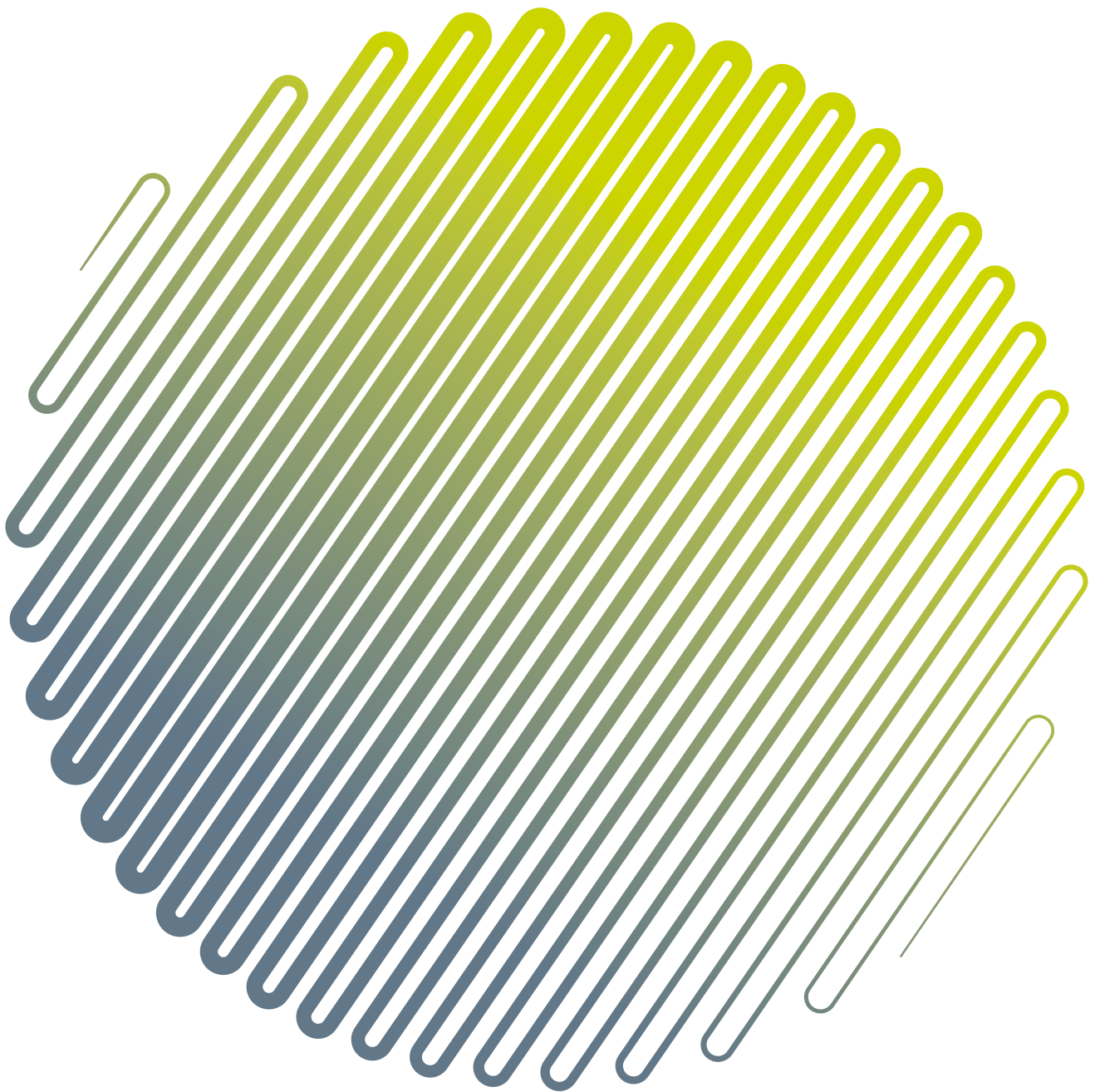


**OMNIE.**

Differentiate your  
development in a  
crowded marketplace

Developers Guide



# Differentiate your development in a crowded marketplace

OMNIE provides the perfect indoor environment for your customers. Allowing them to customise the appearance and comfort of their entire living space, from freedom of internal layout to temperature, air cleanliness and humidity.

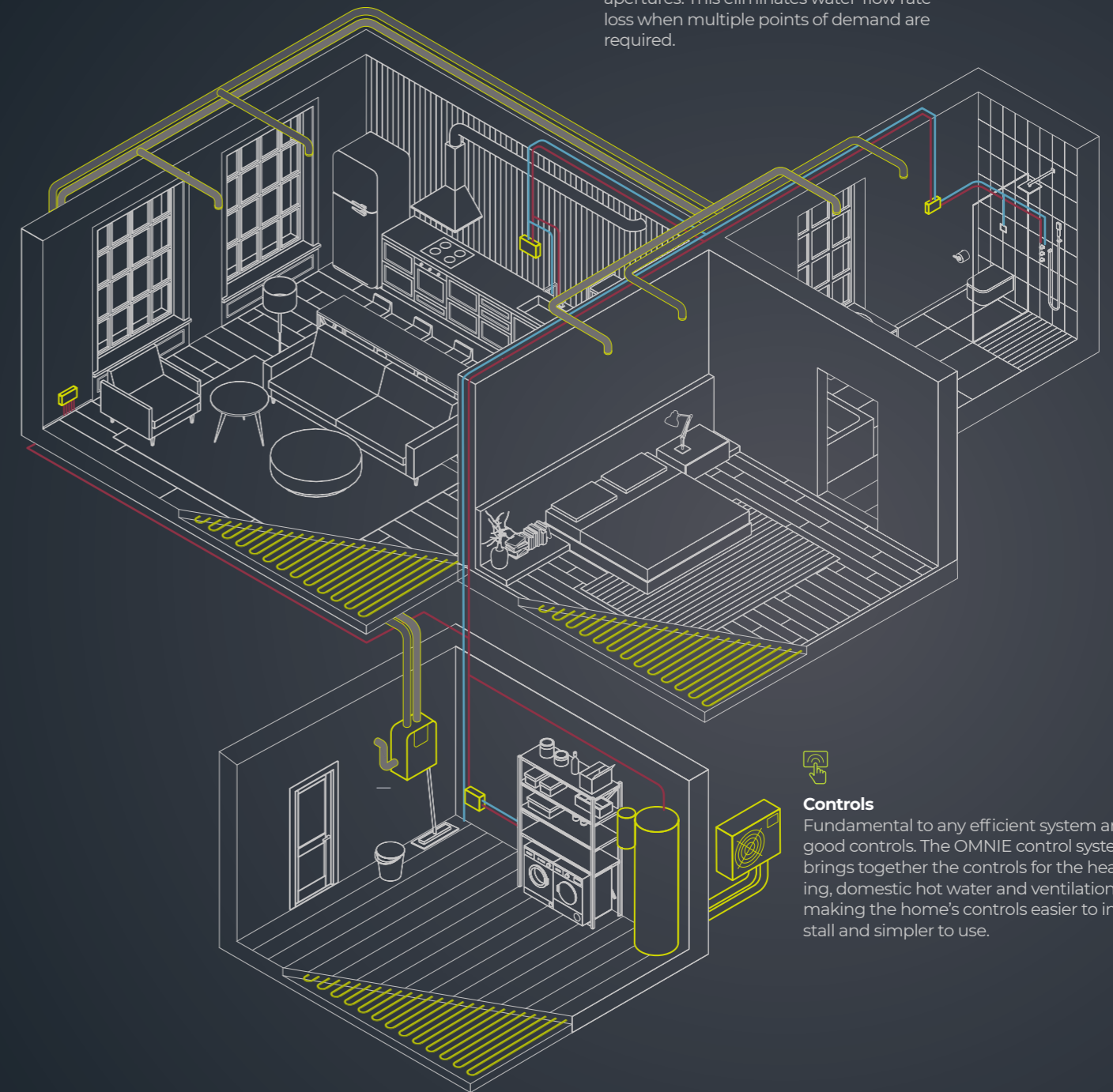
By specifying OMNIE in your projects, you can set your developments apart by providing your customers a more tailored, premium experience.

## Whole house One environment

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

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

**Hot & Cold Distribution**  
A risk-reducing and more effective method of distributing hot and cold water throughout the building. Using a manifold-based system, as opposed to branch system, will significantly reduce the number of fittings used, as well as offer a convenient and safe way to isolate supplies when needed. Optimisation of water flow is achieved by eliminating constricting pipe angles and narrow diameter apertures. This eliminates water-flow rate loss when multiple points of demand are required.



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

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

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

# Underfloor heating will set you apart

UFH helps you save on your build time and improve your margins.

## Fast to lay, easy to fit

Our range of dry constructions allow for a quick install with no waiting for screeds to dry. Unique omni-directional panel system, speeding up installation.

## Save costs & time

Our Torfloor® product dual functions in the construction process - Torfloor product provides both a structural floor deck and underfloor heating in one, whilst FoilBoard offers insulation and UFH.

## Larger living space

Living space is increased by 15%. With radiators, furniture cannot be placed in front of a wall-mounted heater without reducing its effectiveness.

## Single fix

UFH is a single fix whereas radiators require 1st fix pipework, 2nd fix radiators & boiler + 3rd fix when radiators must be removed for wall painting. Sometimes a 4th fix is required to put them back, and all phases have to be separately scheduled and co-ordinated, resulting in extra time on site and possible delays in getting trades back between fixes.

## Reduction in snagging

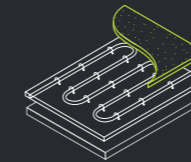
Most UFH components are in the floor and this reduces snagging.

## Designed for retro-fit

Retrofit systems are available to accommodate a wide range of constructions even if the floor is already specified or installed.



## Screed



### ScreedPlate 0

Castellated plate system for use in screeded or concrete floors.

### ScreedPlate 11

Castellated plate system with insulation layer for use in screeded or concrete floors.

### ScreedPlate Compact

Low build-up castellated plate system for use in screeded or concrete floors.

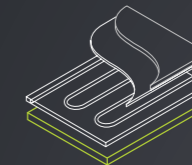
### Staple

Staples for use in screeded or concrete floors that are pre-insulated.

### ClipRail

Similar to Staples for use in screeded or concrete floors that are pre-insulated.

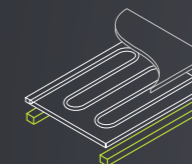
## Floating



### FoilFloat

Insulation panel that floats over an existing timber or concrete floor.

## Low Build-up / Overlay



### LowBoard®

Low build-up system that floats over existing insulated timber or concrete floor.

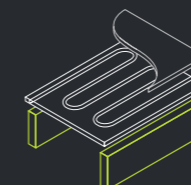
### Ultimate 2 (pre-primed)

Easy-to-use low build-up insulated panel especially designed for tiled floor finishes.

### OMNIE-Tile

Cementitious board panel for use with tiled floor finishes.

## Timber Suspended



### FoilBoard®

Inter-joist insulated panels that sit between joists.

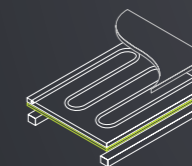
### TorFloor® TorFloor 2®

Integrated floor deck and heating system for suspended floors.

### UnderPlate

Low-cost alternative for timber floors, not recommended for use with low water temperatures.

## Acoustic /Specialist



### LowBoard® RdB

Low build-up panel with integrated acoustic layer.

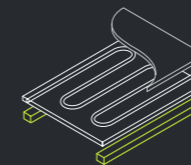
### TorFloor® RdB

Combined floor deck and heating system for suspended floors with integrated acoustic layer.

### FoilFloat RdB

Insulation panel that floats over an existing timber or concrete floor with integrated acoustic layer.

## Timber Batten



### FoilBatten

Insulated panels that sit between battens.

### TorFloor® TorFloor 2®

Integrated floor deck and heating system for batten floors.

# Experience on tap

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

## Technical Experts

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

## 30 years' experience

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

## Award-Winning Products



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

## Performance Guaranteed

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

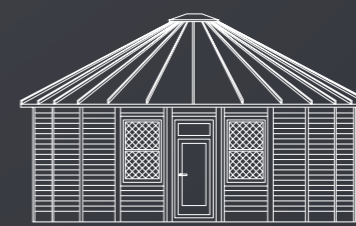
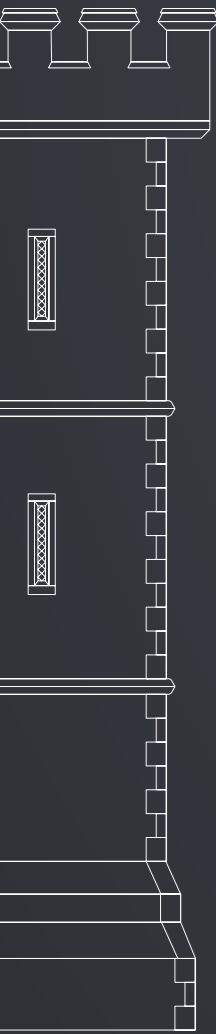
1. The water temperature for a heat output at 50 W/m<sup>2</sup>.
2. The heat output at 50°C flow water temperature.
3. Heat maps showing heat diffusion and heat output at 20-, 40-, 60- and 80-minute intervals vs. the nearest competitor product.

## Free Design Service

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

## Dedicated Project Manager

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



Castles

Churches

Low-Energy Buildings

Period Properties

Yurts

New-Build Homes

## The right system for every building

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

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

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

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

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

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

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



## Home development Case study

OMNIE puts its knowledge to the test with underfloor heating for a 12 home development.

OMNIE recently supplied the underfloor heating to the high quality Meadow View Park estate in Cowes on the Isle of Wight. The development consisted of 12 timber framed houses- 3 x 4-Bed detached, 6 x 3-Bed detached & 3 x 2-Bed terrace homes. The developer wanted to set the properties apart from major house builders by offering a more sustainable heating solution that potential buyers would expect as well as higher quality fixtures and fittings to complement the market position.

Our local OMNIE expert covering the IoW, worked closely with the developer to tailor our systems to work with the individual project requirements. Underfloor heating was considered a key driver from the start, with the developer having experienced first hand feedback of the benefits of UFH such as an easier install and higher market price.

The developer decided that UFH would be top of the list as standard for all properties, and considers UFH more

attractive to prospective buyers for reasons such as; making the rooms in the properties look larger, freeing up rooms for furniture and allowing for easier configurations by buyers, more desirable compared to run-of-the-mill specifications and the complimentary perspective of a higher quality fit out. Furthermore, the use of OMNIE underfloor heating in the development allows for a future proofing effect and home buyers can easily upgrade from gas boilers to heat pumps in the future with no loss of performance.

On the ground floor our tested Staples system was designed, specified and installed – this was an in-screed application to take advantage of the floor construction. The staple system was installed at 150mm centres to guarantee the correct performance of the system whether a gas boiler or heat pump is used.

On the first floor we designed a TorFloor panel which was specially manufactured

to span 600mm joists. These panels reduced installation time and costs by incorporating a floor deck with no loss of heating performance.

In two of the twelve properties, buyers have opted for an Air Source heat pump exclusively supplied and designed in the UK by OMNIE to take advantage of the increased efficiency.

- Custom made UFH panels
- High performance heating solution with boiler or heat pump heat source
- Larger room spaces and higher specification with increased sales margin



## Luxury apartments Case study

OMNIE keeps a low profile for heating system installation in a luxury flat renovation.

A former office has been converted into half a dozen high specification apartments in the sought-after Tooting district of South-West London. The apartments feature a low profile underfloor heating system from the OMNIE range, as part of a space-saving building services strategy. The focus of the development on Althorp Road, SW17 has been on a three storey commercial unit which the contractors have successfully reconfigured to form six similar sized flats that are expected to command purchase prices in the £750K price bracket.

While our design department provided detailed layout drawings for the project, along with other comprehensive technical guidance, all of the installation work was carried out by Locksbury Services Limited from Biggin Hill in Kent. Locksbury Services' engineers installed the 35mm deep OMNIE FoilBoard panels across the building's existing sub-floors. The lightweight

boards, manufactured from extruded polystyrene (XPS) that has a very high compressive strength perfect for floating floors, were easily cut to fit the bay windows and the rest of the rooms' layouts. 400 metres or more of 16mm diameter heating pipes were pressed into the unique omni-directional channel designs which simplified the on-site installation, eliminating the need of an assemble loop and straight panels, prior to being connected back to OMNIE manifolds which distribute the flow from the home's boiler. While the slightly more complex Flat 3 required a six-port manifold, the rest of the dwellings feature five-port versions supplying primary water at 55 °C to the different zones.

Together with the appropriate controllers and room thermostats from the OMNIE range, this arrangement offers occupants excellent comfort levels and controllability, while getting optimum performance from the Electromax boilers and helping to deliver energy efficiency.

The OMNIE range of underfloor heating systems can facilitate installations in almost any situation, including between existing timber floor joists, across concrete sub-floors, or even for retrofit situations where the overall depth has to be kept to an absolute minimum.

- Compact manifold - only 615 x 415 x 100 mm
- High performance heating solution but optimising boiler performance
- Systems installed on all floors in as little as 2 days



## Home development Case study

Welsh housebuilder opts for OMNIE one-stop shop solution

An award-winning housebuilder has created the Pludds Meadow development of high specification three and four bedroom homes near Carmarthen on the Welsh Coast, selecting OMNIE to supply the complete underfloor heating package, including air source heat pumps.

OMNIE provided full drawings and specifications for each plot, indicating the layout of their Staple and TorFloor underfloor heating arrays across the ground and first floor of each dwelling. The developer's Design Manager comments: "We build 15-20 houses a year and although we have used underfloor heating systems in the past, we choose to work with OMNIE for the complete package they offer, rather than sourcing the pipework, manifolds and controls separately. This simplifies things for us while OMNIE also supplied all the drawings for our installer to work from and then its engineers come back to commission each system. It has been a very successful project with

Pludds Meadow winning Best Small Development category for Wales in last year's NHBC awards."

Opting for underfloor heating throughout avoids wall space being taken up with bulky and unsightly radiators, while porcelain floor tiles contribute to the feeling of luxury downstairs, laid over the OMNIE Staples UFH pipework which is fixed across rigid insulation and encapsulated in a screed.

The plumbing and heating install team commented: "The TorFloor in particular, combining a floor and heating system in one structural panel, is a fantastic system and straightforward to install. The carpenters have fixed the panels across both engineered and conventional timber joists ready for our team to lay the pipes and connect back to the manifolds"

As a fully proven and very versatile, panel based underfloor heating system, OMNIE's TorFloor presents building

services consultants and contractors with an unrivalled combination of performance benefits. Crucially the TorFloor panels combine the ability to span upper storey joists or battens fitted across a ground level slab, to provide high efficiency underfloor heating and a structural deck in one product. Thus saving both time and money on installation, while avoiding the need for separate particleboard or other flooring.



## Sustainable home Case study

OMNIE whole-house technologies at the heart of architect's sustainable home project

From the heavily insulated, suspended ground floor slab to the wildflower meadow growing on the roof, a new-build home in Cambridgeshire is an exemplar for sustainability and energy efficiency, which is why the owner, who is also the lead architect, chose OMNIE to provide the whole-house heating and ventilation system to maintain an ideal indoor environment.

Maintaining the supply of hot water for a 277 square metre home with four bathrooms - plus heating in the colder months, required an integrated approach to the project's mechanical services.

OMNIE specified the entire system from the 9 kW LV heat pump, with the Staple underfloor heating system installed across the entire ground floor, split between a polished concrete floor in the main kitchen-living area and engineered wood for the other rooms. Upstairs, the UFH switches to OMNIE LowBoard floor panels, while the Zehnder mechanical ventilation with heat recovery (MVHR) system is installed in two plant rooms:

the main one being downstairs, where the 300 litre hot water cylinder and the indoor unit for the heat pump are located. The MVHR extracts from the 'wet areas' like the kitchen, utility, bathrooms and the plant rooms themselves, then feeds tempered fresh air to the living spaces and bedrooms. The client is further making use of the OMNIE App which is compatible with iPhones and other devices, offering precise monitoring and control of the various room spaces.

The owner reflected on the success of the project; "We have been delighted with the real time data we are seeing on the energy performance of the house: including the water and room temperatures that are being maintained. Since getting to understand the OMNIE range and the detailed specification service they offer, we have gone on to specify the company's underfloor heating systems for our own clients. It is good to have a company that offers all the different technologies - a one-stop shop. From an architect's point of view,

it is so useful to have a supplier who will provide all the necessary information prior to an order actually being placed so you can weigh the benefits. We want to include all that information in our tenders, but a lot of companies do not want to take that risk."

# Extensive technical expertise & experience

OMNIE has extensive technical expertise and experience spanning over 20 years in the design, manufacture and supply of underfloor heating products and systems in the UK.

**Flexibility, consistency & ease of supply**  
OMNIE understand the importance of developing and supporting business relationships.

**Professionalism & peace of mind**  
Our experienced technical project managers will manage your project from start to finish, ensuring a complete service for the whole development from design, specification, manufacture and supply. We can tailor our fulfilment and delivery to match phase or plot by plot based programmes.

We can turnaround a quotation and specification quickly and our rapid manufacturing processes can make sure that your project will be on time and on budget. All our products are designed and manufactured by us in the UK, so we have complete control of the supply chain from beginning to end.

## Contact an expert

Your local OMNIE expert is ready to help you start your project. To find out more, visit [omnie.co.uk/quote](https://omnie.co.uk/quote) and enter your postcode.

**01392 36 36 05**  
**projects@omnie.co.uk**  
**omnie.co.uk**





