to choose the right system for your home.

OMNIE underfloor heating products are specifically designed to ensure the best possible performance in terms of efficiency, heat output and warm-up time.

As a result of good product design, OMNIE Torfloor outperforms generic underfloor heating diffuser plates ensuring lower running costs, faster warm-up and better heat output.

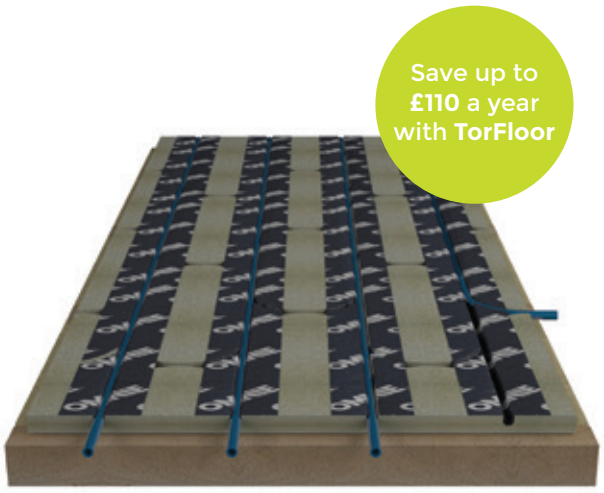


Are all underfloor heating systems the same?

Independent tests by BSRIA prove OMNIE systems are more efficient.

Independent tests at BSRIA showed that systems that have an air gap between the pipe and floor deck are less efficient at transferring energy than OMNIE systems. This means they have to use significantly warmer water to produce the same heat output.

The water temperature stated below is of that needed to provide the same heat output from each system. Consumption is based on a new build 4 bedroom 200m² property using a ground source heat pump and heating system as shown.



Heat Source	Water temperature	Annual energy consumption	Cost to run
Oversized radiators	55˚C	4733 kWh	£662
Competitor Air-Gap UFH	55˚C	4733 kWh	£662
Competitor Rigid Aluminium heat diffusers	49˚C	4115 kWh	£576
OMNIE FoilBoard	**46˚C**	**3789 kWh**	**£530**
OMNIE TorFloor	**41˚C**	**3329 kWh**	**£466**

*Illustration purposes only – based on 14p per unit.

BSRIA

Improve SAP ratings with an OMNIE underfloor heating system.

What is a SAP rating?
A SAP rating is a calculation to predict the energy performance for new dwellings. The SAP rating takes into account insulation levels and the types of renewable energy products used in the building. The higher the rating the better the building's predicted energy performance.

OMNIE UFH and SAP
OMNIE Underfloor heating products for timber constructions, or 'dry constructions', have a faster warm-up and cool down time than underfloor heating in screed floors. This reduces the possibility of overheating and improves efficiency. Also, when compared to radiators, underfloor heating is more efficient when used with a heat pump.

These factors combine so that using OMNIE dry construction underfloor heating systems, such as TorFloor, over conventional radiators improves the energy efficiency of the building and increases the SAP rating.

Traditional Radiator

77
SAP RATING

OMNIE TorFloor
Underfloor Heating

81
SAP RATING

*These calculations are based on a new-build 100m² timber frame house using a ground source heat pump.

OMNIE products are designed to use low water temperatures, which saves on both energy and money.

What makes OMNIE different?

OMNIE products are perfectly suited to using heat pumps and other renewable energy sources. To be able to work with these technologies a heating system must be able to run at low water temperatures yet still provide sufficient heating to warm the building particularly in timber floors. This is important because a heat pump producing lower temperature water will reduce running costs and carbon emissions.

To ensure good performance at low water temperatures it is crucial that there is a conductive pathway that transfers heat quickly from the pipe to the floor surface. If there is a break in the conductive pathway i.e. an air gap, then the efficiency of this energy transfer is greatly reduced. To overcome this inefficiency the water used in the heating system needs to be much hotter to produce an effective heat output.

Further to this, our heating systems are designed with ease of installation in mind. All our products benefit from our unique multi-directional system, allowing for the pipe to loop seamlessly within one panel, eliminating the need for separate straight and loop panels simplifying the installation process significantly.

Contact an expert

Get in touch with your local OMNIE expert today.
Visit www.omnie.co.uk and enter your postcode.

Technical Support Line: 01392 36 36 05

We design and manufacture all our products and systems in house at our UK facility.

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

OMNIE is a pioneer in manufacturing as well as developing a range of technologies designed specifically for the built environment. All products are manufactured in Britain in an environmentally-responsible way, using as far as possible British-made component materials.

Product research and development is the basis on which the business has been built. Our products are carefully designed by our expert engineers and are tested independently at BSRIA for performance. All work very effectively with sources of renewable energy, and tests show they are the most energy-efficient and some of the highest performing on the market.

Furthermore, all our products have all been designed to suit British buildings and the constantly-changing British climate. The wide range of constructions we cater for includes products for both heating and cooling, as well as those with acoustic features and retrofit applications.

We take great pride in delivering the highest quality products, systems and customer care. Each system we supply is carefully designed to ensure long lasting performance.

Independently tested for performance

All UK constructions

30+ years experience

Designed & manufactured in the UK by us

Installing an OMNIE system has never been easier. Fast Installation. Minimum Fuss.

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.

LayFast

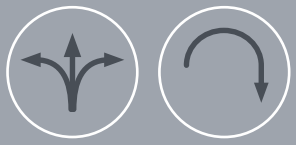
Look out for products carrying the LayFast badge.

Our new LayFast Technology has been perfected thanks to 30 years of experience in the underfloor heating industry. LayFast means exactly what it says, enabling our systems to be installed quicker and easier than ever before.

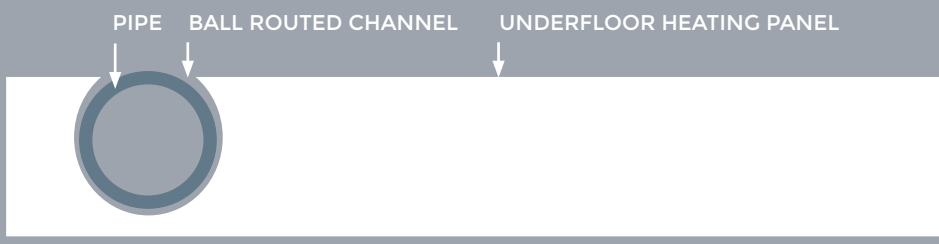
LayFast Technology makes the most of our patented and completely unique pipe channel pattern. This pattern not only allows for panels to be laid in a similar method to flooring panels, but enables almost infinite flexibility as to where the pipe can be laid. This means you can easily work around complex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

Combined with our unique pipe channel pattern, LayFast 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.

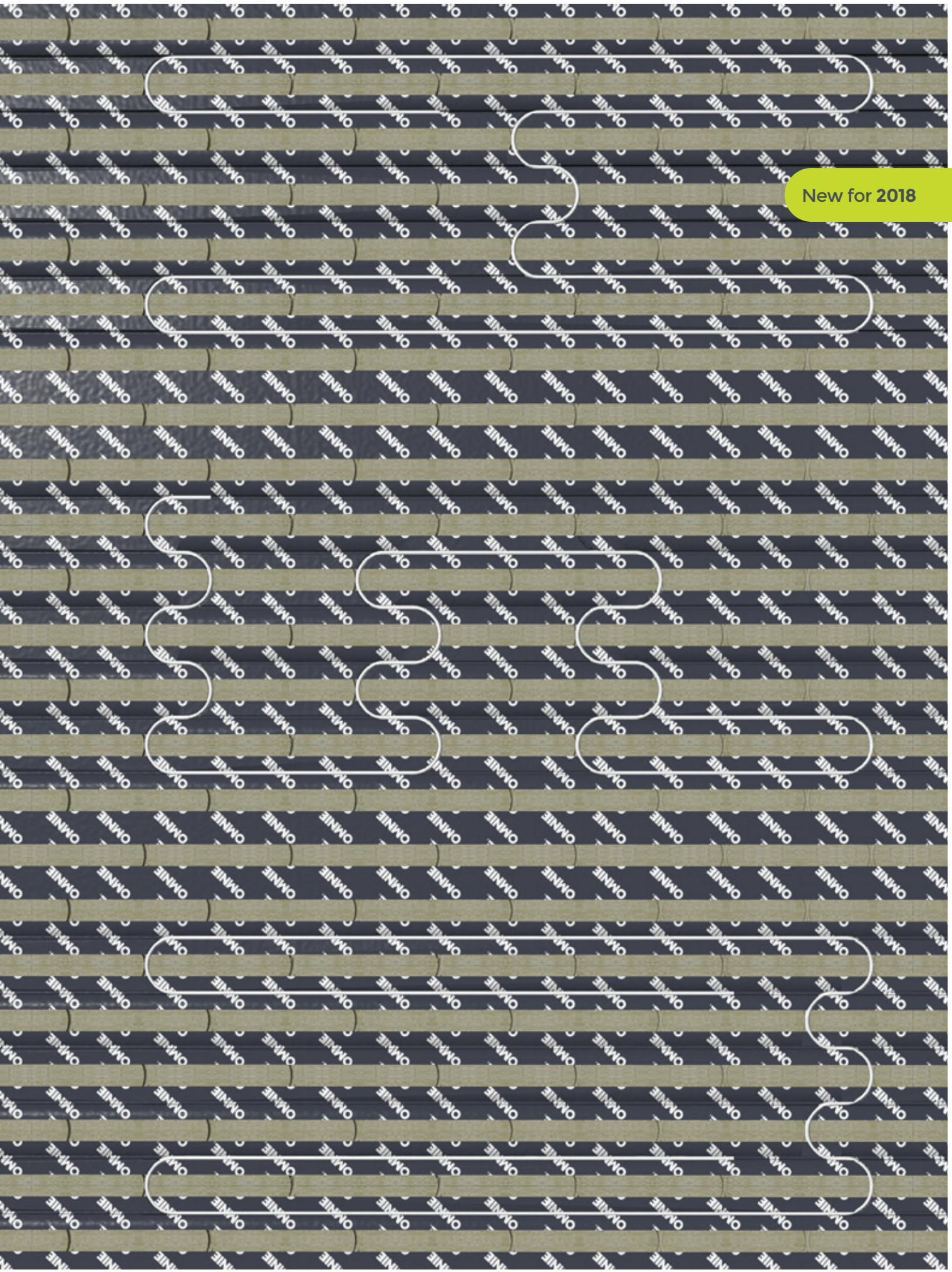
LayFast Technology is available across our product range. You can find out more about our LayFast Technology by contacting your local OMNIE expert for a hands-on demo, or alternatively visiting our website.



Easily lay the pipe in any direction



Ball routed channels eliminate pipe pop out


New for **2018**

UltraLow. Our thinnest panels ever, some are even thinner than a five pence piece.

Retrofit? No problem. Minimum build up. Minimum fuss.

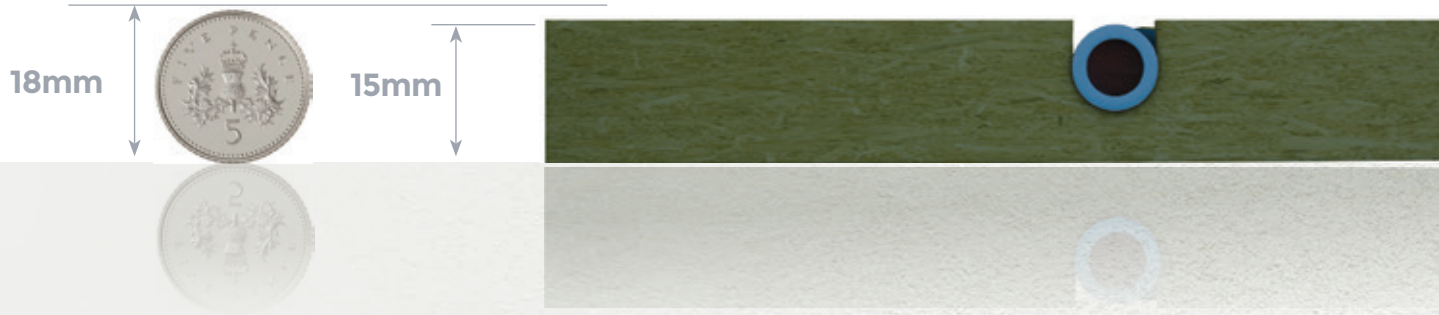
Our unique UltraLow technology means very low build up (from 15mm panel thickness) without any loss of performance. UltraLow technology also maintains the rigidity of the panel (where applicable) making sure the panel is still easy to lay.

Products with UltraLow technology are ideal for retrofit projects or where it is impractical or expensive to lift or replace the existing floor deck. With such thin panels, UltraLow products can be installed in almost any existing building.

UltraLow is also available with both DrySystem and LayFast technologies, meaning an easy to install, super thin panel.

Look out for products carrying the UltraLow badge in this brochure.

New for **2018**



Tile your floor with absolute confidence.

Our new TileOver technology means that OMNIE underfloor heating systems have been extensively tested with a specific range of tile adhesives to maintain the integrity and performance of a tiled floor finish.

We have partnered with Tilemaster Adhesives to create a unique formula that allows a tiled floor finish to be successfully laid over the majority of our underfloor heating systems. We call this TileOver technology. Our extensive testing means that you can have absolute peace of mind whilst also reducing the need for additional floor build up or floor coverings such as cementboard, further reducing costs and hastening the installation time of the system.

Our new TileOver technology has been designed to work with our timber floor products, removing the uncertainty in a tiled finish in timber constructions. The formula will make sure that the floor finish is stable, doesn't crack and can flex with the movement of the heating system.

Each of our products are now supplied with a comprehensive technical guide for tiled floor coverings, guaranteeing the performance of a tiled finish providing that the right Tilemaster Adhesives are used in the correct layers and quantities. Furthermore, the adhesives and screeds are available directly with your OMNIE system and we have provided an easy online tool to help in calculating the volumes of adhesive/screed needed for your specific system.

Simply visit our website at omnie.co.uk and click on the TileOver icon to find out more.

To find out more about TileOver technology please contact your local OMNIE expert. Use our TileOver tool today to work out exactly what materials you need:

www.omnie.co.uk/tileyourfloor

New for **2018**

High performance underfloor heating designed for dry constructions.

Our systems work where others don't, especially when it comes to dry constructions.

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

However getting underfloor heating to work effectively in timber floors is not straightforward. Timber is not naturally a good conductor of heat. Other underfloor heating systems often overcome this using high temperature water and as a result the efficiency of the heat pump or boiler will be reduced, and in some cases the floor can become damaged over the long term.

We are specialists in manufacturing UFH products for timber floors and have developed a range that delivers high performance at low water temperatures. Our systems are also designed to reduce and even eliminate noise on warm up and cool down, as well as being very easy to install using our LayFast technology.

In addition, the majority of our products for timber floors have been designed to accept a tiled floor finish using our new TileOver technology.

Our unique DrySystem technology means exactly that. All our systems for timber floors do not require any wet elements such as bonded screeds or fills, simply lay and complete, with no mess and no fuss. Our DrySystem technology incorporates pre-bonded foil emitter layers to further enhance performance in timber constructions.

No need for screeds. Save time, save money and save hassle with DrySystem technology.

Look out for products carrying the DrySystem badge in this brochure.

Product focus: TorFloor

TorFloor is the complete flooring system with structural floor and underfloor heating in one. TorFloor panels are a TRADA certified for floor decks.

See pages 36 & 42 for more

DrySystem

Structural floor and heating panel in one

LayFast

Multi-directional panels for easy and quick installation

TileOver

Suitable for all floor finishes including tiles using our TileOver technology

OVER 130,000 PANELS SOLD

PERFORMANCE TESTED AT BSRIA
BSRIA
SEE PAGE 18 FOR DETAILS

THE ONLY STRUCTURALLY CERTIFIED
TorFloor
FLOORING PANEL AVAILABLE IN THE UK

Innovative underfloor heating systems for in-screed applications.

In-screed systems

We have a wide range of high performance systems designed to be placed in-screed. Our in-screed systems benefit from a wide range of features and are very easy and quick to install, providing a screed of sufficient depth and specification can be laid.

Our flagship in-screed product, ClipPlate Compact can make use of a flexible and fibre reinforced, rapid setting self levelling compound, which when laid creates a build-up of only 20mm.

Types of screed

There are many different types of screed from the conventional sand and cement screed to proprietary liquid screeds.

The screeds that are discussed here are floating screeds, i.e. they are not bonded to the concrete sub-floor.

Sand/ cement screeds
The minimum thickness of a floating screed is 75mm for commercial installations and 65mm for domestic installations. There should be a minimum of 25mm screed over the pipes.

Self-levelling screeds
There are many proprietary screeds on the market. Advice should always be sought from the manufacturer.

Calcium sulphate & anhydrite screeds
The benefit of using this type of screed is that the drying time is less than conventional sand/ cement screeds and there is less shrinkage.

The minimum thickness of a screed in a commercial installation is 40mm and 35mm in a domestic installation. There should be a minimum of 25mm screed over the pipes.

Tilemaster levelflex
A flexible and fibre reinforced, rapid setting self levelling compound for use with our ClipPlate compact system.

tilemaster adhesives

Laying screeds

The British Standard for underfloor heating states that there should be joints in stone and ceramic-finished screeds every 40m^2, with a maximum length of 8m between joints. A joint must be placed at least every 8m across the floor but, as the joint is only one third of the screed thickness, it should not interfere with the underfloor heating pipe provided the underfloor heating circuit has been fixed down securely.

Only flow and return pipes should pass through movement joints. Where this happens, a 300mm piece of conduit should enclose the pipe and span the joint.

Drying of screeds

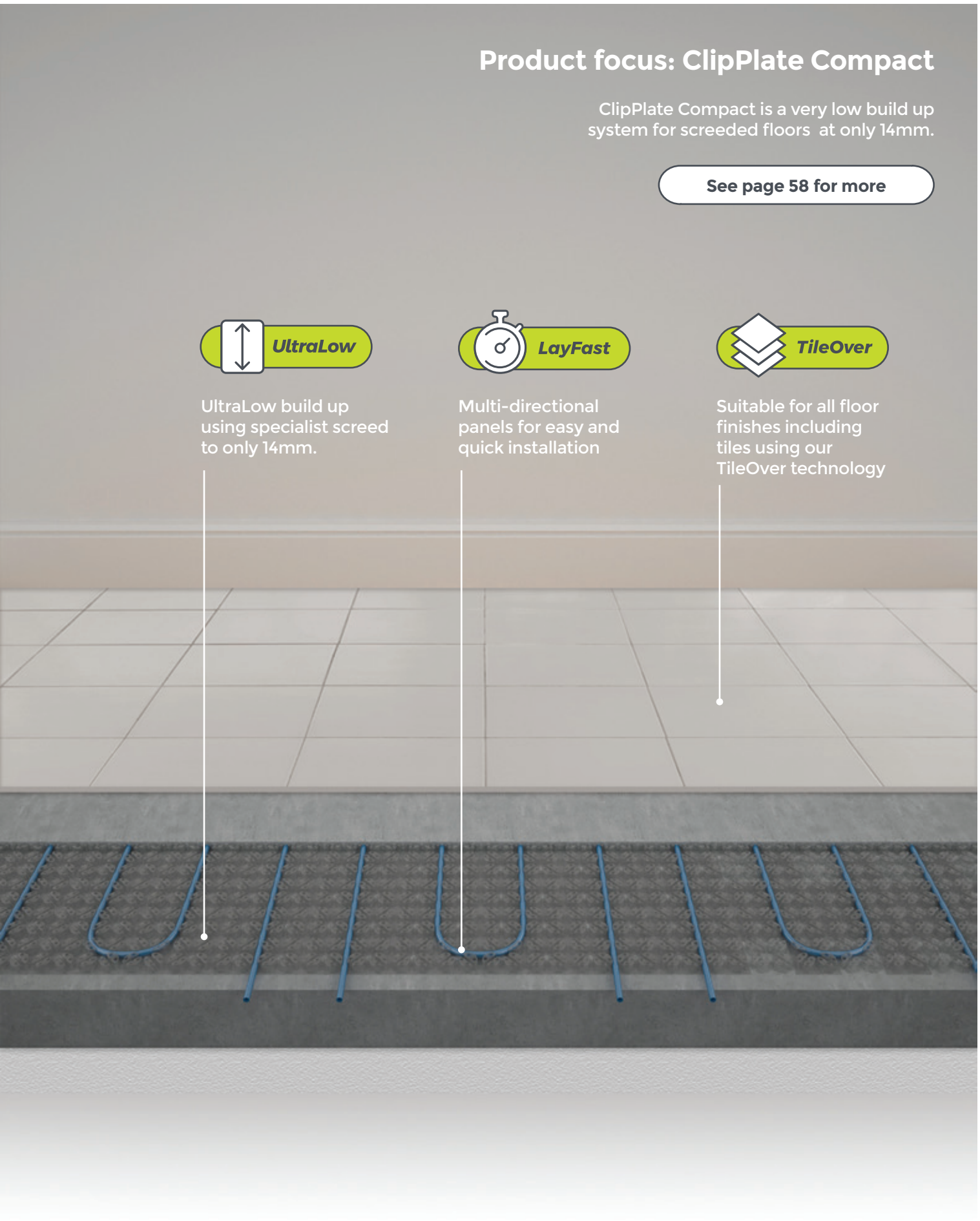
As a rule of thumb a 50mm sand/ cement screed could be expected to dry in good conditions within 2 months and a 75mm screed in around 3 months. Sand cement screeds should not be heated for at least 21 days after laying and with anhydrite screeds 7 days after laying. The screed manufacturer's instructions must always be followed.

Once the screed has dried, the system can be turned on but the screed must not get any warmer than 25˚C for the first 3 days or 15˚C above the temperature of the unheated floor. After this period, the system can be switched to the maximum temperature and kept there for 4 days. The underfloor heating must never be used to dry the screed. It is important that the screed must be allowed to cool to room temperature before the final floor finish is laid.

Product focus: ClipPlate Compact

ClipPlate Compact is a very low build up system for screeded floors at only 14mm.

See page 58 for more



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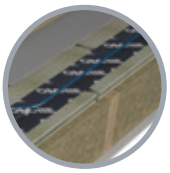

TorFloor Suspended

Integrated floor deck and heating system for suspended floors.

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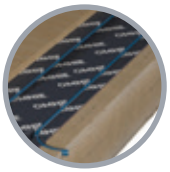

FoilBoard Suspended

High strength insulation with integrated underfloor heating for suspended floors.

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UnderPlate

Simple and easy to lay underfloor heating system for suspended floors.

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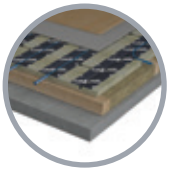

TorFloor Batten

Integrated floor deck and heating system for batten floors.

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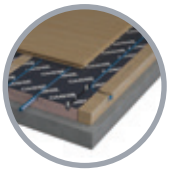

FoilBoard Batten

High strength insulation with integrated underfloor heating for batten floors.

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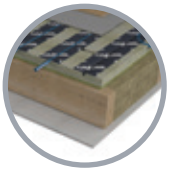

TorFloor RdB

Integrated floor deck and heating system for suspended floors, incorporating sound reducing technology.

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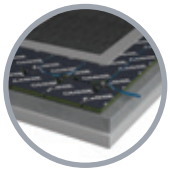

LowBoard

Low build-up underfloor heating system for floating floors.

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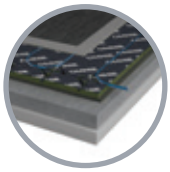

LowBoard RdB

Low build-up underfloor heating system for floating floors, incorporating sound reducing technology.

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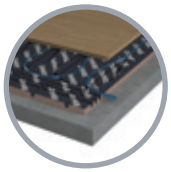

FoilBoard

High strength insulation with integrated underfloor heating for floating floors.

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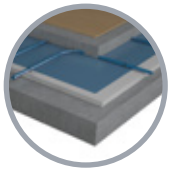

Staple

Simple and easy to lay in-screed underfloor heating system for solid floors.

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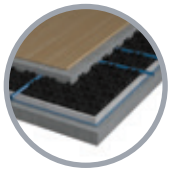

ClipPlate

Pipe protector and easy to lay underfloor heating system for in-screed floors.

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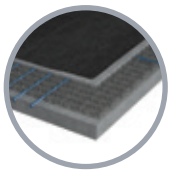

ClipPlate Compact

Low build-up in-screed underfloor heating system for solid floors.

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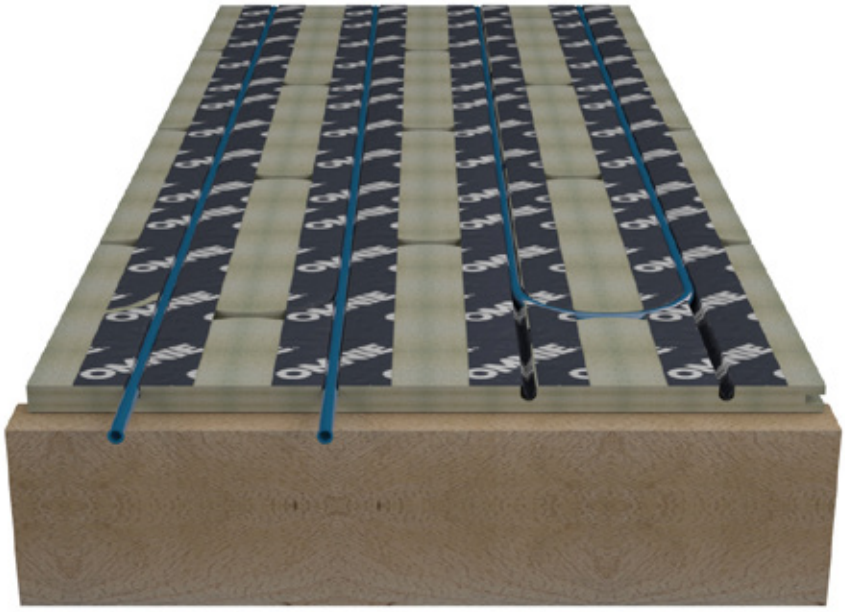
LayFast

TileOver

DrySystem



TorFloor

for suspended floors

Combined floor deck and underfloor heating system for timber suspended floors.

Combine with OMNIE heat pumps for effective cooling performance.

TorFloor panels are manufactured from P5 grade moisture resistant tongue and groove chipboard or flooring grade ply. The pre-machined panels are routed with a unique pattern to accept OMNIE pipe and factory fitted with foil diffusers. The design of the panel makes it suitable as a structural floor deck. The panels are laid and fixed onto the joists in the same way as a normal chipboard floor.

The pipe is installed into the grooves with the ends of the circuit dropping into the joist space to then continue to the manifold. A 6mm ply covering layer is then glued and screwed to the TorFloor panels to complete the structural floor.

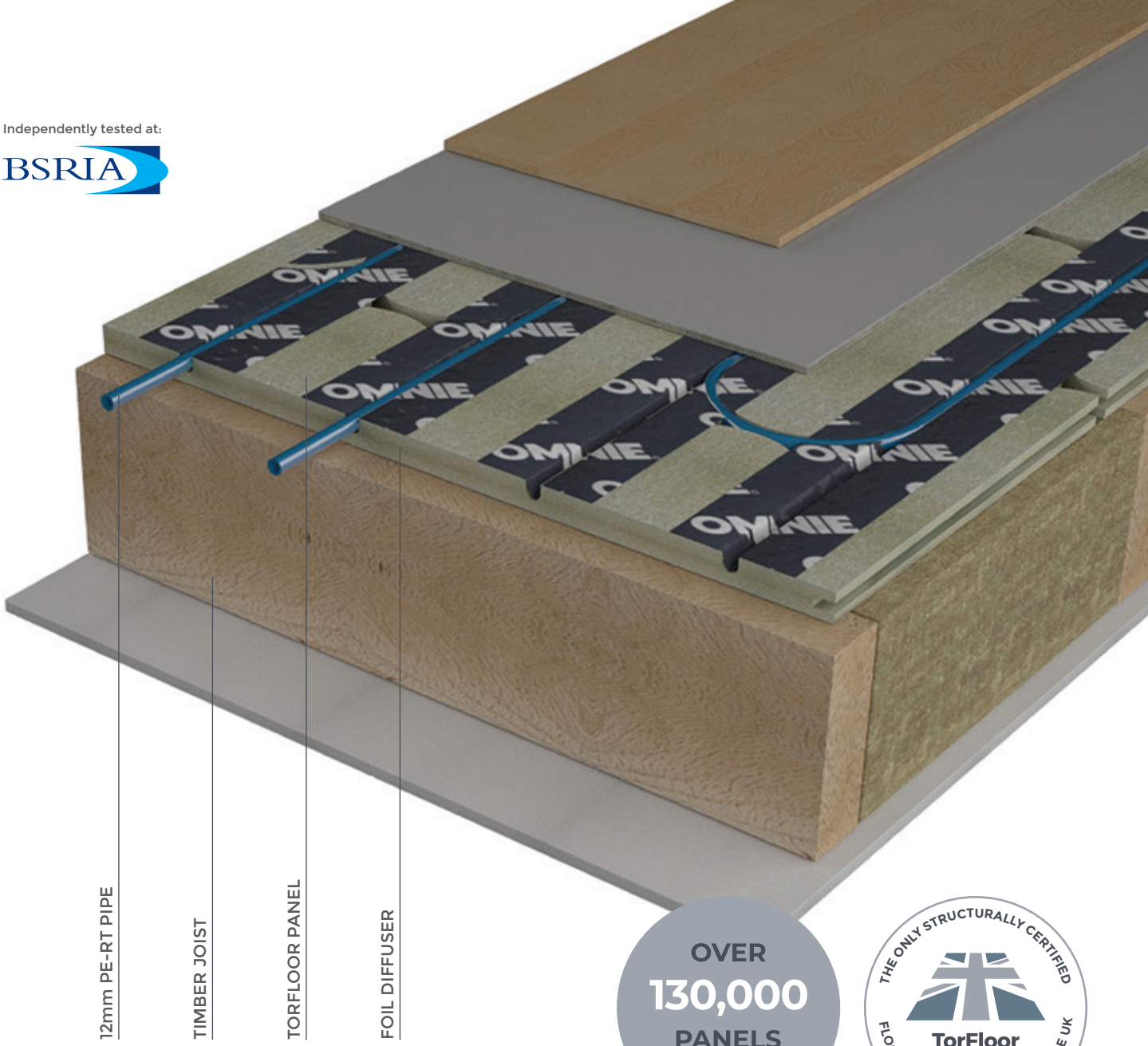
Panel thickness:
22mm (+6mm ply)
Weight with water:
18.9kg/m² (inc. 6mm)
Suitable for:
Suspended timber floors
Pipe Centres:
Standard: 150mm using 12mm pipe
New build: 200mm using 12mm pipe
Dimensions:
2400 x 600mm

UFH04 Datasheet

IN04 Install guide

Independently tested at:

BSRIA



OVER 130,000 PANELS SOLD

THE ONLY STRUCTURALLY CERTIFIED FLOORING PANEL AVAILABLE IN THE UK
TorFloor

Extensively tested by TRADA (Timber Research & Development Association)

Key features

- Perfect for heat pumps
- Multi-directional pipe channels
- Floor & heating system in one

Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

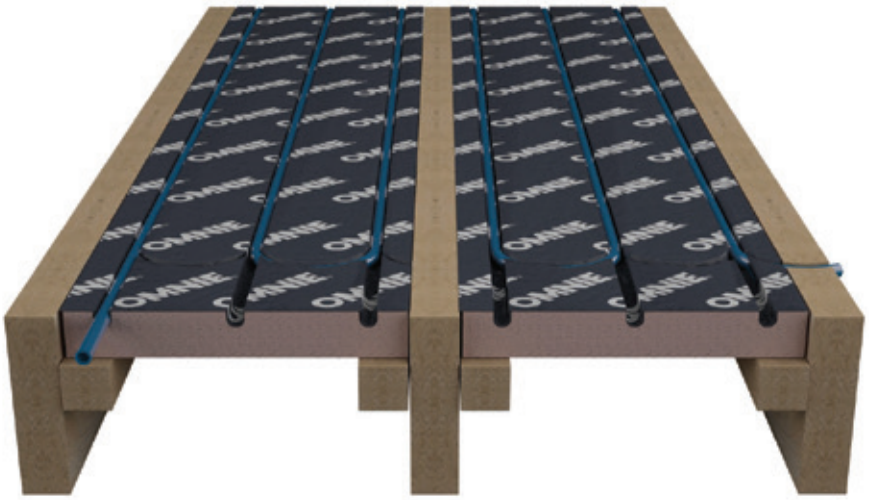
As a guide the heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 6mm ply installed over (12mm ply for tiles). Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	86 W/m^2	72 W/m^2	59 W/m^2	45 W/m^2
15mm Wood Finish (0.1m^2K/W)	76 W/m^2	63 W/m^2	51 W/m^2	39 W/m^2
Carpet & Underlay (0.15 m^2K/W)	72 W/m^2	60 W/m^2	49 W/m^2	37 W/m^2

LayFast

TileOver

DrySystem



FoilBoard

for suspended floors

Combined insulation and underfloor heating system for timber suspended floors.

Combine with OMNIE heat pumps for effective cooling performance.

Our FoilBoard suspended system provides assured performance in timber suspended floors.

Our FoilBoard panels are manufactured from high quality extruded polystyrene (XPS) insulation and faced with a highly conductive aluminium emitter. The panels are laid between joists supported by battens or brackets. This ensures that the system is in direct contact with the underside of the floor deck, maximising the transfer of heat from pipe to floor deck.

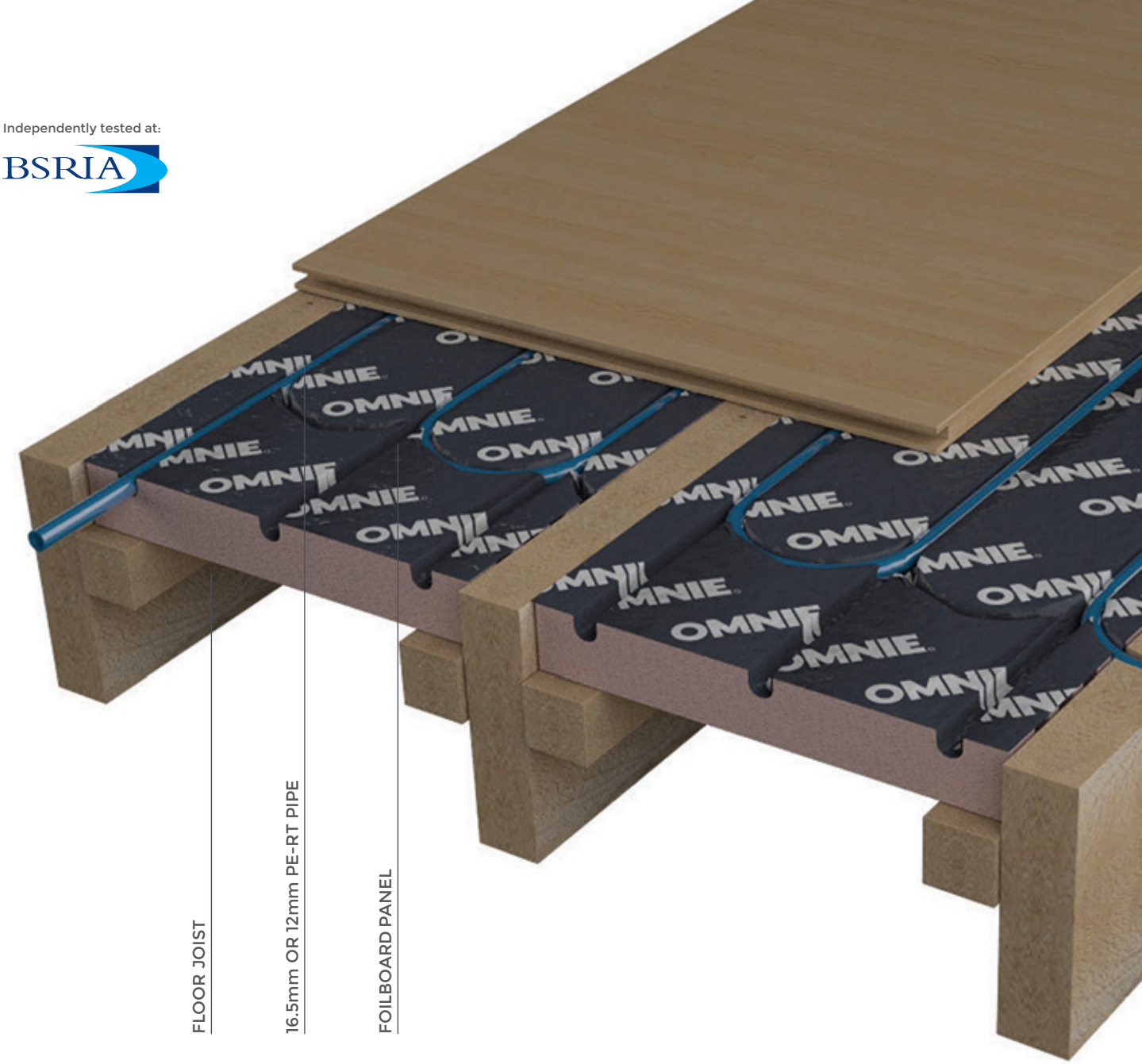
Panel thickness:
50mm/ 75mm
Compressive strength:
200kPa
Thermal conductivity:
0.033W/mK
Weight with water:
1.5 kg/m² (50mm)
Suitable for:
Suspended timber floors with joists at 400 or 600mm centres
Pipe centres:
133mm (12mm pipe)
200mm (16.5mm pipe)
Dimensions:
1200 x 340mm (400mm centre joists)
1200 x 545mm (600mm centre joists)

UFH09 Datasheet

IN09 Install guide

Independently tested at:

BSRIA



Key features

- No noise on warm-up or cool down
- Multi-directional pipe channels
- Easy to trim panels on site

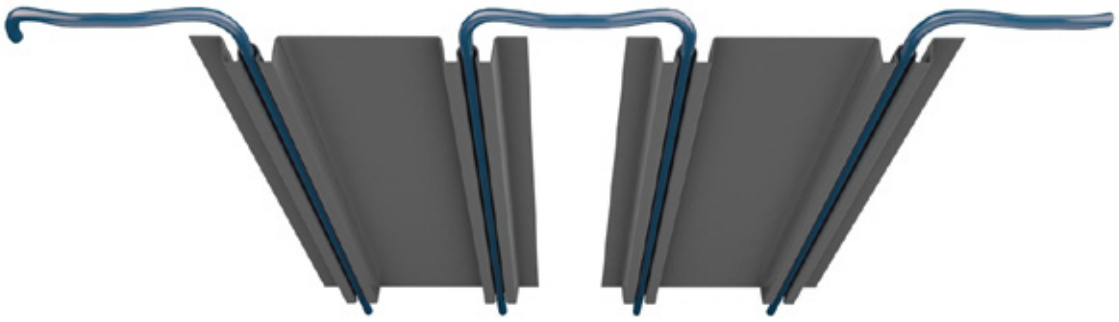
Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

As a guide the heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 22mm chipboard laid under 15mm wood & carpet and underlay, and 22mm plywood laid under tiles. Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	84 W/m^2	70 W/m^2	57 W/m^2	43 W/m^2
15mm Wood Finish (0.1m^2K/W)	67 W/m^2	57 W/m^2	46 W/m^2	35 W/m^2
22mm Wood Finish (0.14m^2K/W)	90 W/m^2	75 W/m^2	61 W/m^2	46 W/m^2
Carpet & Underlay (0.15 m^2K/W)	61 W/m^2	51 W/m^2	41 W/m^2	31 W/m^2

DrySystem



UnderPlate

for suspended floors

High performance system for retrofit & new build projects where the floor deck is already installed.

Our new UnderPlate system provides underfloor heating in timber suspended where the floordeck has already been installed or where the floordeck is to be laid prior to the underfloor heating pipe installation.

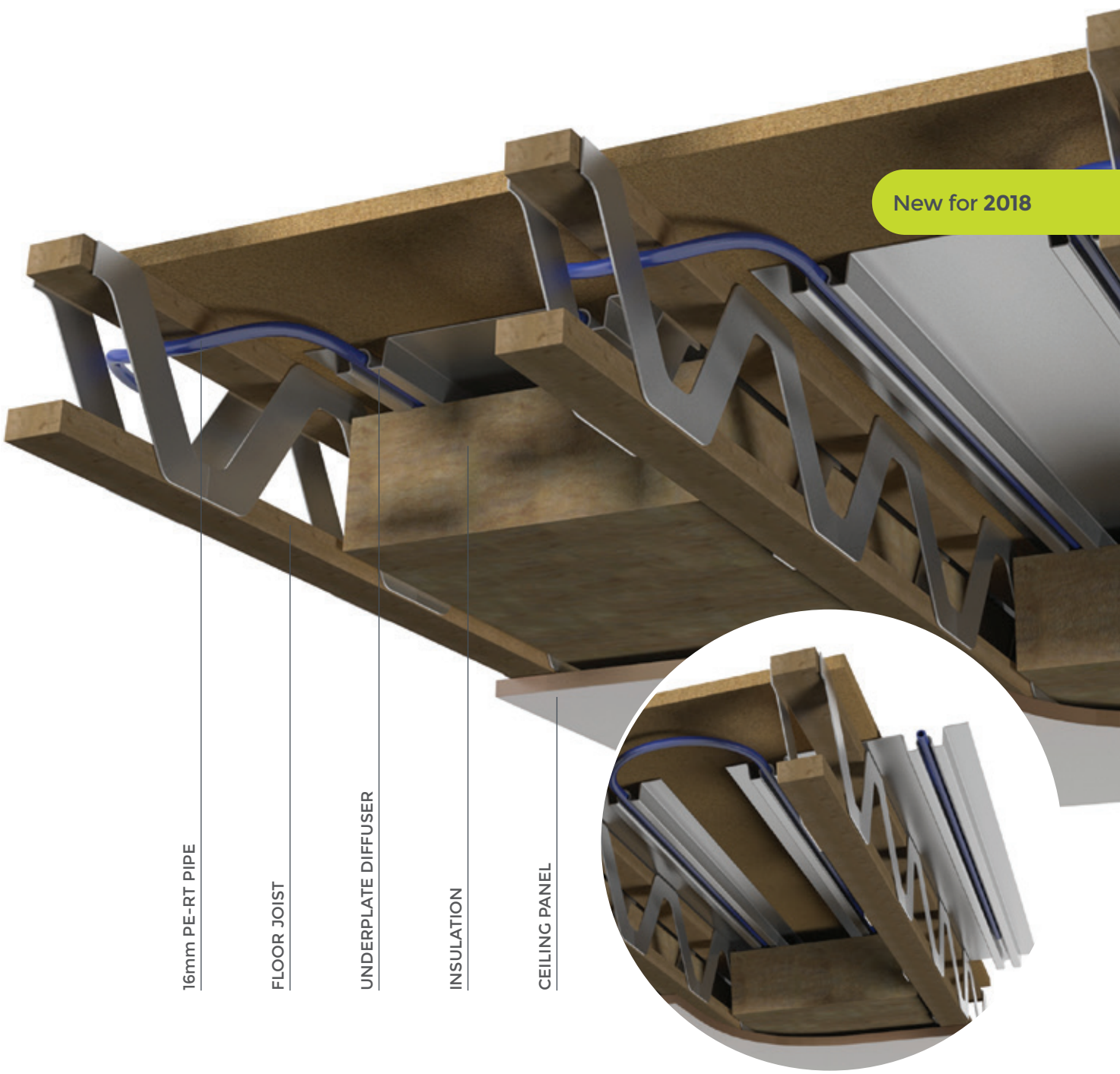
With a floordeck already in place the UnderPlate system is simply offered up between the joists from underneath and secured to the underside of the floordeck. Alternatively the UnderPlate can be installed from above and straddle the joists in order that a floor deck can be laid so that trades can continue without damaging the underfloor heating. This is particularly relevant to an exposed deck where the progress of construction relies on a working deck to be in place.

In both situations the pipe is then simply pushed into the UnderPlate and once fitted, mineral wood insulation is placed between the system and the proposed ceiling to complete the installation.

Panel thickness:
N/A: apply directly to floor deck from underside
Suitable for:
Suspended timber floors
Pipe centres:
200mm (16.5mm pipe)

UFH19 Datasheet

IN19 Install guide



Key features

No noise on warm-up or cool down

Installation from above & below

Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions.

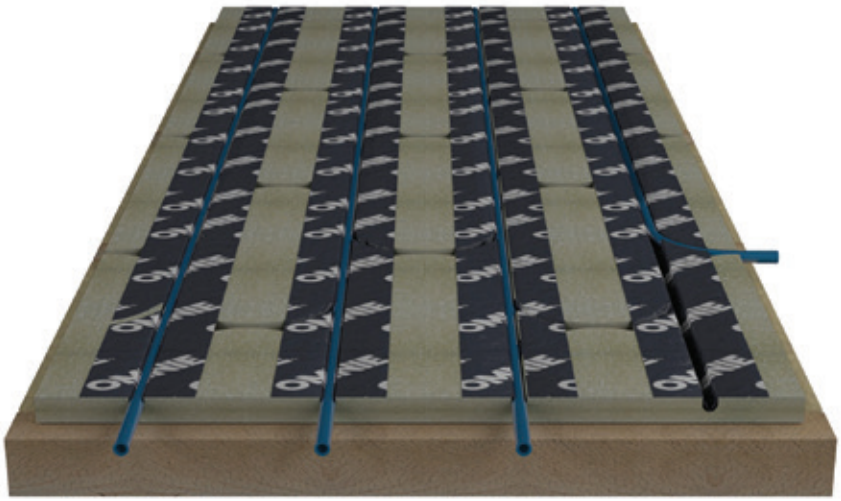
Heat outputs below are based on 16.5mm PE-RT pipe at 200mm centres with 22mm ply laid under the tiles and 22mm chipboard laid under 15mm wood and carpet & underlay. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	62 W/m^2	52 W/m^2	42 W/m^2	32 W/m^2
15mm Wood Finish (0.1m^2K/W)	49 W/m^2	41 W/m^2	33 W/m^2	25 W/m^2
22mm Wood Finish (0.14m^2K/W)	67 W/m^2	56 W/m^2	45 W/m^2	35 W/m^2
Carpet & Underlay (0.15 m^2K/W)	44 W/m^2	38 W/m^2	30 W/m^2	23W/m^2

LayFast

TileOver

DrySystem



TorFloor

for batten floors

Combined floor and underfloor system for timber batten floors.

Combine with OMNIE heat pumps for effective cooling performance.

TorFloor panels are manufactured from P5 grade moisture resistant tongue and groove chipboard or flooring grade ply. The pre-machined panels are routed with a unique pattern to accept OMNIE pipe and factory fitted with foil diffuser. The design of the panel makes it suitable as a structural floor deck. The panels are laid and fixed onto the joists in the same way as a normal chipboard floor.

The pipe is installed into the grooves with the ends of the circuit dropping into the batten space to then continue to the manifold. A 6mm ply covering layer is then glued and screwed to the TorFloor panels to complete the structural floor.

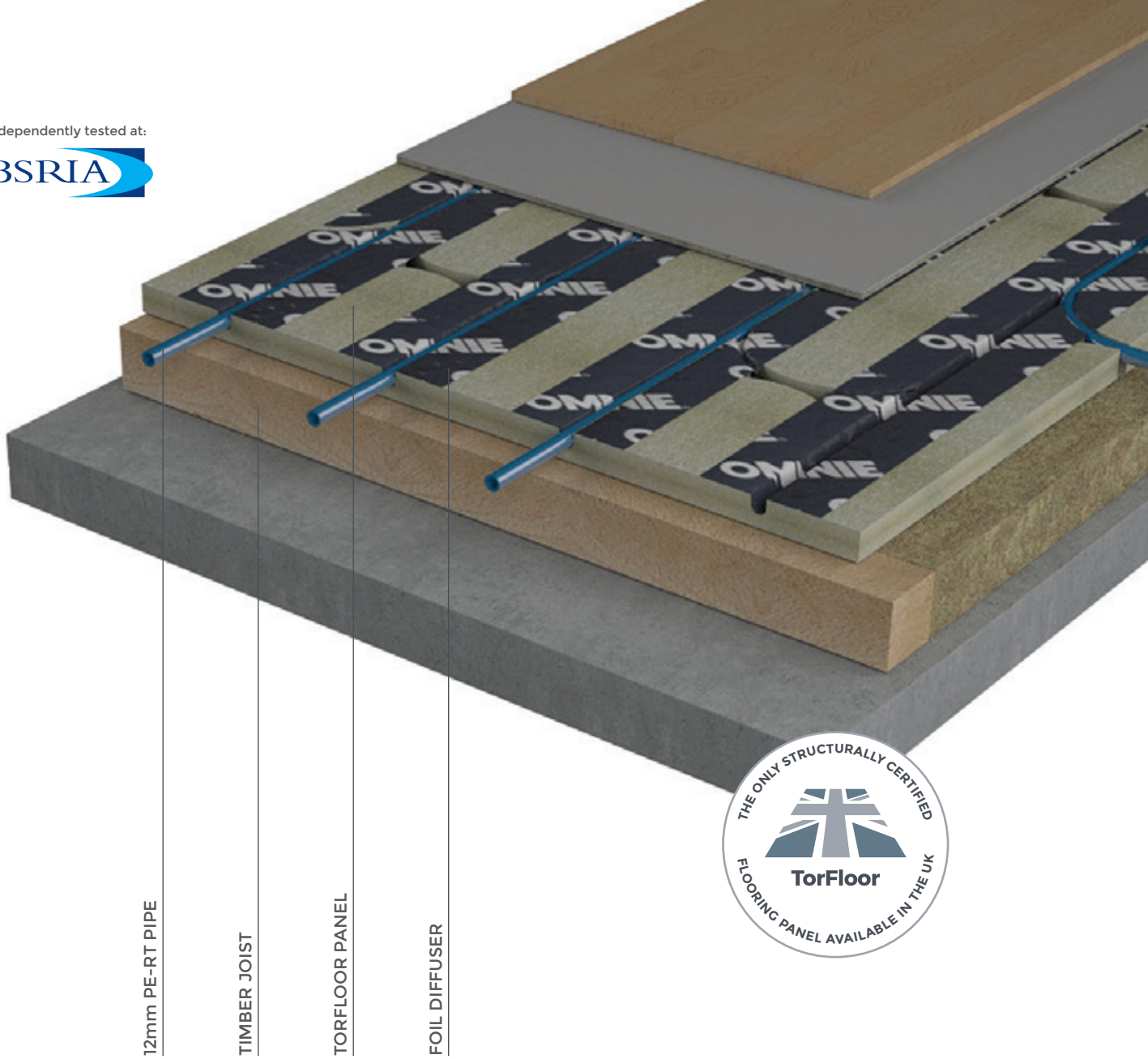
Panel thickness:
22mm (+6mm ply)
Weight with water:
18.9kg/m² (inc. 6mm)
Suitable for:
Batten floors
Pipe Centres:
Standard: 150mm using 12mm pipe
New build: 200mm using 12mm pipe
Dimensions:
2400 x 600mm

UFH03 Datasheet

IN03 Install guide

Independently tested at:

BSRIA



Extensively tested by TRADA (Timber Research & Development Association)

Key features

- Perfect for heat pumps
- Multi-directional pipe channels
- Floor & heating system in one

Heat outputs

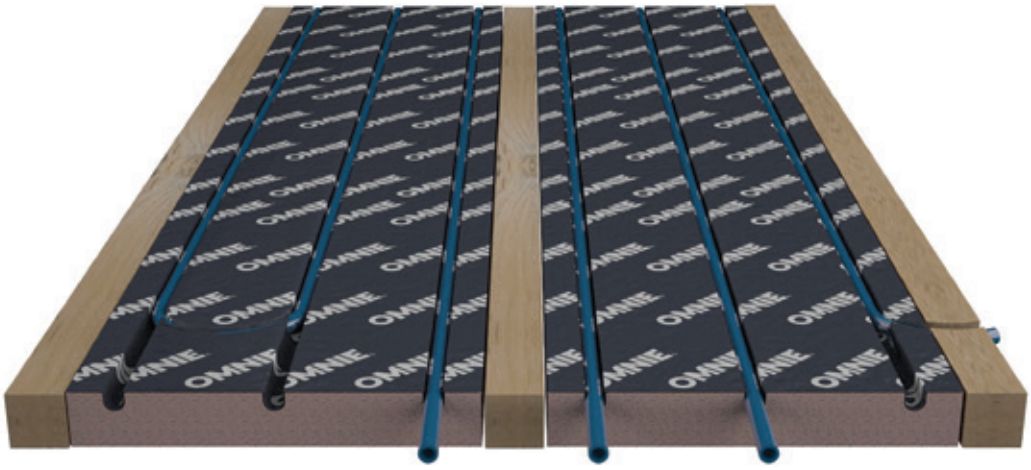
Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

As a guide the heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 6mm ply installed over (12mm ply for tiles). Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	86 W/m^2	72 W/m^2	59 W/m^2	45 W/m^2
15mm Wood Finish (0.1m^2K/W)	76 W/m^2	63 W/m^2	51 W/m^2	39 W/m^2
Carpet & Underlay (0.15 m^2K/W)	72 W/m^2	60 W/m^2	49 W/m^2	37 W/m^2

TileOver

DrySystem



FoilBoard

for batten floors

Combined insulation and underfloor heating system for timber batten floors.

Combine with OMNIE heat pumps for effective cooling performance.

FoilBoard Batten is an insulated underfloor heating panel installed between timber battens.

The panels are manufactured from high quality extruded polystyrene (XPS) insulation with a pre-bonded soft temper aluminium heat diffuser, making the panel easy to trim on site.

The top of the panel must be level with the top of the batten to ensure no air gap and provide the maximum efficiency of the system.

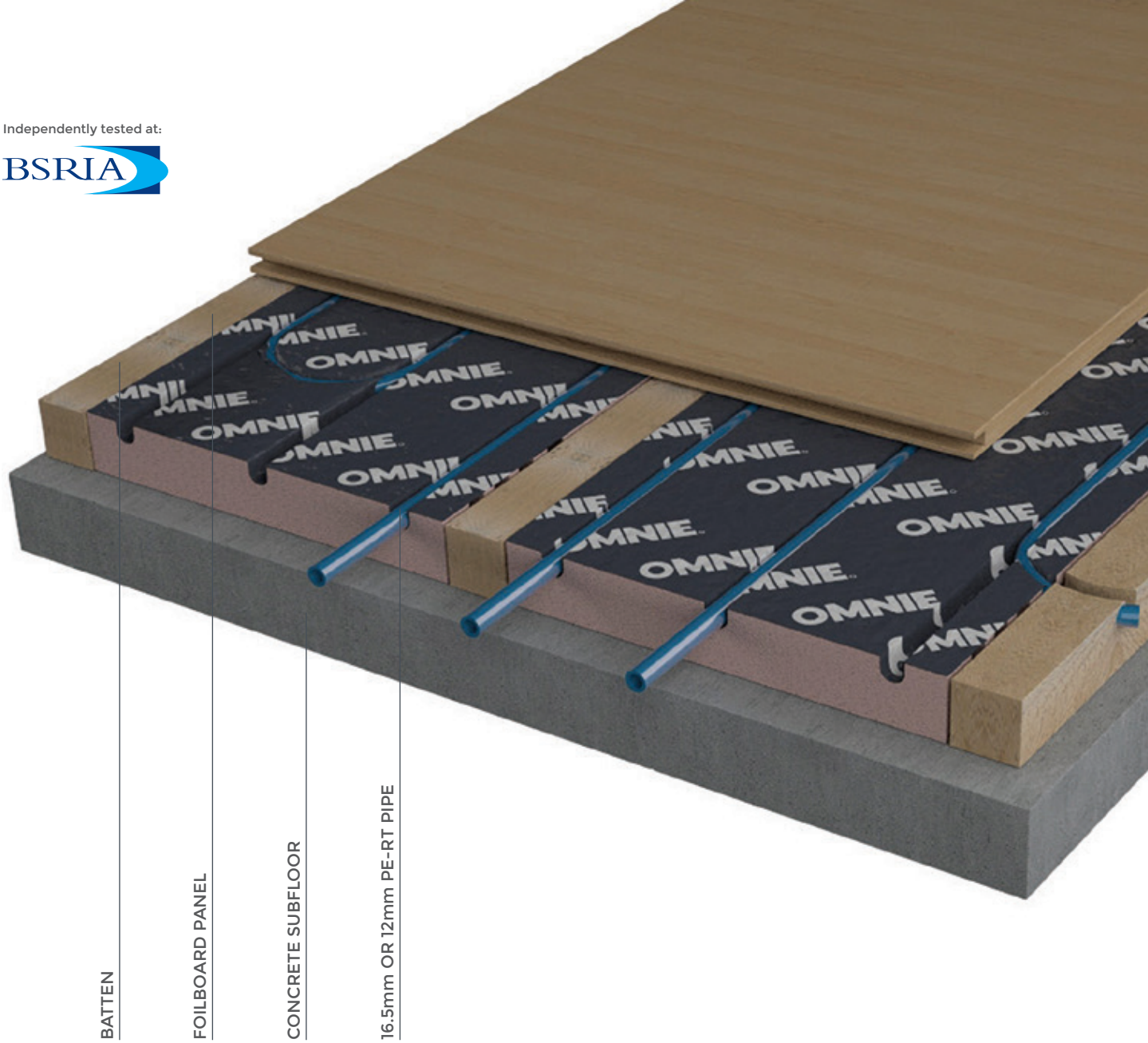
Panel thickness:
25mm/ 35mm/ 50mm/ 75mm
Compressive strength:
200kPa
Thermal conductivity:
0.033W/mK
Weight with water:
1.5 kg/m² (50mm)
Suitable for:
Batten Floors with joists at 400 or 600mm centres
Pipe centres:
Standard: 133mm (12mm pipe)
New build: 200mm (16.5mm pipe)
Dimensions:
1200 x 340mm (400mm centre battens)
1200 x 545mm (600mm centre battens)

UFH07 Datasheet

IN07 Install guide

Independently tested at:

BSRIA



Key features

- No noise on warm-up or cool down
- Multi-directional pipe channels
- Easy to trim panels on site

Heat outputs

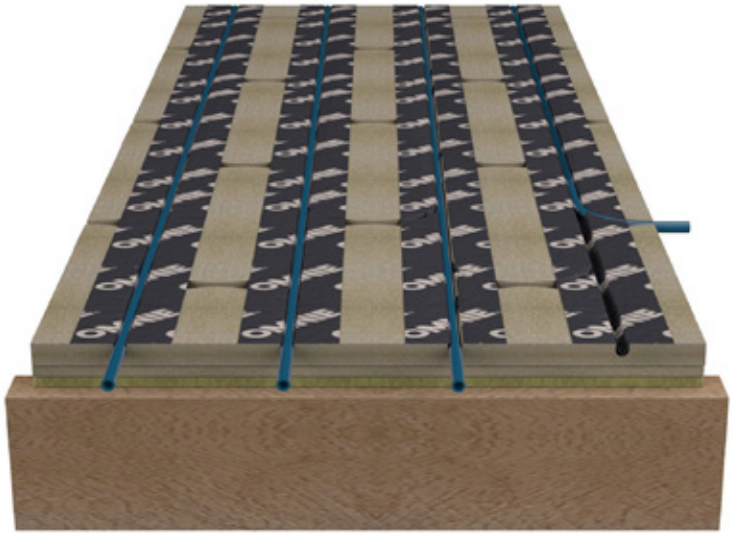
Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

As a guide the heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 22mm chipboard laid under 15mm wood & carpet and underlay, and 22mm plywood laid under tiles. Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	84 W/m^2	70 W/m^2	57 W/m^2	43 W/m^2
15mm Wood Finish (0.1m^2K/W)	67 W/m^2	57 W/m^2	46 W/m^2	35 W/m^2
22mm Wood Finish (0.14m^2K/W)	90 W/m^2	75 W/m^2	61 W/m^2	46 W/m^2
Carpet & Underlay (0.15 m^2K/W)	61 W/m^2	51 W/m^2	41 W/m^2	31 W/m^2

LayFast

DrySystem



TorFloor RdB

for suspended floors

Structural acoustic floor and heating system in one.

The TorFloor RdB system is, in principle, the same as the standard TorFloor system but the TorFloor RdB panel has two additional layers bonded to the underside to reduce vibration, and attenuate airborne and impact noise passing through floors.

These additional two layers comprise of a second chipboard layer separated from the 22mm TorFloor 9mm panel by sound damping strips and attached to the underside of the 9mm chipboard is an acoustic felt layer.

Overall, the panel is 39mm thick. To the top surface the 6mm ply layer must be added, glued and screwed to complete the structural floor.

Panel thickness:
39mm (+6mm ply)
Weight with water:
26kg/m² (+ 6mm ply)
Suitable for:
Suspended timber floors
Pipe Centres:
Standard: 150mm using 12mm pipe
New build: 200mm using 12mm pipe
Dimensions:
2400 x 600mm

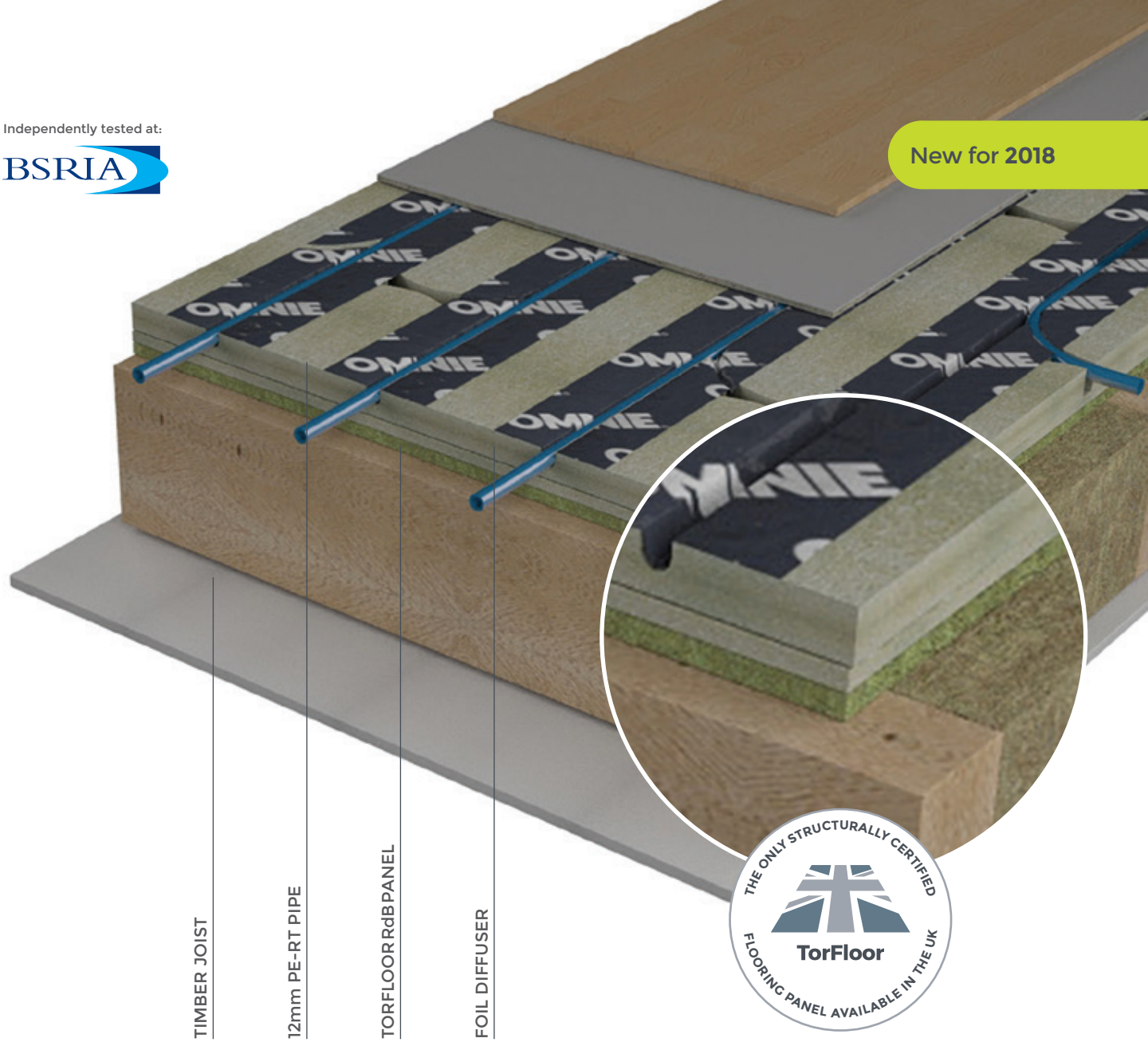
UFH05 Datasheet

IN05 Install guide

Independently tested at:

BSRIA

New for **2018**



Extensively tested by TRADA (Timber Research & Development Association)

Key features

- Perfect for heat pumps
- Multi-directional pipe channels
- Floor & heating system in one

Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

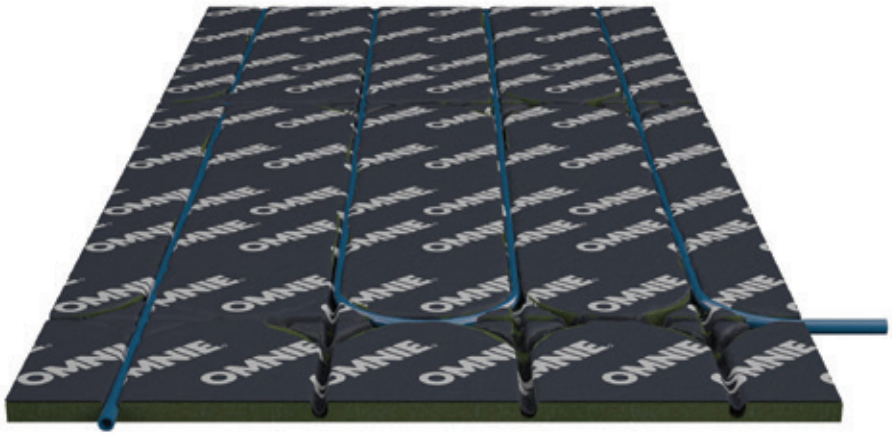
As a guide the heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 6mm ply installed over (12mm ply for tiles). Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	86 W/m^2	72 W/m^2	59 W/m^2	45 W/m^2
15mm Wood Finish (0.1m^2K/W)	76 W/m^2	63 W/m^2	51 W/m^2	39 W/m^2
Carpet & Underlay (0.15 m^2K/W)	72 W/m^2	60 W/m^2	49 W/m^2	37 W/m^2

LayFast

TileOver

UltraLow



LowBoard®

for floating floors

Low build-up underfloor heating system for floating floors.

Combine with OMNIE heat pumps for effective cooling performance.

The LowBoard panel enables underfloor heating to be installed where there is minimal height available to build up the floor either in a solid floor or overlay situation. The total height of the panel is just 15mm.

The LowBoard panel is a high-density wood board with grooves routed to accept the 12mm pipe. The panel has a aluminium layer bonded to it that acts to spread the heat into the floor.

LowBoard is also available in 22mm thick tongue and groove chipboard panels.

Panel thickness:
15mm/ 22mm
Weight with water:
12 kg/m2 (LowBoard15)
Suitable for:
Low build-up & floating floors
Pipe centres:
Standard: 150mm using 12mm pipe
New build: 200mm using 12mm pipe
Dimensions:
1200 x 600mm

15mm:

UFH01 Datasheet

IN01 Install guide

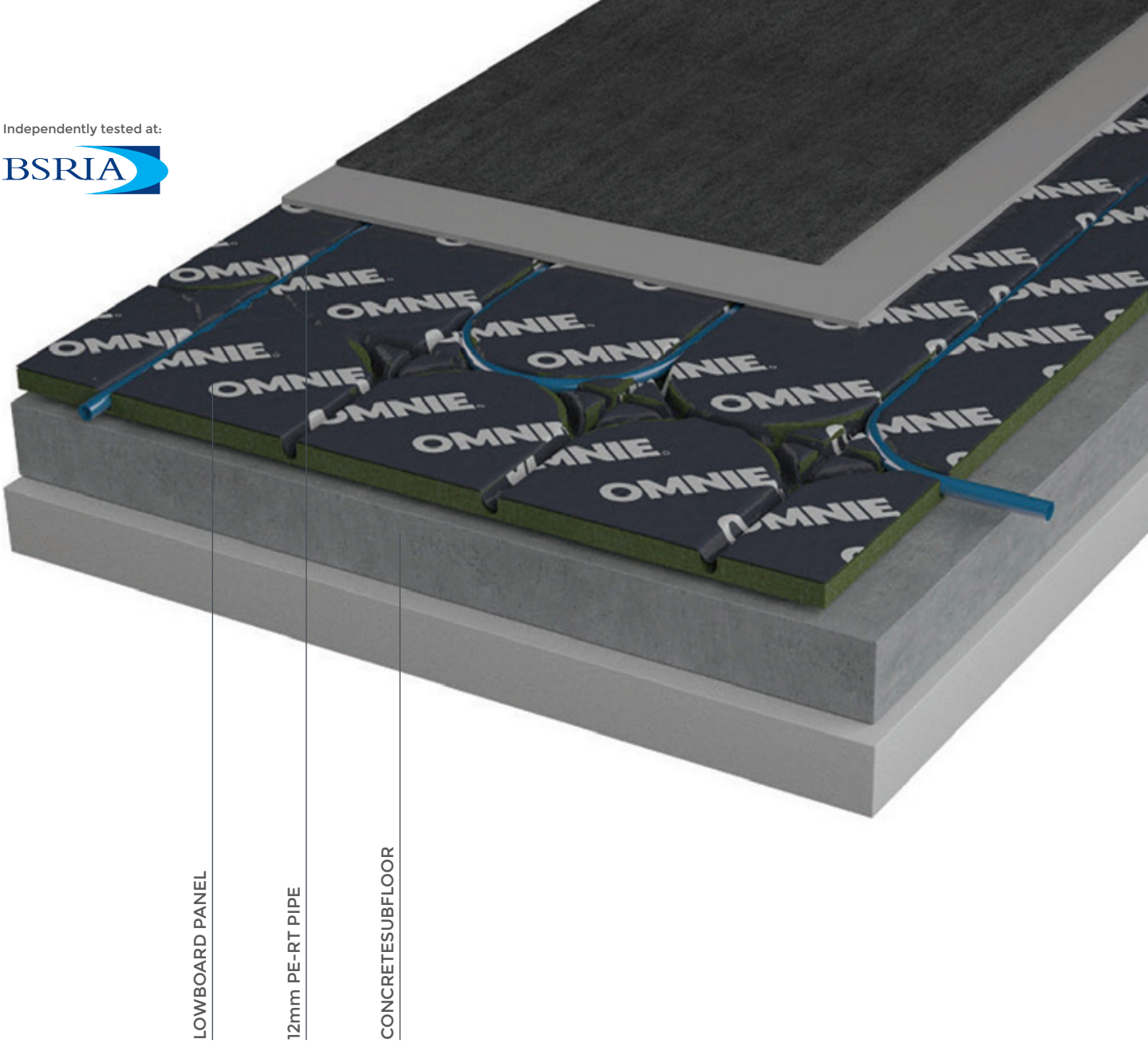
22mm:

UFH02 Datasheet

IN02 Install guide

Independently tested at:

BSRIA



Key features

Low build-up/ perfect for retrofit

Multi-directional pipe channels

Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

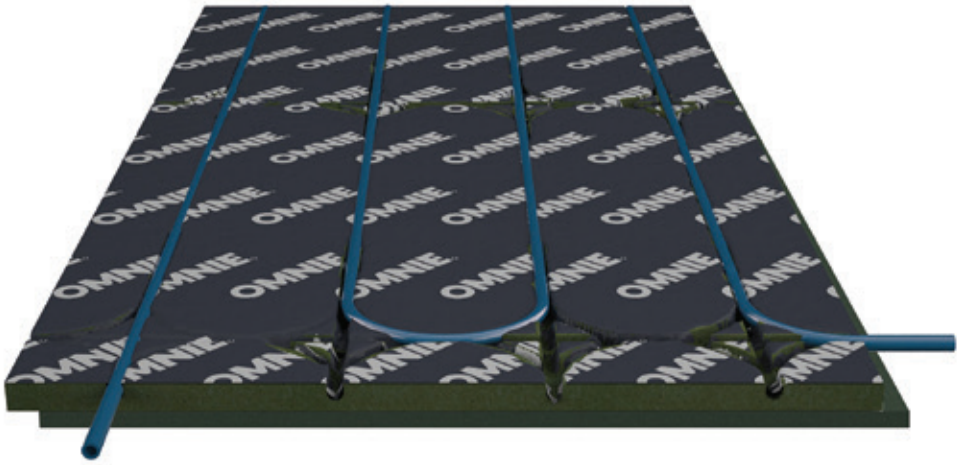
Heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 6mm ply laid under carpet and 12mm ply under tiles. Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	84 W/m^2	70 W/m^2	57 W/m^2	43 W/m^2
15mm Wood Finish (0.1m^2K/W)	82 W/m^2	69 W/m^2	56 W/m^2	42 W/m^2
22mm Wood Finish (0.14m^2K/W)	74 W/m^2	62 W/m^2	51 W/m^2	39 W/m^2
Carpet & Underlay (0.15 m^2K/W)	70 W/m^2	59 W/m^2	47 W/m^2	36 W/m^2

LayFast

DrySystem

UltraLow



LowBoard® RdB

for floating floors

Low build-up floating underfloor heating system with integrated acoustic insulation.

LowBoard RdB is a low build up underfloor heating system and acoustic separation in one. It is designed to dampen vibration and attenuate impact and airborne sound passing through floors with minimum loss of floor height. The system can be laid on solid or timber floors and is supplied with edge isolation strip.

The LowBoard RdB panels comprise of a 15mm moisture resistant high-density wood board combined with an 8mm acoustic rubber offset to provide a lap joint. As per our standard LowBoard 15 product the wood board layer has grooves routed to accept 12mm pipe and an aluminium layer bonded to the top which acts to spread the heat through the floor. The panels are laid in a brick pattern with the pipe installed by piercing through the soft temper aluminium diffuser into the multi directional channels. A finished floor deck or 6mm ply, MDF or similar is floated or mechanically fixed over the LowBoard RdB panels to complete the floor.

Panel thickness:
26mm
Weight with water:
14 kg/m² (LowBoard15)
Suitable for:
Solid and timber floors
Pipe centres:
Standard: 150mm using 12mm pipe
New build: 200mm using 12mm pipe
Dimensions:
1200 x 600mm

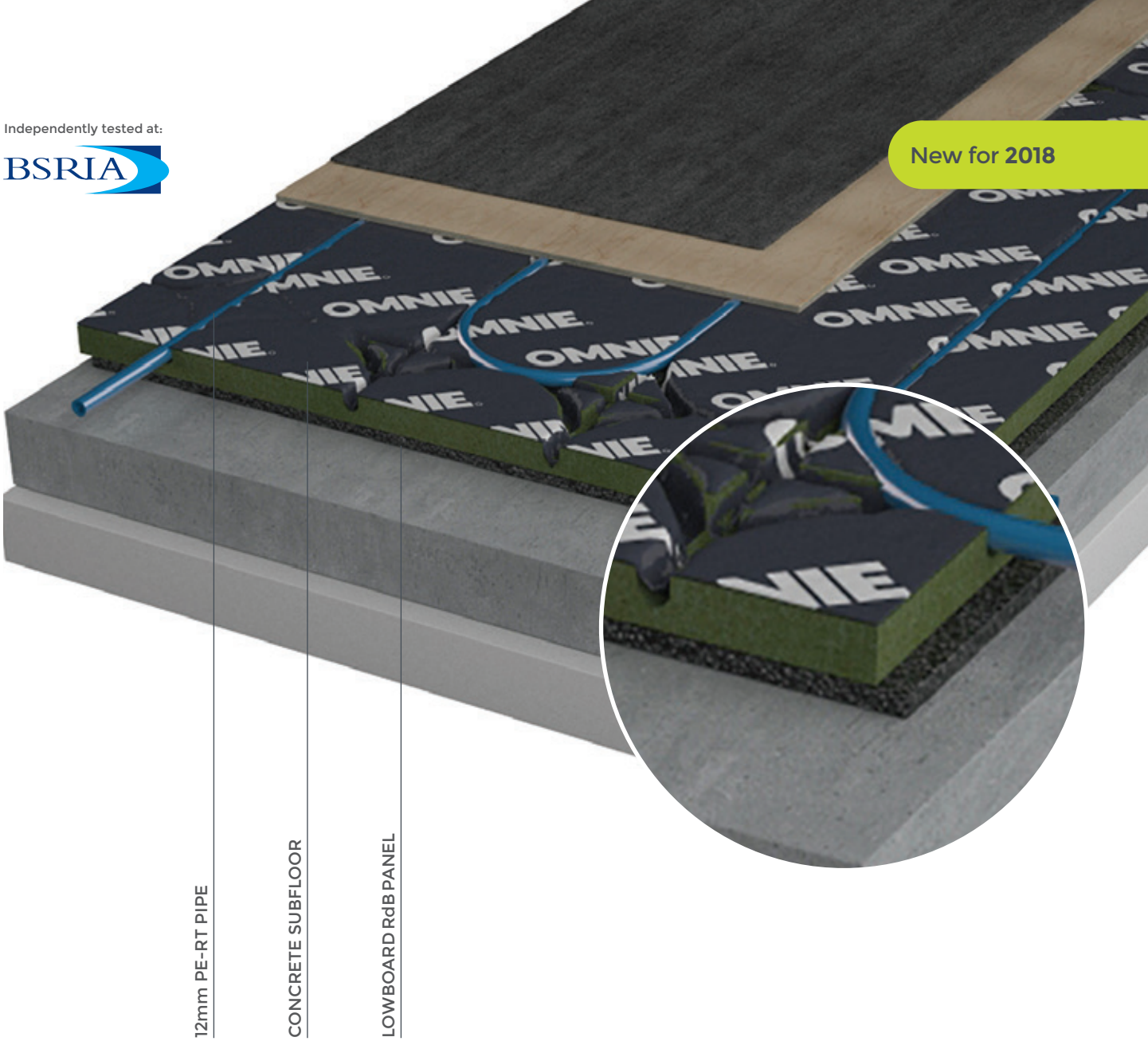
UFH20 Datasheet

IN20 Install guide

Independently tested at:

BSRIA

New for **2018**



Key features

- Perfect for heat pumps
- Multi-directional pipe channels
- Low build-up/ perfect for retrofit

Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

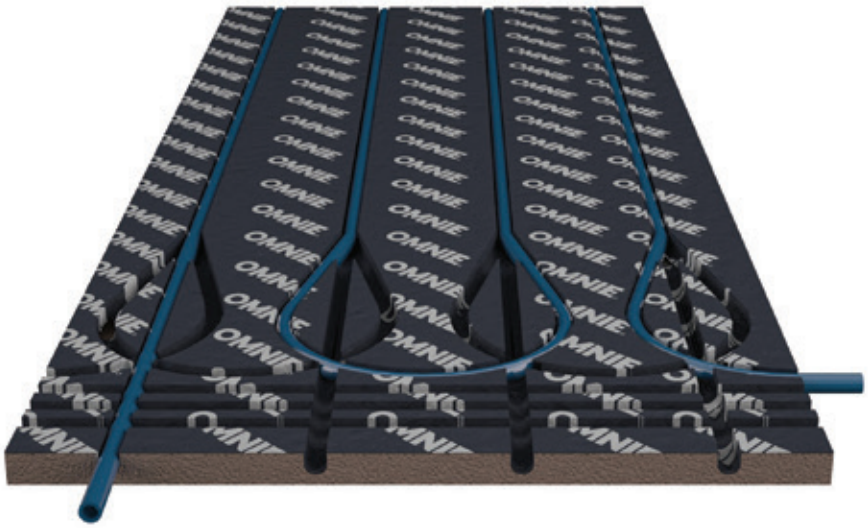
Heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 6mm ply laid under carpet and 12mm ply under tiles. Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	84 W/m^2	70 W/m^2	57 W/m^2	43 W/m^2
15mm Wood Finish (0.1m^2K/W)	82 W/m^2	69 W/m^2	56 W/m^2	42 W/m^2
Carpet & Underlay (0.15 m^2K/W)	70 W/m^2	59 W/m^2	47 W/m^2	36 W/m^2

LayFast

UltraLow

Product available in 18mm



FoilBoard

for floating floors

High compressive strength insulation with integrated underfloor heating for floating floors.

Combine with OMNIE heat pumps for effective cooling performance.

Our FoilBoard Floating system is laid over a solid or existing floor deck. The FoilBoard panels provide the support for the fully floating floor deck that is laid over.

FoilBoard is manufactured from high quality extruded polystyrene (XPS) insulation which has a high compressive strength, suitable for floating floor applications. The heat diffusers are pre-bonded and made from soft temper aluminium. As no thick rigid plates are used the panels are easily trimmed on site.

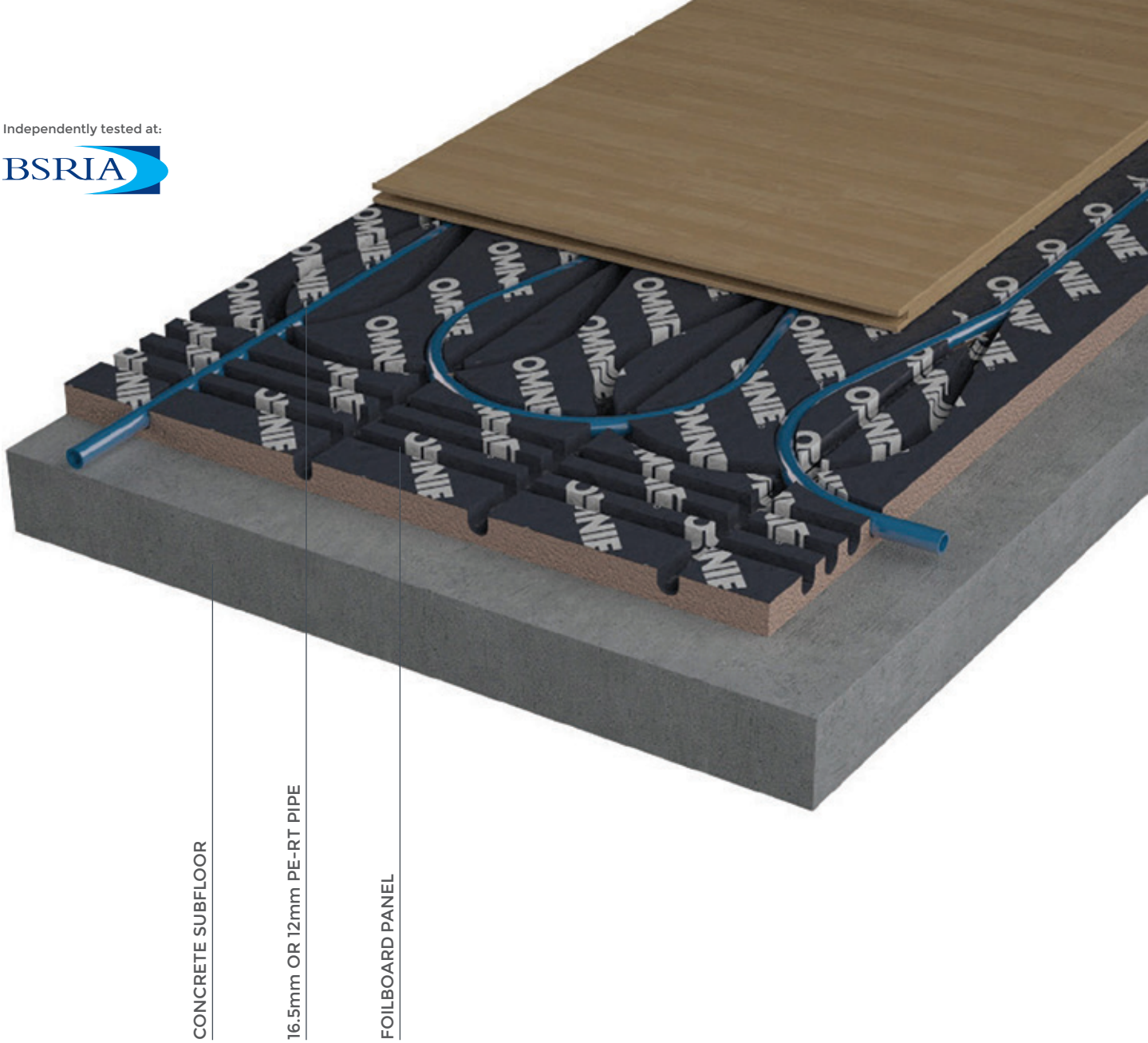
Panel thickness:
18mm/ 25mm/ 35mm/ 50mm/ 75mm
Compressive strength:
200 kPa
Thermal conductivity:
0.033 W/mK
Weight with water:
1.5 kg/m² (50mm)
Suitable for:
Floating Floors
Pipe centres:
150mm or 200mm (16.5mm pipe)
Dimensions:
1200 x 600mm

UFH06 Datasheet

IN06 Install guide

Independently tested at:

BSRIA



Key features

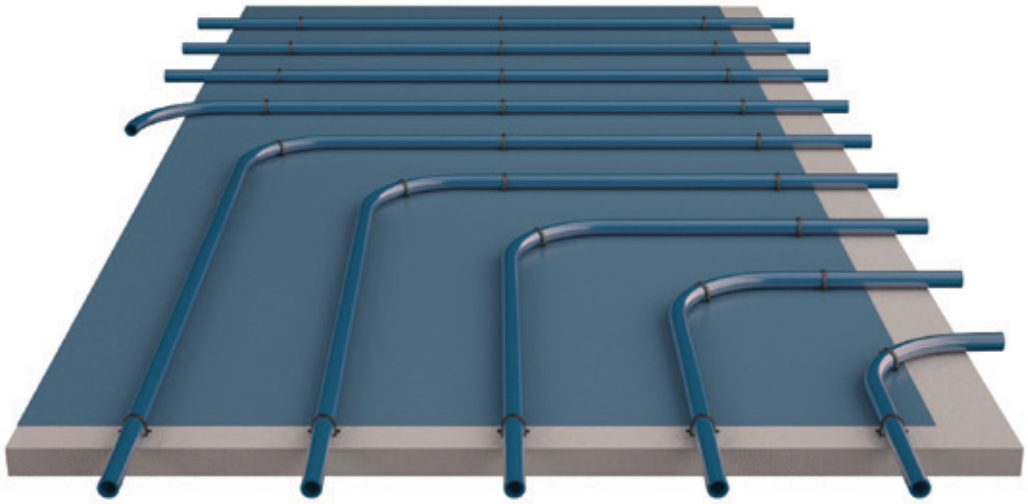
- No noise on warm-up or cool down
- Multi-directional pipe channels
- Easy to trim panels on site

Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

Heat outputs below are based on 16.5mm PE-RT pipe at 150mm centres with 22mm chipboard laid under 15mm wood & carpet and underlay, and 22mm plywood laid under tiles. Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	82 W/m^2	69 W/m^2	55 W/m^2	42 W/m^2
15mm Wood Finish (0.1m^2K/W)	66 W/m^2	55 W/m^2	45 W/m^2	34 W/m^2
22mm Wood Finish (0.14m^2K/W)	88 W/m^2	74 W/m^2	60 W/m^2	45 W/m^2
Carpet & Underlay (0.15 m^2K/W)	59 W/m^2	49 W/m^2	40 W/m^2	30 W/m^2



Staple

for screeded floors

Simple and easy to lay in-screed underfloor heating system.

Combine with OMNIE heat pumps for effective cooling performance.

The staple system provides a quick, flexible and simple method of installing underfloor heating in a screed floor.

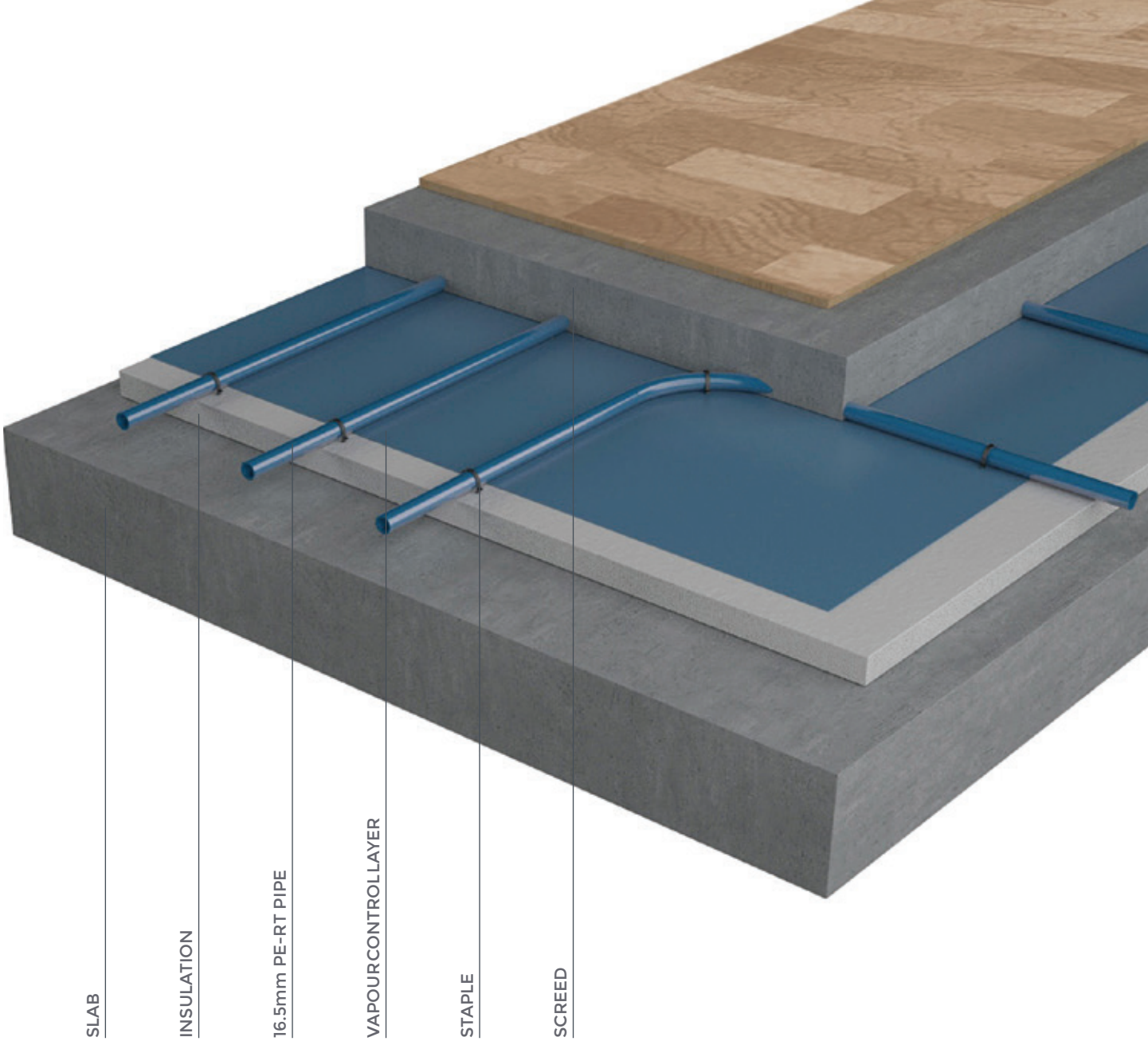
The pipe is easily held using 60mm staples. The staples have a barbed end which fixes into the insulation.

40mm staples are also available for thin insulation applications.

Suitable for:
Screeded floors
Pipe centres:
100mm/ 150mm/ 200mm using 16.5mm pipe

UFH16 Datasheet

IN16 Install guide



Key features

Cost effective solution

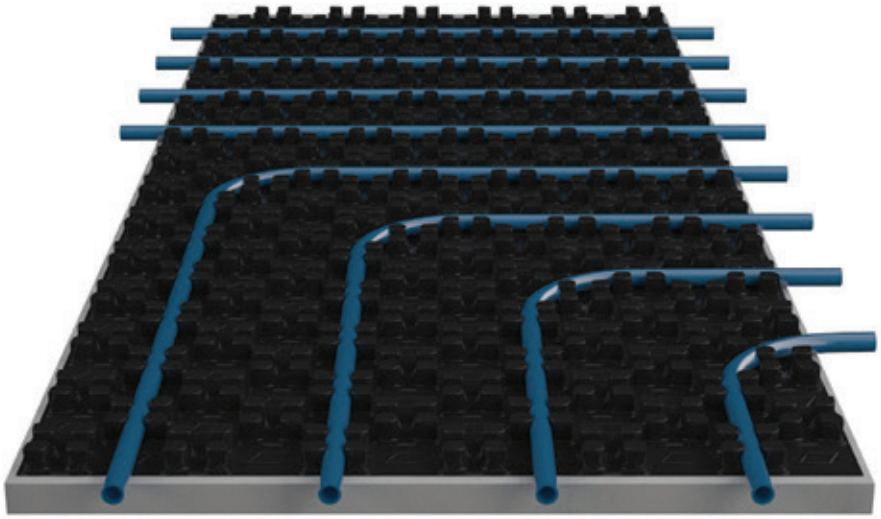
Multi-directional pipe channels

Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

As a guide the heat outputs below are based on 16.5mm PE-RT pipe at 150mm centres with 65mm sand/cement screed laid over. Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	150 W/m^2	126 W/m^2	102 W/m^2	78 W/m^2
15mm Wood Finish (0.1m^2K/W)	105 W/m^2	88 W/m^2	71 W/m^2	54 W/m^2
Carpet & Underlay (0.15 m^2K/W)	88 W/m^2	74 W/m^2	60 W/m^2	46 W/m^2



ClipPlate

for screeded floors

Pipe protector and easy to lay in-screed underfloor heating system.

The ClipPlate system has been purposely designed to avoid using fixings and staples in the floor. ClipPlates have castellations in the panel at set centres to provide a consistent/ even guide for the spacing and good grip for the pipe, as well as providing protection for the pipe from site traffic.

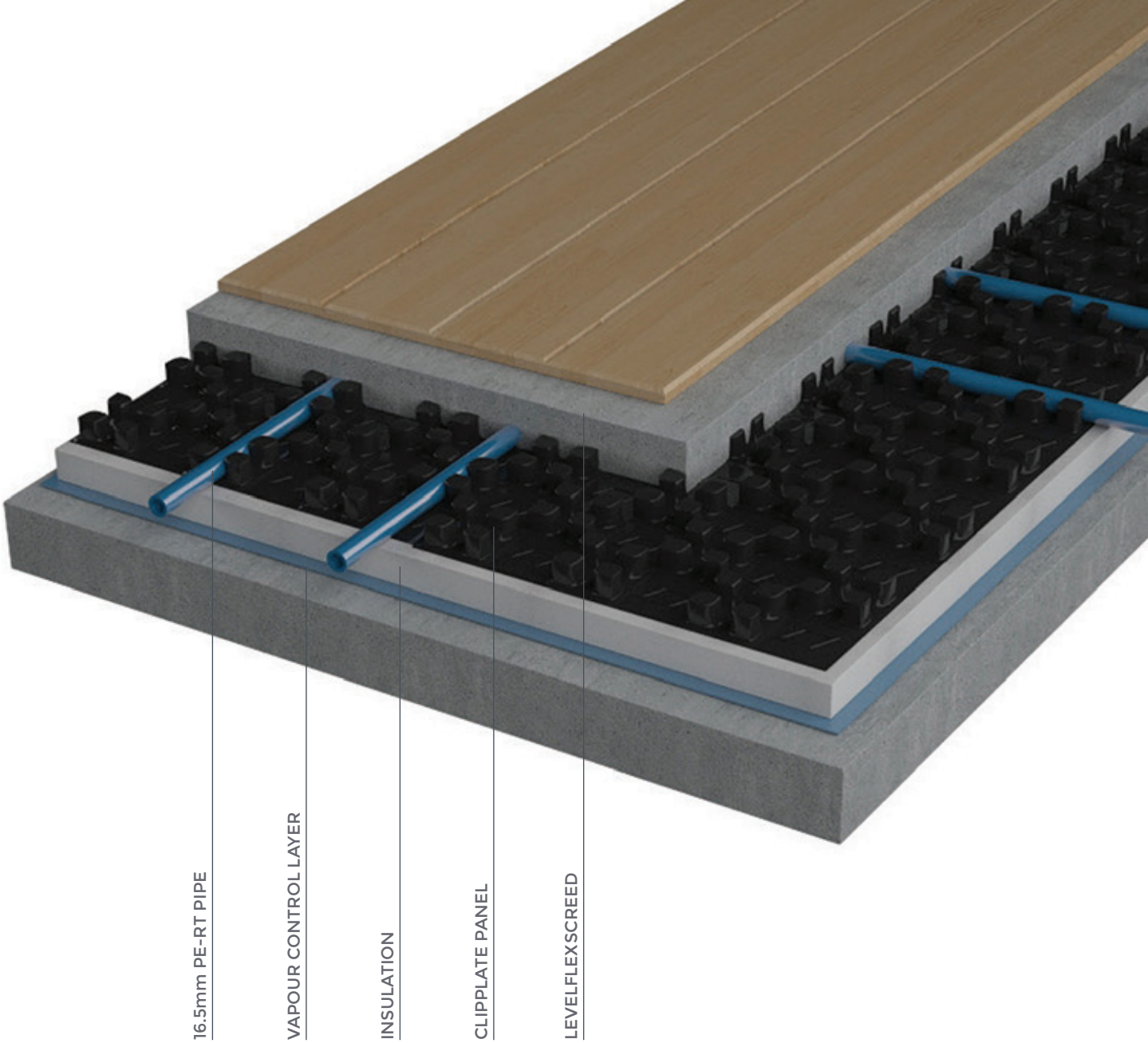
The panel is designed to allow the pipe to easily change direction and also provide a simple method of installation where the pipe approaches the manifold.

This system is available with a 10mm integrated insulation layer. This version provides a reduction in required height as opposed to insulation and staples on upper floors and existing insulated floors.

Panel thickness:
20mm to top of castellation
(no insulation)
add +10mm with integrated insulation
Weight:
1.1 kg/m2 + Screed
Suitable for:
Screeded floors
Pipe centres:
150mm/ 200mm using 16mm pipe
Dimensions:
1450 x 950mm (ClipPlate Zero)
1000 x 1000mm (ClipPlate 11)

UFH13 Datasheet

IN13 Install guide



Key features

- Multi-directional pipe channels
- Interlocking sheets
- Protects pipe from site traffic
- Available with 10mm insulation layer

Heat outputs

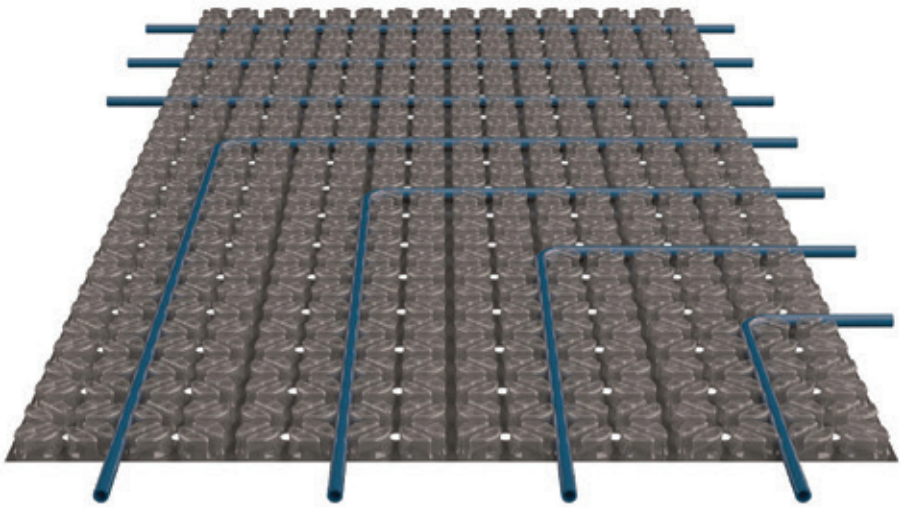
Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

As a guide the heat outputs below are based on 16.5mm PE-RT pipe at 150mm centres with 65mm sand/cement screed laid over. Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	150 W/m^2	126 W/m^2	102 W/m^2	78 W/m^2
15mm Wood Finish (0.1m^2K/W)	105 W/m^2	88 W/m^2	71 W/m^2	54 W/m^2
Carpet & Underlay (0.15 m^2K/W)	88 W/m^2	74 W/m^2	60 W/m^2	46 W/m^2

TileOver

UltraLow



ClipPlate Compact

for screeded floors

Low build-up in-screed underfloor heating system over solid floor & timber deck.

Combine with OMNIE heat pumps for effective cooling performance.

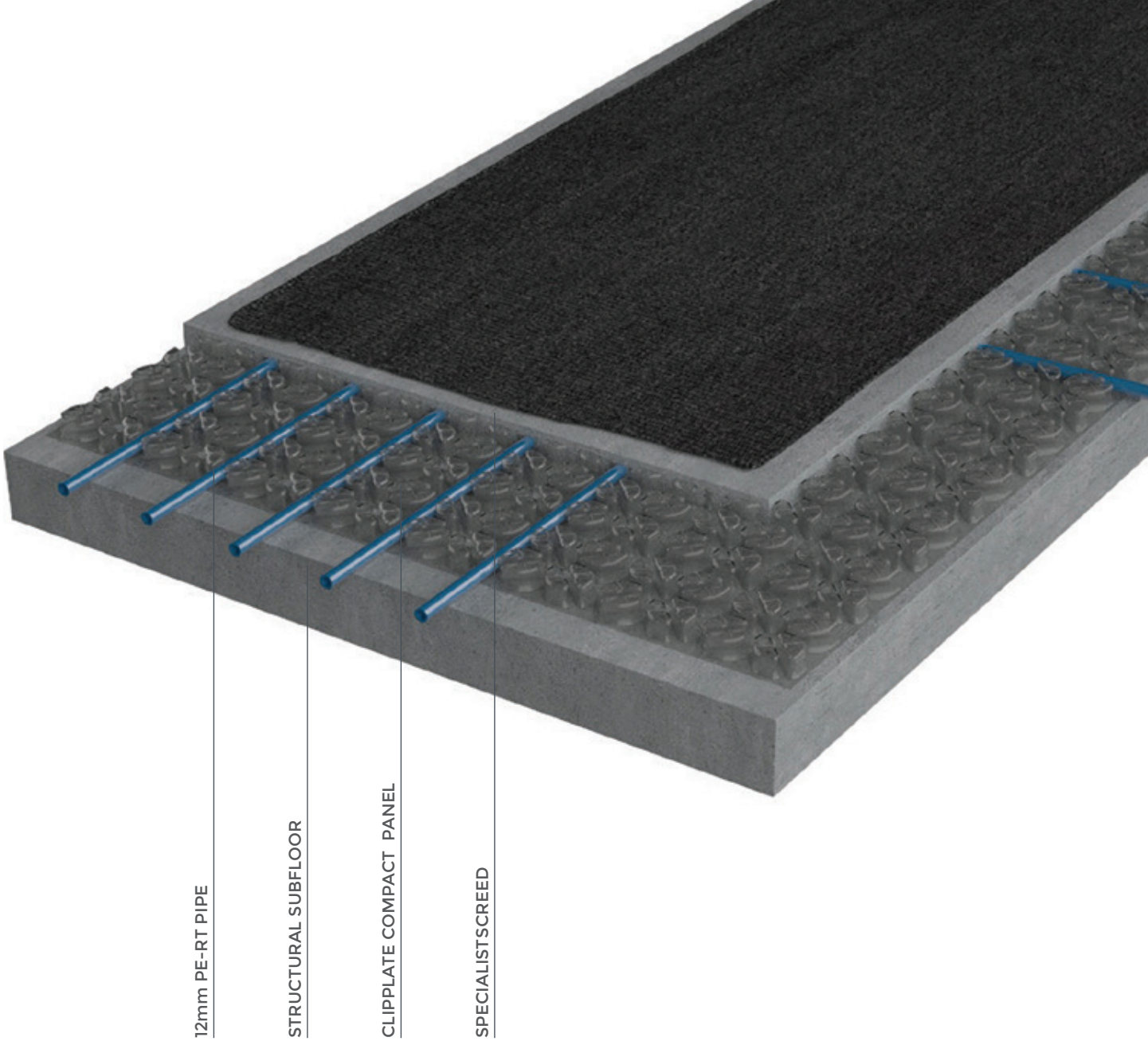
The ClipPlate Compact panel is designed for refurbishment applications. The panel is 14mm thick and uses 12mm pipe making it a much thinner build-up. The panel comes with preformed holes within it to allow the screed to flow within the panel. The plate has an adhesive layer on the underside that ensures the plate stays in place when the specialist screed is being poured.

The design enables a very thin self levelling screed to be used. A flexible, rapid setting, self levelling compound - Levelflex from Tilemaster Adhesives is recommended to provide the lowest possible screed build-up with an underfloor heating system – just 20mm.

Panel thickness:
14mm
Weight:
30kg/m² including 20mm levelflex
Suitable for:
Low build-up applications over solid floor & timber deck.
Pipe centres:
150mm using 12mm pipe
Dimensions:
1070 x 770mm

UFH14 Datasheet

IN14 Install guide



Key features

- Multi-directional pipe channels
- Low build-up/ perfect for retrofit
- Adhesive layer on underside

Heat outputs

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 36 36 05 to discuss your specific requirements.

As a guide the heat outputs below are based on 12mm PE-RT pipe at 150mm centres with 20mm specialist screed laid over. Air Temperature = 20°C. (0.15 m^2K/W = 1.5 TOG).

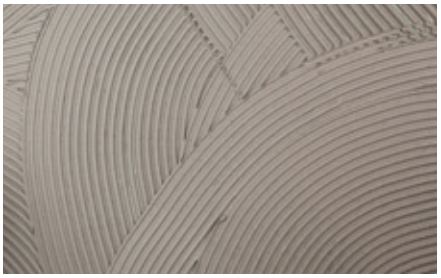
Floor Finish	55/48 (°C)	50/43 (°C)	45/38 (°C)	40/33 (°C)
Tile Finish (0.01m^2K/W)	150 W/m^2	126 W/m^2	102 W/m^2	78 W/m^2
15mm Wood Finish (0.1m^2K/W)	105 W/m^2	88 W/m^2	71 W/m^2	54 W/m^2
Carpet & Underlay (0.15 m^2K/W)	88 W/m^2	74 W/m^2	60 W/m^2	46 W/m^2

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 from Tilemaster Adhesives. Tilemaster Adhesives products have been specifically tested to provide a secure and flexible bond that will not deteriorate, break or lead to an uneven floor finish once tiles have been applied. Tilemaster Adhesives are available as part of your OMNIE system.

Tilemaster Adhesives are experts in the tile adhesive industry and providing all guidelines are followed will guarantee the performance of their products for use with our underfloor heating products.

tilemaster adhesives

Timber and engineered wood floors

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 sub-floor.

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

for underfloor heating systems

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 200m² 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.

Key features

- Auto air vents
- Drain and filling point
- Flow meters
- Isolating valves
- 6 Bar Pressure Gauge

Specification

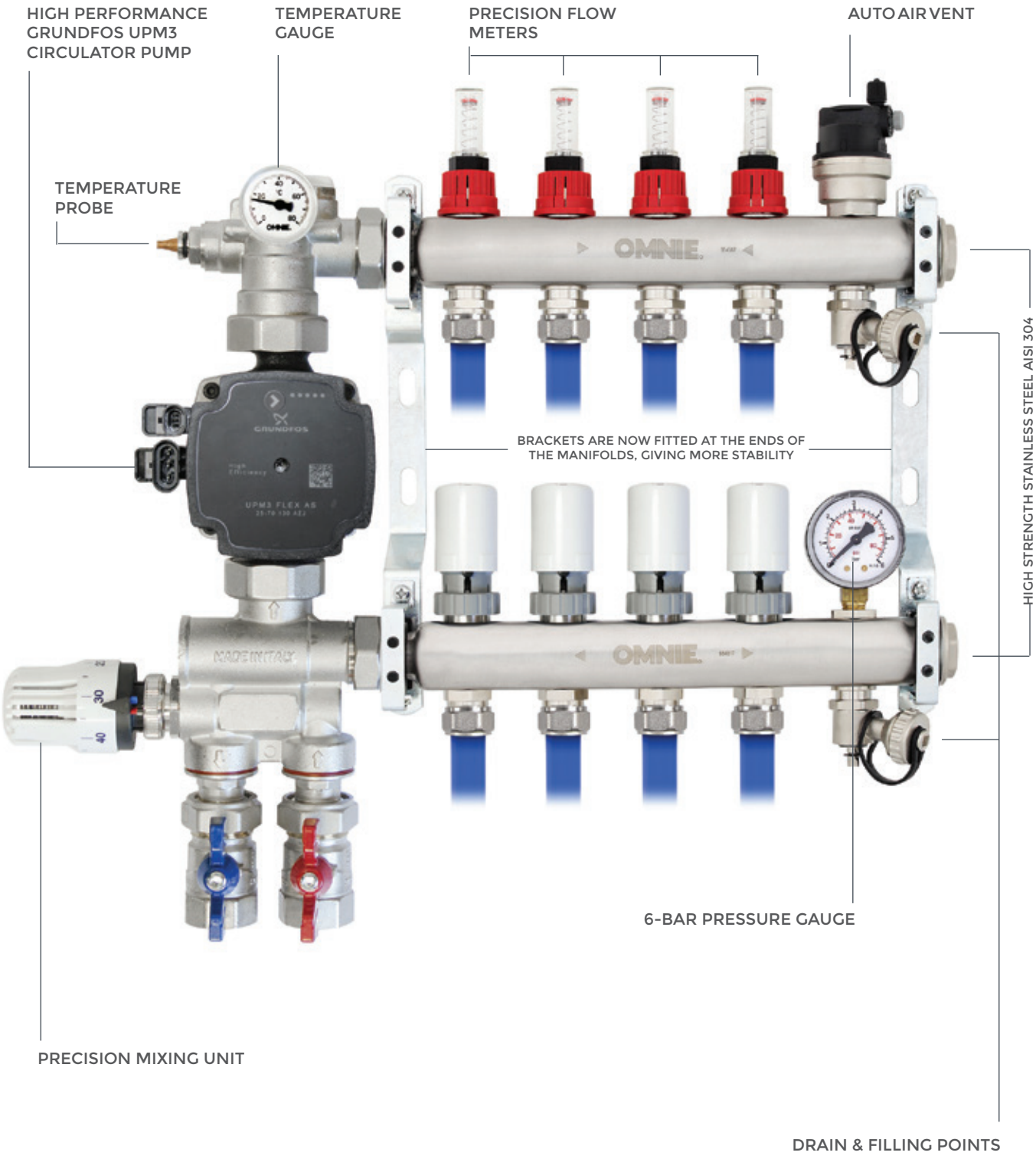
Sizes available:
2 to 12 Port
Suitable for:
Water, Water/Glycol mixtures
Temperature Range:
-10˚C to +95˚C
Max system pressure:
6 bar
Electrical supply:
200-240 Volt, 50/60 Hertz

UFH17 Datasheet

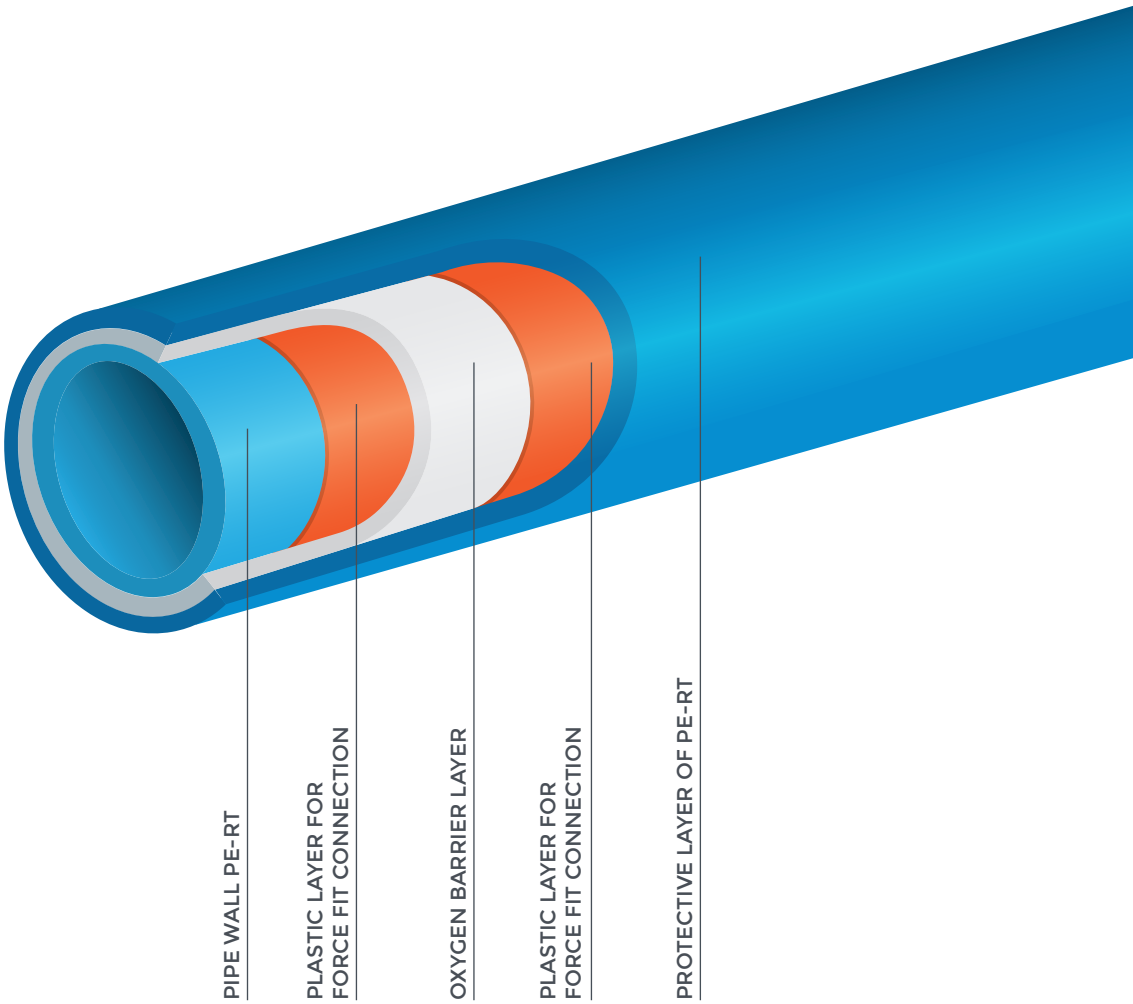
IN17 Install guide

		Manifold Ports										
		2	3	4	5	6	7	8	9	10	11	12
L (mm)	Arms Only Unit	305	355	405	455	505	555	605	655	705	755	805
	Pump & Mixing Unit	420	470	520	570	620	670	720	770	820	870	920
H (mm)	Arms Only Unit	365										
	Pump & Mixing Unit	460										
D (mm)	Arms Only Unit	90										
	Pump & Mixing Unit	150										

New for **2018**


HIGH PERFORMANCE GRUNDFOS UPM3 CIRCULATOR PUMP
TEMPERATURE GAUGE
PRECISION FLOW METERS
AUTO AIR VENT
TEMPERATURE PROBE
BRACKETS ARE NOW FITTED AT THE ENDS OF THE MANIFOLDS, GIVING MORE STABILITY
HIGH STRENGTH STAINLESS STEEL AISI 304
6-BAR PRESSURE GAUGE
PRECISION MIXING UNIT
DRAIN & FILLING POINTS

OMNIFLO



OmniFlo

system pipe

PE-RT underfloor heating pipe

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 a high degree of 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 material quality from renowned manufacturers are used.

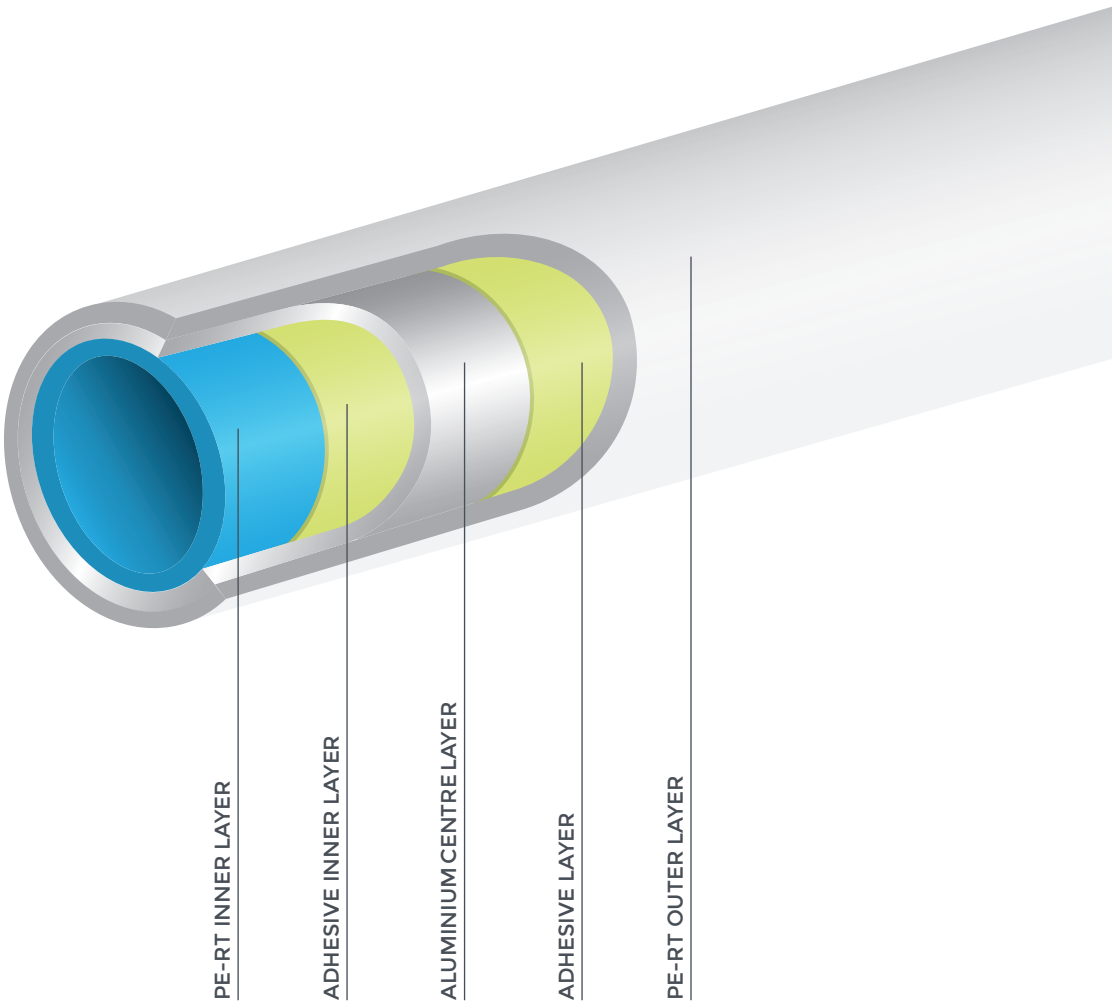
Thickness range:
12mm & 16.5mm

DIN 4721

MAX 60°C

MAX 6bar

FORMUFLO



FormuFlo

system pipe

PE-RT - AL - PE-RT underfloor heating pipe

Multi-layer pipe for low temperature heating systems only, made from a 5 layer composite material with PE-RT as the inner and outer layers with a 0.25mm thick aluminium core which is bonded to the inner and outlayer using a high performance adhesive. Maximum operating pressure 10 bar; maximum operating temperature 70°C

Thickness range:
16mm

DIN 4726

MAX 70°C

MAX 10bar

Touch

smart thermostat

The Touch looks both elegant and sophisticated with its futuristic profile and full width colour touchscreen, Touch allows you to program your heating system and hot water with full 7-day programmable room control.

Touch thermostats are grouped together using the Touch app, allowing you to control your whole house from your smartphone.

Furthermore, add Remote to easily setup and create a partner temperature zone, ideal for rooms such as an en-suite or wetroom.

Mounting position:
Surface mounted
Dimensions (mm):
w125 x h88 x d11
Power:
Mains Powered 230V
Communication:
Wi-Fi & Bluetooth

TCH01 **DATASHEET**
IN30 **INSTALL GUIDE**

Remote

wireless sensor

Adding Remote to Touch has two optional configurations;

Use Remote to measure temperature from a different location near to Touch. Touch could be placed in the hallway but the temperature is measured from the space you spend time in such as a nearby room.

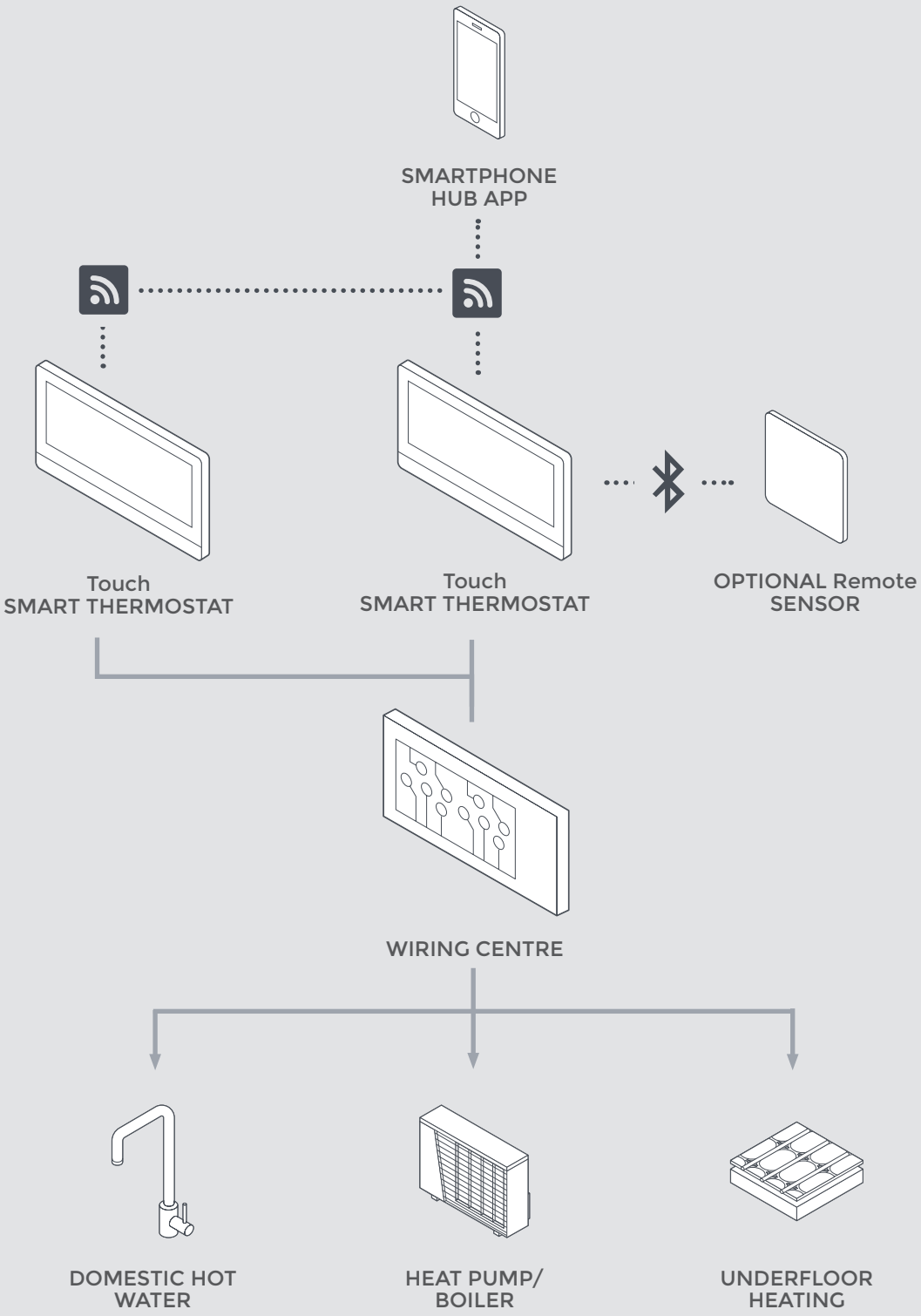
Use Remote to enable and measure the temperature for two partner zones, such as a bedroom and adjoining en-suite. Remote measures the temperature of the partner zone and both zones appear on the Touch.

Mounting position:
Surface mounted
Dimensions (mm):
w88 x h88 x d11
Power:
Battery, 1x Button NiMh
Communication:
Bluetooth

TCH02 **DATASHEET**
IN31 **INSTALL GUIDE**

Touch smart controls

New for **2018**



TouchLite

basic thermostat

The OMNIE TouchLite programmable thermostat provides full 7-day programmable room control. The discreet thermostat fits into a standard back box and is powered by a permanent 230V mains supply. Each thermostat comes with an optional floor sensor. The floor sensor can be activated to limit the floor temperature where this is required.

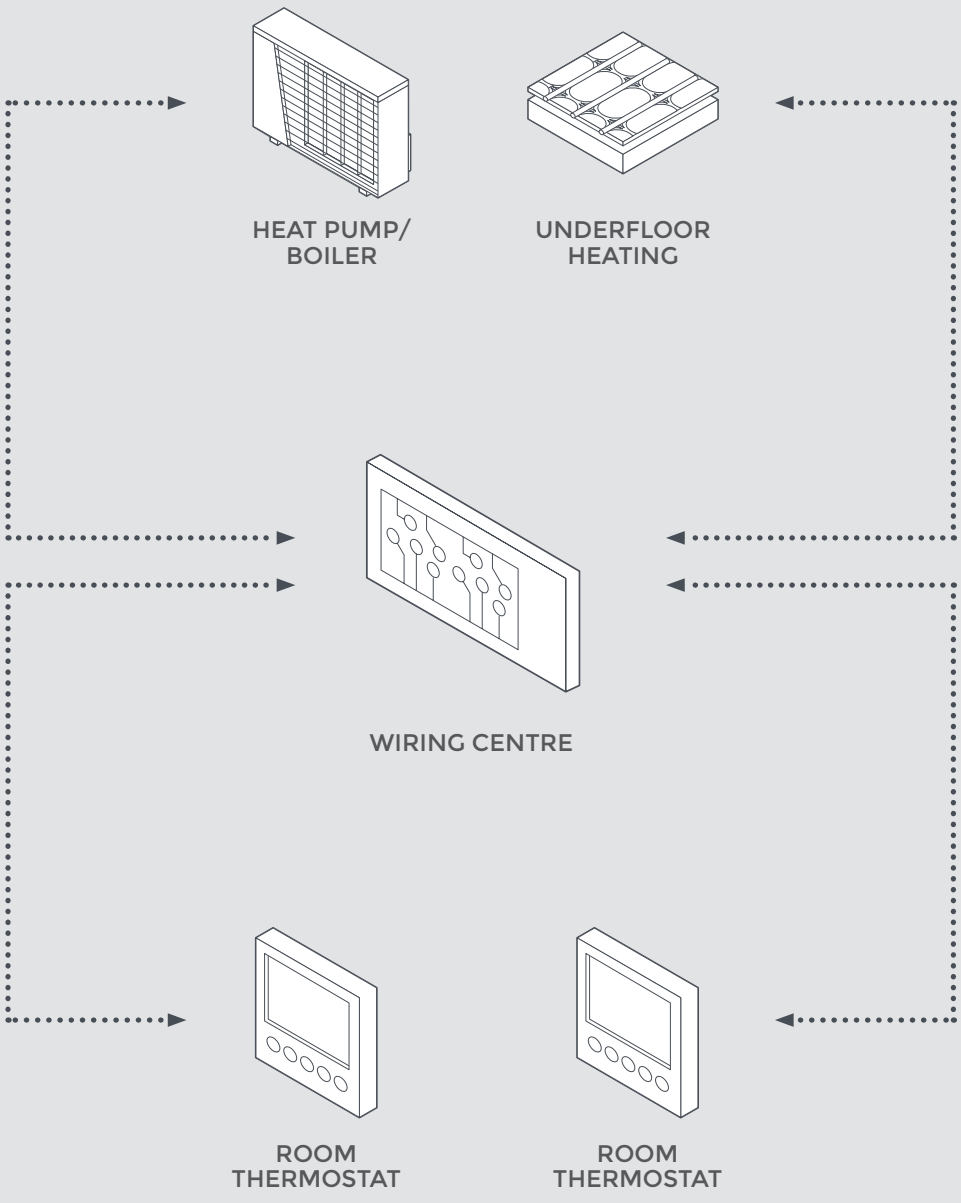
Mounting position:
Flush mounted
Dimensions (mm):
w85 x h85 x d15
Power:
230V

TCH03 **DATASHEET**

IN32 **INSTALL GUIDE**

TouchLite controls

The OMNIE TouchLite controls are an alternative to Touch controls and used only for underfloor heating systems. A thermostat would be placed in each room to control the room temperature.



The perfect partners.

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

Reduce your running costs
Low temperature OMNIE underfloor heating works well with ground and air source heat pumps. Not only will a system that is designed to work at low temperatures reduce running costs, but also will benefit from increased Renewable Heat Incentive (RHI) payments. The range of underfloor heating products from OMNIE are designed to minimise the temperature of the water needed for your home.

Designed to be future proof
It is important that any heating system should be designed with the future in mind. If you install a heating system which depends on high water temperatures it is impractical to change in the future to a heat source which provides water at low temperatures. Every heating system should now be designed to enable the homeowner to retrofit renewable technologies in the future. This involves designing the system for the lowest possible water temperature.

Did you know?

Our heat pumps are designed and manufactured in Germany for market leading performance, efficiency and design.


alpha innotec

Make savings on heat output and improve performance with Alpha-Innotec Heat Pump systems.

Why buy from OMNIE?

Quality engineering
The heat pumps we supply are manufactured by Alpha-Innotec and are exclusively available to OMNIE. Alpha-Innotec heat pumps have a reputation for high standards of engineering performance making efficient and durable heat pumps.

Design
OMNIE have an experienced technical team who are on hand to provide comprehensive technical support, ensuring that the heat pump meets the project requirements.

Remote access
For all of our heat pumps we offer as standard free use to our remote access software - AlphaWeb. This enables the end-user to interact with the heat pump whilst away from the home or office, as well as providing diagnostic information to the installer.

Alpha-Innotec
Alpha-Innotec has been developing, producing and selling market-driven and user-friendly heat pumps since 1998. As a brand of ait-deutschland GmbH, which is now part of Europe's largest group of heat pump manufacturers (NIBE), Alpha-Innotec excels in the development and manufacture of heat pumps for use with underfloor heating systems.

AIT's own research and development as well as many years of experience as a producer of energy-efficient solutions has resulted in a premium product at the right price.

Keeping warm in winter, staying cool in the summer.

Why heat pumps?

Renewable energy
A heat pump takes energy from the ground 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 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 Renewable Heat Incentive (RHI) which is a guaranteed payment for the amount of renewable energy produced for seven years for the domestic installation.

Free cooling?

No other heating system can do it: Heating in the winter, cooling in the summer. Free cooling is a very cost-effective way of using the low temperatures in the ground for pleasant and eco-friendly cooling of rooms in the summer, because the heat pump remains switched off during the cooling phase. The room temperature is lowered via surface heating system.

Heat Pumps not only present big savings on energy usage, they are also eligible for the Renewable Heat Incentive

Renewable rewards

Renewable Heating Incentive
The rate payable is dependent on the efficiency of the system, specifically the water temperature needed by the heat emitter.

Using lower temperature water in an OMNIE underfloor heating system increases the amount of RHI that can be claimed.

To be able to claim the RHI it is necessary to provide room-by-room heat loss calculations and to then demonstrate that the chosen heat emitter will meet those losses. The RHI benefits installations smaller than 45kW for refurbishments, retro-fit and self builders.

Commercial RHI is available for multiple dwellings, please contact our office for details.

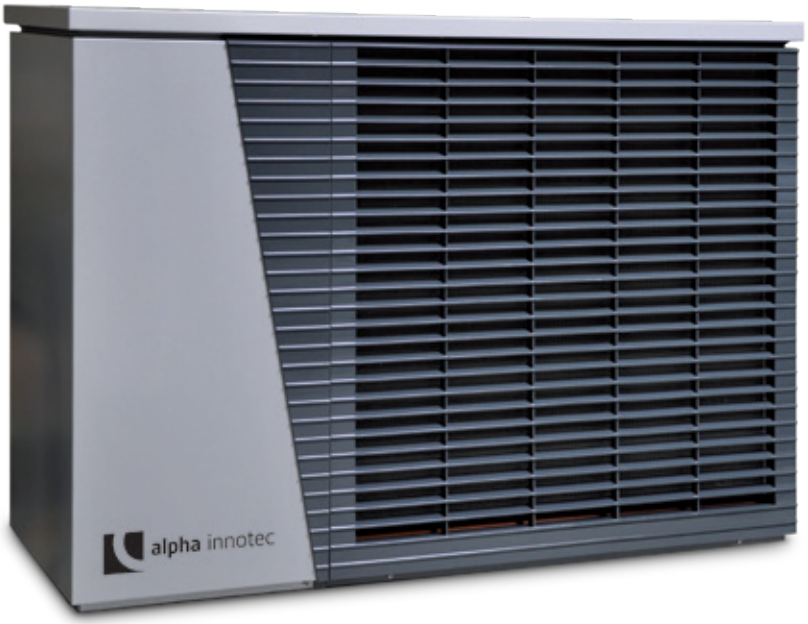
Running costs
The running costs of a heat pump will, of course, depend on the heat loss of the building, just like a conventional boiler would. In addition the efficiency is improved and the running costs reduced with low temperature OMNIE underfloor heating.

Efficient
The average efficiency of the heat pump over the year is called the Seasonal Performance Factor (SPF) and is important in determining the RHI payment.

Heat Source	Cost per unit of fuel (p/kWh)	Efficiency (%)	Cost per unit of heat (p/kWh)	Relative cost
Ground Source	12p*	340%	3.5p*	-
Air Source	12p*	270%	4.4p*	+26%
Gas	4p*	85%	4.7p*	+34%
Oil	4.5p*	85%	5.3p*	+51%
Biomass	5.5p*	85%	6.5p*	+86%
LPG	6p*	85%	7.1p*	+103%

*Heat source efficiency and fuel cost will vary.


Auto
+/- 4.0°C
10.0°C
Donnerstag
4.9.08 16:39



LWD

air source heat pump for outside installation

HP20 **DATASHEET**

The LWD models offer is the latest in heat pump technology, a high temperature heat pump that uses low global warming refrigerant. The heat pump can be wall or floor mounted externally and coupled with an internal hydraulic module (HMD) that contains the expansion vessel, back up heater, heating circulator and safety module.

If two LWD heat pumps are needed in cascade, the internal HMD2 hydraulic module is able to provide the necessary control for both heat pumps without the need for a second controller, allowing combinations to be used e.g. LWD 50A/SX + LWD 70A/SX.

Flow temperatures of up-to 70˚c and uncomplicated integration into existing systems make the LWD series the ideal solution for new build, modernisation and refurbishment projects.

For installers

- Single + three phase units available
- Excellent COPs – up to 4.8 (A7/W35)
- Low installation without refrigeration spilt system. F Gas accreditation not required due to monobloc design
- Fast and easy start-up function
- Integrated hydraulic components
- Pre-assembled integrate connection
- Natural cooling medium R290 (Propane) with low global warming potential
- Modulating units

For end users

- MCS models eligible for RHI payments
- Extremely quiet in operation at only 45dB @1m
- Heating, cooling and domestic hot water in a single system
- PV compatable
- Intelligent energy management with time programs and temperature reduction at night as well as photovoltaic integration
- High temperature unit up to 70˚C
- Remote access
- Corrosion protection to outer cover and internal components

Single phase
MCS accredited

New for **2018**

SWCV 62H1
1.2-5.9 kW*

SWCV 92H1
1.7-8.6 kW*

SWCV 122H1
2.5-13.5 kW*

SWCV

flexible ground source heat pump

HP21 **DATASHEET**

The new SWCV is a flexible range of modulating ground source heat pumps providing high efficiency while changing the heat demand to only supply the required output. They include all the necessary hydraulic components for the heating and hot water system that would normally be installed alongside the heat pump. These include the heating and brine circulator (including ball valves), backup electric heater, integrated brine expansion vessel, brine circuit pressure gauge, air vent and safety valve. Our ground source heat pumps come with all the necessary ground array pipe work, and manifolds for horizontal and borehole installations.

Larger three phase non modulating SWC models are also available from 17 to 30kW.

For installers

- Pre-assembled unit and fast installation
- Compact delivery
- High COPs - up to 5
- Heat metering and energy-efficient circulation pumps integrated
- Optionally available with cooling
- Perfect for use with all types of heat sources
- Modulating units

For end users

- Low running costs
- Low noise levels
- Easy to use
- Domestic hot water heating
- Connect with Alpha web
- Optional cooling on request
- MCS approved (single phase)

Luxtronik

OMNIE heat pump controls

One controller for all units
The Luxtronik 2.0 and 2.1 controls your heat pump, to ensure that you feel comfortable at all times. After you have saved your required temperatures and settings the heat pump will run automatically. A turn and push button makes operating the heat pump very simple and user friendly.

Through your Luxtronik controller you can link your Alpha Innotec heat pump easily to the web server in order that you can control all of the functions on your computer in house or for remote access whilst away. This also provides diagnostic information to your installer or us at OMNIE. Apart from a connection cable, no other hardware or software is required.

All Luxtronik 2.1 controllers made by Alpha Innotec are compatible with easy connection to the server with not extra costs.

Key features

- Easy to control using a single turn and push button
- Connection to the internet/network without additional accessories
- USB connection for data and software updates
- Intuitive interface
- Remote access

HP22 **DATASHEET**

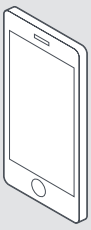
Alpha Home

Alpha Home allows the homeowner to control heating, domestic hot water and heat distribution in each room via app, smartphone, tablet or PC. Furthermore the system determines automatically the flow temperatures required to achieve the room temperatures saved by the homeowner and then adapts these to the outdoor conditions. Alpha Home distributes heat efficiently and as required.

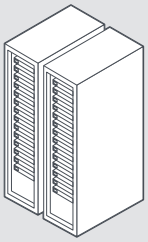
AT HOME

LOGIN DIRECTLY AT HOME

ACCESS ON THE MOVE



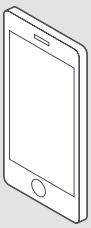
SMARTPHONE APPLICATION



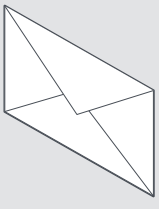
ALPHA WEB LOGIN

PC

FAULT MESSAGE



SMS



E-MAIL

Complete range
Heat pumps

LWD-Series

- Monobloc design
- Heating, cooling and domestic hot water in one
- Extensive accessories program
- High flow temperature up to +70˚C
- Options available with cooling
- Heating capacity: 6-10kW
- Low noise and corrosion proofed

LWA-Series

Available only until mid 2018

- Heating, cooling and domestic hot water in one system
- Small space requirements due to the outdoor installation
- Flow temperatures up to +65˚C
- Optional available with cooling
- Heating capacity: 9-35kW
- Modulating: 5 to 16kW

LW-Series

- Minimum space requirement
- Heating, cooling and domestic hot water in one
- Flow temperature up to +65˚C
- Heating capacity: 10-35kW
- Modulating: 5-16kW

Air source | Ground source | Outside installation | Inside installation

SWCV/SWC
(Flexible range)

- SWCV, MCS accredited models
- Particularly flexible installation
- Optional integrated cooling versions
- Flow temperatures up to +65˚C
- Hydraulics and heat pump module
- Heating capacity / supply voltage: SWCV modulating range 1.25-13.5kW (230V), SWC range 17-30kW (440V)

SW-Series
(Compact range)

- Optional cooling package
- Heat pump module
- Flow temperature up to +65˚C possible
- Can be combined with Solar Thermal
- Heating Capacity/ supply voltage 5-13kW (230V)

SWP-Series
(Commercial range)

- Twin or single compressor units
- Heating, cooling and domestic hot water in one
- BMS ready
- Flow temperature up to +70˚C
- Active and passive cooling possible
- Heating capacity: 29-160kW

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W: www.omnie.co.uk

Help and support

For architects & specifiers

Up to date information on product specification and performance is available on our website. Please visit **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 or 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 business development manager or area sales manager who will happily talk you through our product range and also arrange for samples as 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 **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.

For installers & heating professionals

We recommend that you order our products directly through 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 and enter your postcode or call 01392 36 36 05

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 **www.omnie.co.uk/resources**

Simply select the product group required and view the install guide on your mobile device. You can also download and print install guides directly from the website by clicking on the download icon.

A comprehensive support knowledgebase is also available that contains a wealth of information around installing and commissioning our systems. You can visit the knowledgebase online at **www.omnie.co.uk/help**

For 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 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. Alternatively we recommend you contact your local OMNIE Expert who will be able to advise on the best system for your project.

If you have already ordered an OMNIE underfloor heating system, your system pack will include instructions on installation along with a plan of the system and details on commissioning and setting up the system. 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.

Get the right help

For help & support assistance please visit **www.omnie.co.uk/help**

Chat online with an expert

Browse the knowledge base

Raise support queries

Common user 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 cost 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 checked from time to time.

How fast does an underfloor heating system warm up?
Underfloor heating can be used in any 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.

Book a course

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E: training@omnie.co.uk
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- **twitter.com/omnieuk**
- **omnie.co.uk**
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Technical information for **Air Source Heat Pumps**

MCS accredited models:
LWD50A /SX & X, LWD70A /SX, LW121A /SX

(A) Outdoor installation (S) Single phase (X) Extracorrosion coating (R) Reversible/ cooling (H) High temperature (V) Variable/ modulating output

LWA (outdoor)		**LW121A /SX**	**LW140A**	**LW180A**	**LW251A**	**LW310A**	**LW90A /RX|/RSX**	**LW140A/ RX**	**LW160H -A/V**
Phase	1 = 230V 3 = 400V	1	3	3	3	3	3 | 1	3	3
Hydraulic module /controller		LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0
Compressor		Single	Single	Twin	Twin	Twin	Single	Single	Single
Performance data for A7/W35	**Heat Output (kw)**	12.1	14.4	19.6 / 10.1	27.3 | 14.1	35.0	9.2 | 9.1	14.4	5.6 min 16.1 max
	COP	3.7	4.3	3.9 / 4.2	3.9 | 4.2	4.0	4.1 | 4.0	4.2	9.5kW = 4.76 COP
Cooling performance data	**Heat Output (kw)**						14.5 | 14.3	20.3	
	COP/EER (kW)						3.7 | 3.6	3.8	
Unit	**Measurements (mm) WxDxH**	1943 x 746 x 1523	1931 x 1050 x 1780	1931 x 1050 x 1780	1779 x 1258 x 1817	1779 x 258 x 2127	1774 x 848 x 1353	1931 x 1050 x 780	1931 x 1050 x 1780
	Weight (kg)	265	370	420		573	260	280	310
Sound	**dB (a) @ 1m**	51	50	52		59	55	56	34-52
Energy efficiency class	**Heating in conjunction with control unit**	A++	A++	A+		A+	A+	A++	A+++
	55°c	A+	A++	A+		A+	A+	A+	A++
	35°c	A++	A++	A++		A++	A+	A++	A++
Limits of application (heating)	**heating circuit °c**	20 to 60	20 to 50	20 to 50		20 to 60	20 to 60	20 to 60	20 to 60
	heat source °c	-20 to 35	-20 to 35	-20 to 35		-20 to 35	-20 to 40	-20 to 40	-20 to 35
Limits of application (cooling)	**heating circuit °c**						7 to 20 | 15 to 40	15 to 40	
	heat source °c						7 to 20	15 to 40	
Refrigerant		**R407C**	**R407C**	**R407C**		**R404A**	**R407C**	**R407C**	**R410C**

LWD (outdoor)		LWD50A /SX | /X	LWD70A /SX | /X	LWD90A	LWD50A /RSX | /RX	LWD70A /RSX | /RX
Phase	1 = 230V 3 = 400V	1 | 3	1 | 3	3	1 | 3	1 | 3
Hydraulic module /controller		HMD1/E	HMD1/E	HMD1/E	HMD1/RE	HMD1/RE
Performance data for A7/W35	Heat Output (kw)	7.40 | 7.1	9.3 | 8.5	10.1	6.8 | 6.8	9.3 | 8.7
	COP	4.79 | 4.8	4.24 | 4.3	4.12	4.46 | 4.56	4.24 | 4.32
Cooling performance data	Heat Output (kw)				7.9 | 7.9	11.1 | 11.1
	COP/EER (kW)				4.98 | 4.98	4.59 | 4.59
Unit	Measurements (mm) WxDxH	1320 x 505 x 930	1320 x 505 x 930	1320 x 505 x 930	1320 x 505 x 930	1320 x 505 x 930
	Weight (kg)	141	146	149	146	151
Sound	dB (a) @ 1m	46 | 45	46 | 45	50	47 | 45	47 | 45
Energy efficiency class	Heating in con-junction with control unit	A++	A++	A++	A++	A++
	55°c	A++	A+ | A++	A+	A++	A+
	35°c	A++	A+ | A++	A+	A++	A+
Limits of application (heating)	heating circuit °c	20 to 70	20 to 70	20 to 70	20 to 70	20 to 70
	heat source °c	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35
Limits of application (cooling)	heating circuit °c				7 to 20	15 to 45
	heat source °c				7 to 20	15 to 45
Refrigerant		R290	R290	R290	R290	R290

NOTE: With the LWD models combinations of two units of the same phasing can be used in conjunction with HMD2/(s) E with testing, HMD2/R(S)E with heating & cooling.

LW (indoor)		LW 101	LW 121	LW 140	LW 180	LW 251	LW 310	LW160H(L)/V
Phase	1 = 230V 3 = 400V	3	3	3	3	3	3	3
Hydraulic module /controller		HMD1/E	HMD1/E	HMD1/E	HMD1/RE	HMD1/RE	LUX 2.0	
Compressor		Single	Single	Single	Twin	Twin	Twin	Single
Performance data for A7/W35	Heat Output (kW)	10.3	12.8	14.4	19.6 | 10.1	27.3 | 14.1	35.0 | 19.1	5.6min / 16.1 max
	COP	4.2	4.2	4.3	3.9 | 4.2	3.9 | 4.2	4.0 | 4.2	4.33 (partial load)
Cooling performance data	Heat Output (kw)				7.9/7.9	11-1/11.1		
	COP				4.98/4.98	4.59/4.59		
Unit	Measurements (mm) WxDxH	746 x 846 x 1353	846 x 746 x 1523	795 x 1050 x 1780	795 x 1050 x 1780	795 x 1258 x 1887	795 x 1258 x 1887	795 x 1050 x 1780
	Weight (kg)	260	280	370	420	540	540	362
Sound	dB (a) @ 1m	50	50	50	51	55	60	38min-49max
Energy efficiency class	Heating in con-junction with control unit	A+	A++	A++	A+	A+	A+	A+++
	55°c	A+	A++	A++	A+	A+	A+	A++
	35°c	A+	A++	A++	A++	A++	A++	A++
Limits of application	heating circuit °c	20 to 50	20 to 50	20 to 50	7 to 50	20 to 50	20 to 60	20 to 60
	heat source °c	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35
Refrigerant		R407C	R407C	R407C	R407C	R407C	R404A	R410C

Technical information for **Ground Source Heat Pumps**

MCS accredited models:
SWCV 62H1, SWCV 92H1, SWCV 122H1, SWP 371

A Outdoor installation | S Single phase | X Extracorrosion coating | R Reversible/ cooling | H High temperature | V Variable/ modulating output

SWCV		**SWCV 62H1**	**SWCV 92H1**	**SWC 122H1**
Phase	**1 = 230V 3 = 400V**	1	1	1
Hydraulic module /controller		LUX 2.1	LUX 2.1	LUX 2.1
Performance data for B0/W35	**Heat Output (kw)**	1.25 min 5.95 max	1.77 min 8.65 max	2.48 min 13.56 max
	COP	@3.32kW =4.86	@4kW =4.86	@5.06kW =4.87
Unit	**Measurements (mm) WxDxH**	598 x 665 x 1570	598 x 665 x 1570	598 x 665 x 1570
	Weight (kg)	145	149	158
Sound	**dB (a) @ 1m**	29-36	29-39	29-36
Energy efficiency class	**Heating in conjunction with control unit**	A++	A++	A++
	55°c	A++	A++	A++
	35°c	A++	A++	A++
Limits of application (heating)	**heating circuit °c**	20 to 65	20 to 65	20 to 65
	heat source °c	-5 to 30	-5 to 30	-5 to 30

SWC		**SWC 172H3**	**SWC 192H3**	**SWC 232H3**	**SWC 262H3**	**SWC 302H3**
Phase	**1 = 230V 3 = 400V**	3	3	3	3	3
Hydraulic module /controller		LUX 2.1	LUX 2.1	LUX 2.1	LUX 2.1	LUX 2.1
Perfor-mance data for B0/W35	**Heat Output (kw)**	16.86	18.60	22.35	25.60	29.60
	COP	4.93	4.87	4.95	4.92	4.88
Unit	**Measurements (mm) WxDxH**	598 x 665 x 850	598 x 665 x 850	598 x 678 x 1575	598 x 678 x 1575	598 x 678 x 1575
	Weight (kg)	180	185	207	212	219
Sound	**dB (a) @ 1m**	34	34	37	37	37
Energy efficiency class	**Heating in conjunction with control unit**	A+++	A++	A++	A++	A++
	55°c	A++	A++	A+	A+	A+
	35°c	A++	A++	A++	A++	A++
Limits of application (heating)	**heating circuit °c**	20 to 60	20 to 60	20 to 65	20 to 65	20 to 65
	heat source °c	-5 to 25	-5 to 25	-5 to 25	-5 to 25	-5 to 25

SWC		**SW 42H1**	**SW 62H1**	**SW 82H1**	**SW 102H1**	**SW 132H1**
Phase	**1 = 230V 3 = 400V**	1	1	1	1	1
Hydraulic module /controller		LUX 2.1	LUX 2.1	LUX 2.1	LUX 2.1	LUX 2.1
Perfor-mance data for B0/W35	**Heat Output (kw)**	4.89	5.80	7.50	10.30	13.00
	COP	4.54	4.80	4.80	4.80	4.70
Unit	**Measurements (mm) WxDxH**	598 x 665 x 875	598 x 665 x 875	598 x 678 x 875	598 x 678 x 1575	598 x 678 x 875
	Weight (kg)	135	140	155	160	165
Sound	**dB (a) @ 1m**	31	31	31	31	31
Energy efficiency class	**Heating in conjunction with control unit**	A+++	A++	A++	A++	A++
	55°c	A++	A++	A+	A+	A+
	35°c	A++	A++	A++	A++	A++
Limits of application (heating)	**heating circuit °c**	20 to 60	20 to 60	20 to 60	20 to 60	20 to 60
	heat source °c	-5 to 25	-5 to 25	-5 to 25	-5 to 25	-5 to 25

SWP		**SWP 371**	**SWP 451**	**SWP 561H**	**SWP 700H**	**SWP 850H**	**SWP 1000H**	**SWP 1250**	**SWP 1600**
Phase	**1 = 230V 3 = 400V**	3	3	3	3	3	3	3	3
Hydraulic module /controller		LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0	LUX 2.0
Compres-sor		Single	Single	Single	Twin	Twin	Twin	Twin	Twin
Perfor-mance data for A7/W35	**Heat Output (kw)**	37.2	45.0	53.8	37.1 | 70	46.5 | 88	53 | 100	66.3 | 125.1	85.6 | 161.6
	COP	4.80	4.80	4.50	4.2 | 4.1	4.2 | 4.1	4.2 | 4.1	4.4 | 4.3	4.5 | 4.4
Unit	**Measurements (mm) WxDxH**	1350 x 912 x 1030	1350 x 912 x 1030	1350 x 912 x 1030	1400 x 913 x 1847	1400 x 913 x 1847	1400 x 913 x 1847	1400 x 913 x 1847	1400 x 913 x 1847
	Weight (kg)	371	385	521	930	935	965	935	1000
Sound	**dB (a) @ 1m**	39	41	44	64	64	68	64	66
Energy efficiency class	**Heating in conjunction with control unit**	A++	A++	A++	A++	A++	A++	A++	A++
	55°c	A++	A++	A++	A++	A++	A++	A++	A++
	35°c	A++	A++	A++	A++	A++	A++	A++	A++
Limits of applica-tion	**heating circuit °c**	20 to 60	20 to 60	20 to 65	20 to 65	20 to 65	20 to 65	20 to 55	20 to 55
	heat source °c	-5 to 25	-5 to 25	-5 to 25	-5 to 25	-5 to 25	-5 to 25	-5 to 25	-5 to 25

Starting your project

OMNIE can provide advice from the very beginning of the project through to after-sales care and support. Call us today on 01392 36 36 05.

Obtaining a quote and specification
To get a quote, simply email your plans to us or use the online facility on the OMNIE website. When sending in your plans please provide details of the floor construction, the floor finishes and the type of heat source. We would also like to know the insulation levels and glazing type. If it is a new build then simply state "built to current regs".

Placing an order
Orders can be placed through your local OMNIE expert. They will need to know when the goods are required and the site address. We will then produce a design for approval. Once agreed, the materials will be dispatched and sent to site as required.

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