wavin

OSMA

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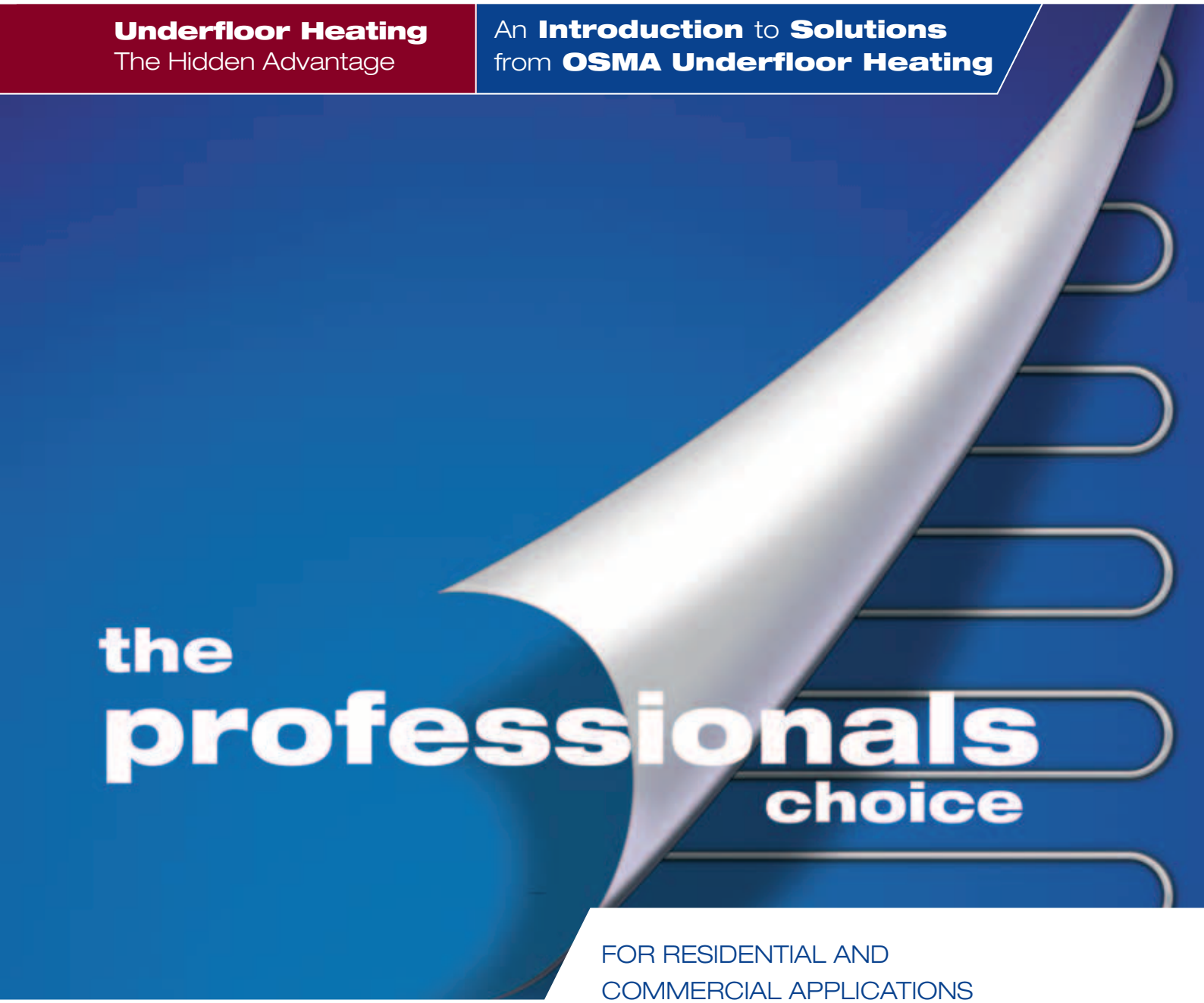
July 2006 UF420

Underfloor Heating
The Hidden Advantage

An **Introduction** to **Solutions** from **OSMA Underfloor Heating**



the professionals choice

FOR RESIDENTIAL AND COMMERCIAL APPLICATIONS

Intelligent Solutions for Heating Projects

About OSMA UFH

Versatility, Consistency and Reliability

OSMA Underfloor Heating Systems
A Partnership of Experience

OSMA Underfloor Heating combines the specialist skills and experience of two companies:

- **Wavin** is Europe's largest manufacturer of industrial plastic products, and one of the largest producers of plastic pipe and fittings in the world
- **ThermoBoard** is the UK's leading manufacturer of innovative underfloor heating systems. The company has pioneered the development of product-based solutions to underfloor heating and holds patents on three systems

OSMA Underfloor Heating is the trading name of Thermoboard Ltd. It draws on more than 30 years experience of underfloor heating and is one of the leading UK suppliers, covering all aspects of both residential and commercial sectors.

OSMA Underfloor Heating is part of the Wavin Group, and one of the originators of UFH technology.

Experience includes:

- Grade 1 listed buildings
- Projects for national house builders
- Housing Associations
- Boats and mobile homes
- Zoos

Specific projects include:

- British Museum
- Eden Project
- Scottish Poetry Library
- London Transport Museum

OSMA Underfloor Heating has supplied underfloor heating to more than 60 architects' practices, to heat either the practice offices or their own homes

In addition, OSMA UFH has developed RIBA CPD approved training to architects about underfloor heating.

OSMA Underfloor Heating is a specialist UFH manufacturer and the only supplier to have developed a product-based approach to UFH. It manufactures almost all of these products, and its pipe, in the UK.

Its main factory and Head Office are in Exeter and it has a Northern Regional office at the Wavin plant in Durham.

Any underfloor heating system must be designed to provide good service throughout the economic life of a building, therefore the Company supplies pipe that conforms to Class S of BS EN 7291, which requires more than 50 year service life. This standard is more demanding than the DIN4726 standard used by other manufacturers.

Many customers demand a complete UFH design and supply service. OSMA Underfloor Heating provides a warranted system design service, with direct-to-site delivery of all the materials needed to implement the system. Its installation drawings are recognised as being the best within the industry. These complete systems are backed up by the most comprehensive, insurance-backed warranties available.

Legislation is constantly changing and from June 2007, anyone selling a building will be expected to provide potential buyers with a Building Information Pack. Buildings with an OSMA designed and supplied underfloor heating system installed in them will be rated highly due to the systems high energy efficiency.

For customers who wish to design their own systems, the Company can supply a comprehensive range of UFH components.

OSMA Underfloor Heating benefits from the memberships of its constituent companies. Thermoboard Ltd is a Full Member of the Underfloor Heating Manufacturer's Association, and Wavin is a member of Eu-Ray – the European Association for Surface Heating and Cooling.

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Contents

Further Information

The following related publications are available for OSMA Underfloor Heating Standard Products Range:

- **Design and Installation Guide**
- **Trade Price List**
- **Easy Install Guide**
- **Product Guide**

To obtain copies, please contact:

Literature Requests

Tel: 01249 766333

Fax: 01249 766332

The OSMA UFH Guarantee

OSMA Underfloor Heating is the only UFH supplier in the UK which engineers and manufactures its products. Each system uses the highest specification components. All systems described in this Product Guide are directly backed by a full product guarantee provided that installation has been in accordance with the instructions provided. Unlike some other UFH suppliers, this guarantee is independently underwritten by insurance. *For full details/terms, contact OSMA Underfloor Heating.*

NOTE: For plumbed systems, this Guarantee presumes the use of OSMA Flexible Plumbing Pipe (OsmaGold). The Guarantee may NOT apply if pipe from another manufacturer is used.

Why Underfloor Heating?

Introduction

UFH can keep a building warm using water that is much cooler than that needed by radiators.

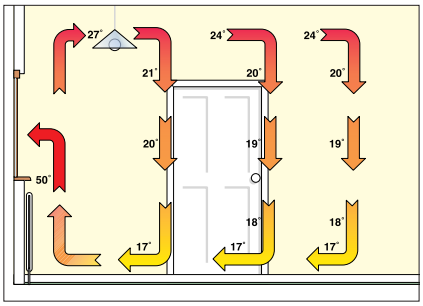
As fossil-fuels become ever more expensive, UFH is able to harness solar energy, geothermal energy and waste energy, while making the most efficient use of fossil-fuels while these are still affordable.

If you install UFH, you will always be able to heat your building.

Radiator convection

Radiators use the air in a room to transfer energy mostly by convection.
Issues with this include:

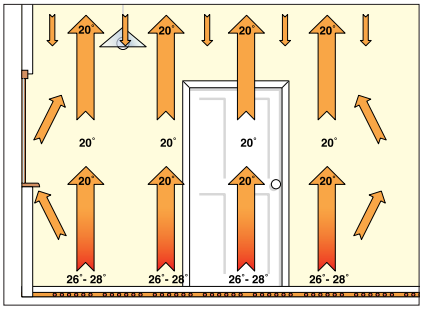
- Heat wasted through windows
- Warm air at ceiling level and cold at floor level
- Dust carried into the air in the room
- Room can become stuffy due to dry reheated air



Underfloor heating radiation

Heat radiates from the floor providing:

- All-round even heat distribution
- It is completely unobtrusive, creating up to 15% more useable space
- More energy-efficient than radiators
- Safer - very low surface temperatures
- More hygienic - less dust in the air



Energy-efficient comfort

UFH needs only to warm the floor surface to 26-28°C, which is about the same temperature as the the palm of your hand. This can be achieved using water at 40-60°C, much lower than radiators need.

Heat losses through windows, ceilings walls and infiltration, as well as from supply pipes, are all reduced. This provides economy and comfort.

What's different about Osma UFH?

Many UFH systems are created on site, one room at a time, using pipe and simple fixings. This "craft- industry" approach makes it difficult to achieve high quality in every project. If radiator heating used the same approach, each radiator would be assembled on site, from sheets of metal, valves and brackets, and then painted.

To overcome these limitations and make installation quicker, OSMA Underfloor Heating has developed and patented a range of standard products. With a product-based approach, it is the product that determines power output rather than the skills or experience of the person who installs it, and these products are as easy to install as radiators. Skilled installers are able to work more quickly and a first time installer can achieve a high quality result.

Each OSMA UFH product has been designed using years of on-site experience and to overcome the problems traditionally encountered with craft-based underfloor heating.

Today's most advanced UFH technology

Products and components to suit every type of floor construction

- Sand/cement screeds and liquid screeds
- Softwood joists and timber I-beams
- Plain and acoustic battens
- Most forms of acoustic and sprung floors
- Raised Access Floors

The Right Solution

Any UFH system has three constituent parts -

- Components that fit into the floor structure,
- Manifolds that fit on the wall and distribute warm water to each pipe circuit, and
- Room temperature controls.

OSMA UFH has developed the most comprehensive, easy to install components designed to suit each part of a system. These are continuously updated, taking into account the practical experience of specifiers, contractors and installers.

Building Regulations 'Part L'

'Part L' (2006) is set to reduce energy used by a building by 23-28% compared with 'Part L' (2002). Legislation within 'Part L' (2010) is set to require a further 25% reduction. Examination of Target Emission Rate (TER) and Design Emission Rate (DER) reveals that 'Part L' (2006) is likely to encourage the wide-scale future use of heat pumps to heat buildings in place of fossil-fuel boilers. Heat pumps can work more effectively with high-efficiency UFH than with radiators.

In future, it will not just be a question of installing any form of UFH. High-efficiency OSMA UFH has been designed to be the most effective partner for a heat pump.

Building Regulations 'Part E'

OSMA UFH includes components that fit quickly and easily into any Robust Standard Detail structure.

Partnership Working

Following the principles advocated by Egan and Latham, the Company has worked very closely with other major building product companies while developing its product range, particularly with Knauf Insulation, but also with J R Danskin and Junckers®.

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Unique Way of Working

OSMA UFH provides two different ways of creating an UFH system

For most customers, it offers a complete design and supply service where it takes responsibility for preparation of heat loss calculations, detailed CAD layout drawings and installation instructions. It supplies User Operating Instructions, plus a set of as-installed drawings for incorporation into the Building Information Pack. Systems that are designed by the company are protected by Professional Indemnity insurance, as well as Product Liability insurance that covers consequential loss. Every project is assigned its own project manager, who is responsible for the project from initial enquiry to post-completion handover.

Alternatively, for builders or plumbers who are already familiar with UFH and who wish to design systems for themselves, the company can supply a range of standard components. It can also supply a simple Bill of Materials calculator to make estimating easy.

In either case, supply is made through a builders' or plumbers' merchant.

The company maintains a register of experienced installers who have installed many OSMA UFH systems successfully. It is also able to provide classroom or on-site training to installers that are installing UFH for the first time.

Residential Projects

The Company has undertaken many hundreds of Residential projects ranging from new-build construction to supplying UFH for Grade 1 listed historic buildings. Its unique technical abilities and understanding of UFH have enabled it to be approved by English Heritage as one of the only suppliers allowed to provide UFH for Grade 1 listed timber floors.

The Company has undertaken housing and apartment projects for -

- Individual self-builders
- Housing Associations
- Local and Regional developers
- National House Builders
- RIBA architects

Many of these have been refurbishment projects. Other projects have included mobile homes and boats.

The company has supplied UFH to more Grand Designs projects than any other supplier, and featured in the Channel 4 programme.

Commercial Projects

The Company is now recognised as being one of the major suppliers of UFH to the Commercial sector. It has a dedicated project management team in Exeter that is experienced with the requirements of major clients, architects, specifiers, main contractors and M+E subcontractors.

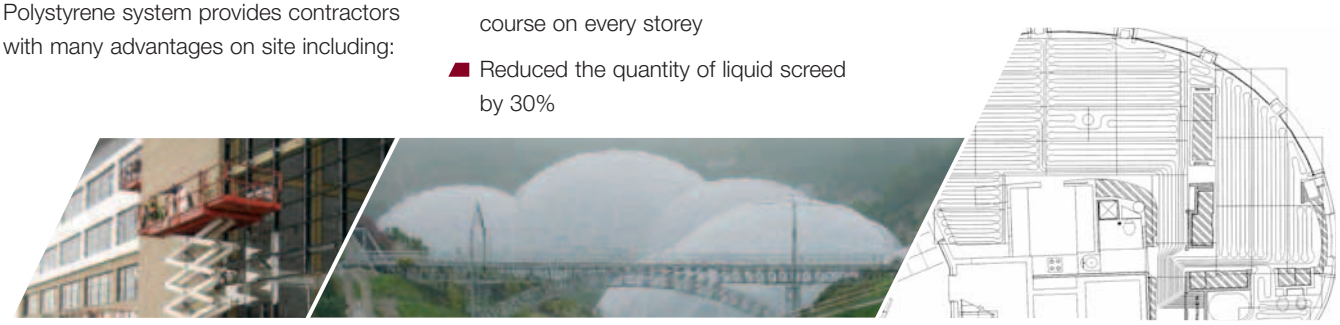
In particular, its unique Pocketed Polystyrene system provides contractors with many advantages on site including:

- Guaranteed performance
- Reduced time on site
- Precise as-installed drawings

As an example of efficient UFH design on one major project this product has:

- Reduced time on site by two weeks
- Saved the cost of an extra brick course on every storey
- Reduced the quantity of liquid screed by 30%
- Reduced screed drying time by 30% while providing assured performance and detailed as-installed drawings.

The Company is uniquely able to incorporate UFH into Raised Access Floors, which no other UFH supplier is able to do.



Solid Floor Construction

Introduction

Solid floor heating includes all floor constructions that have the underfloor heating pipework embedded in either concrete or screed.

These solutions include:

- Concrete structural floors
- Traditional sand and cement screeded floors
- Floors formed using flowing screeds

The above floor types can be used in the following bases:

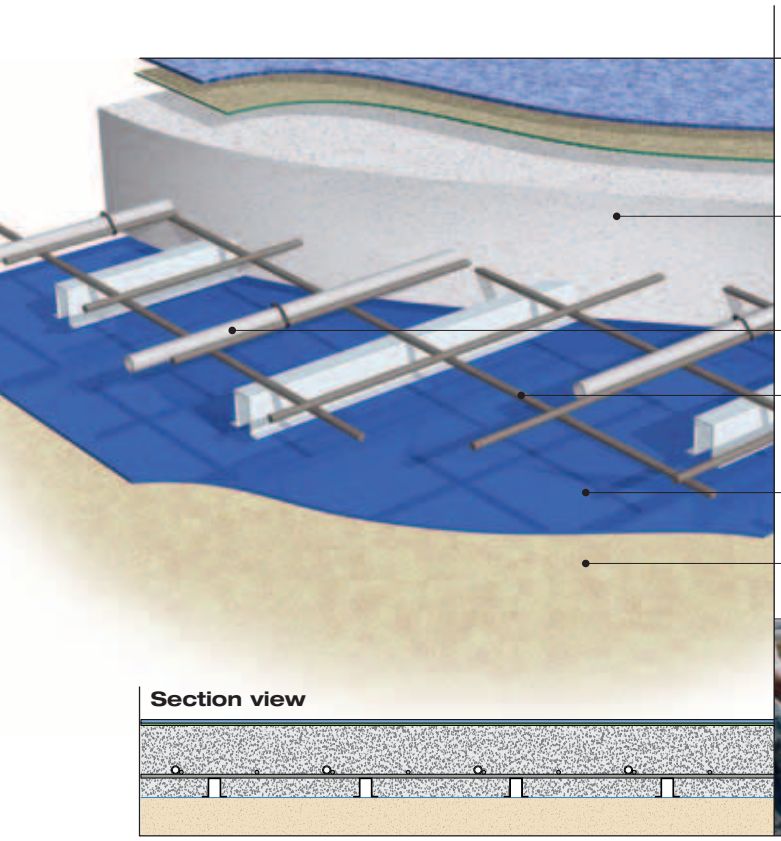
- Cast in situ
- Beam and block
- Cambered planks

OSMA Underfloor Heating has solutions for all of these constructions.

The design and installation of the concrete or screeded floor must conform to the appropriate British Standards and Codes of Practice, including BS EN 1264-4:2001 floor heating, systems & components. Installation BS EN 8204-1:2002 & BS EN 8204-7: 2003 bases and in-situ floorings.

In all forms of solid floor construction the overriding design requirements must be based on the structural requirements of the floor. Uniquely, OSMA Underfloor Heating has products that greatly assist with the design of the floor structure.

Structural Concrete Floor



System Features

- Before concrete is poured OSMA UFH pipes are cable tied to the standard reinforcing mesh commonly found within the structural floor structure.
- Pipe can be configured to meet specific project requirements and can be laid easily.
- The OSMA UFH pipework can be positioned on either the bottom or top layer of reinforcing bar, dependant on the total depth of the structural floor.

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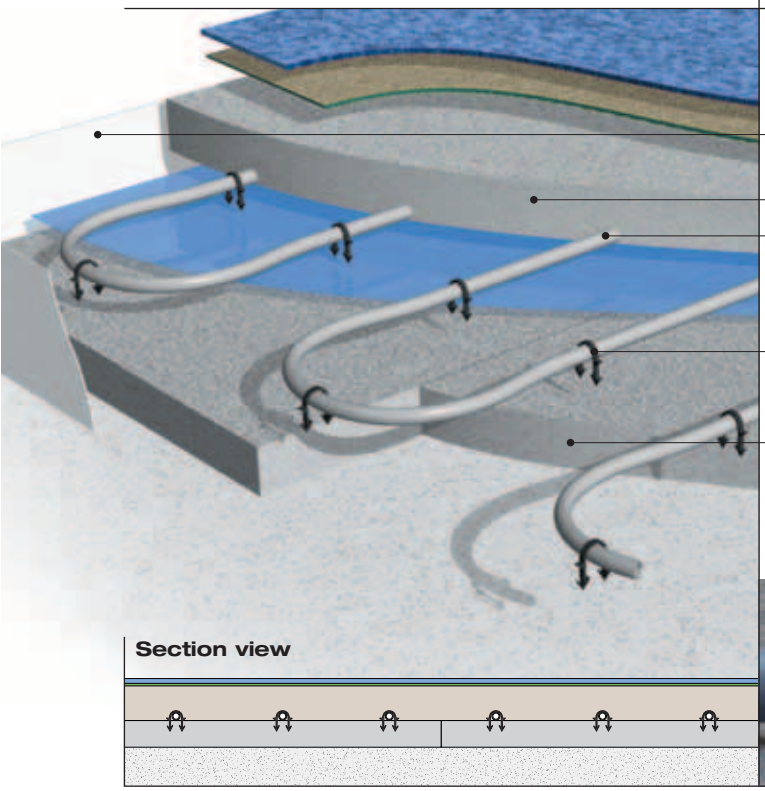
Basic Screeded Floors



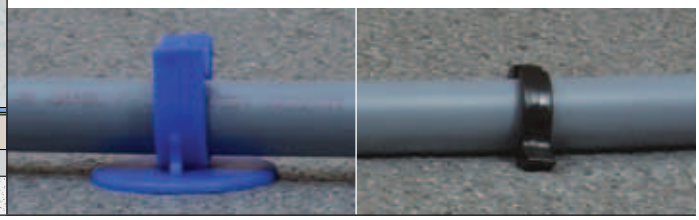
System Construction

Comprising:

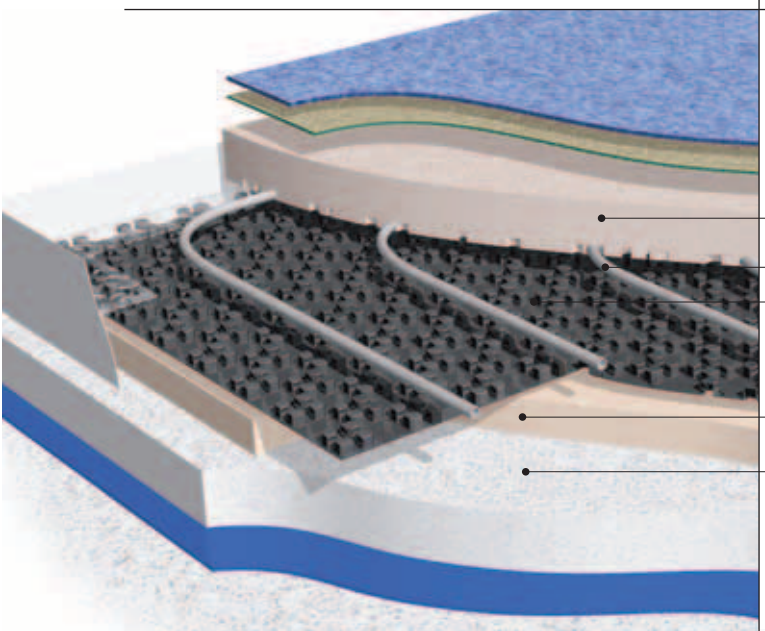
System Features

- Allows independent choice of insulation panels to suit the thermal and acoustic properties and performance required: suitable for any insulation type/thickness.
- Installer marks top of insulation to indicate pipe position and spacing.
- Gaiter from edge insulation overlaps the top of the insulation to prevent screed ingress under panels at the perimeter.
- Use staples with rigid insulation or screw-clips with mineral wool.

Section view



System Plates



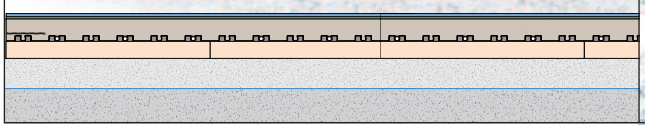
System Construction

Comprising:

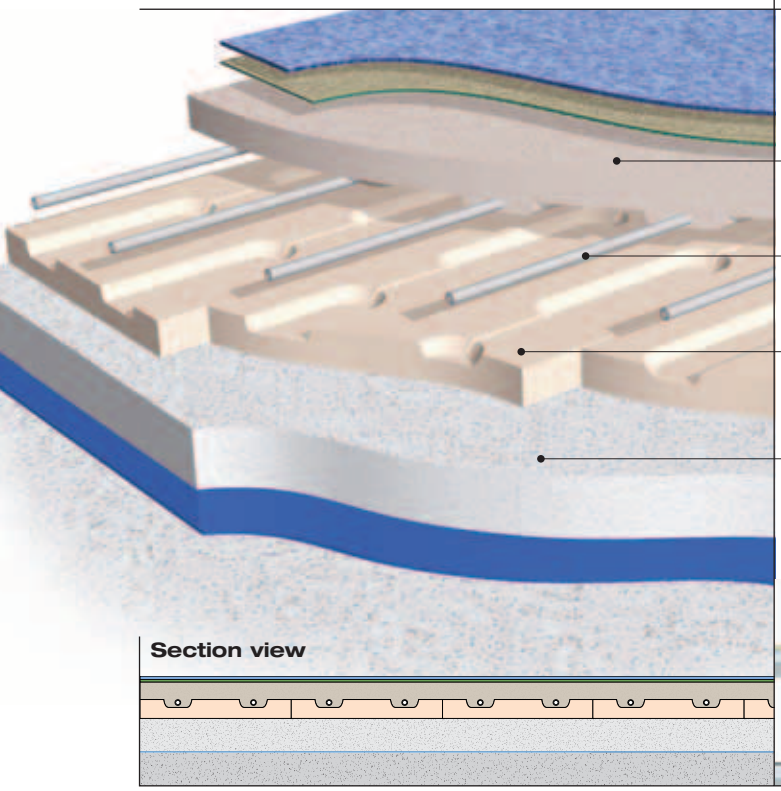
System Features

- System Plates can be laid over any level sub-floor allowing independent choice of insulation panels to suit the thermal & acoustic properties and performance required.
- Can be used with either traditional or liquid screeds.
- Pipe can be configured to meet specific project requirements.
- Layout options include diagonal pipe placement.
- Plates are sufficiently strong to support foot traffic and wheel barrows.

Section view

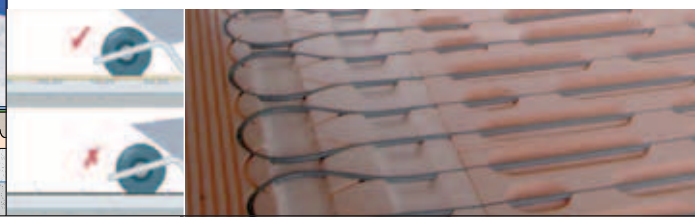


Pocketed Polystyrene

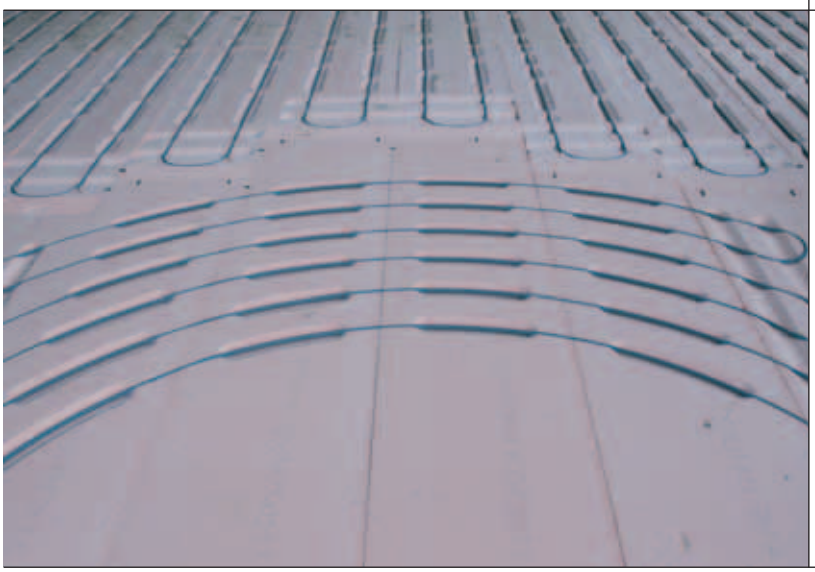


System Features

- Machined panels of closed-cell Knauf Polyfoam used in place of plain insulation – no staples, no system plates
- Fixed pipe centres assure thermal performance and consistency
- Insulation and UFH base installed simultaneously – saves time on site
- Pocket design reduces screed volume – reduces cost and drying time
- Complementary Channel Panels insulate Flows and Returns

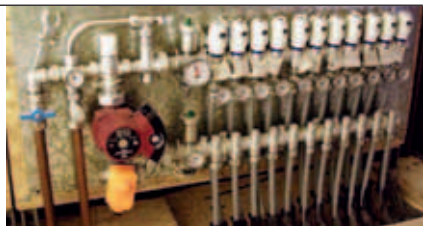


Bespoke Pocketed Polystyrene



System Features

- Specially-cut panels used with standard Pocketed panels to minimise installation time
- Enables UFH systems to be reproduced identically by different installers on different sites
- Flows and Returns set in channels in the top of the insulation – avoids overheating of screed and waste of energy in corridors, doorways and approaches to manifolds
- Brings Flows and Returns to manifolds at correct spacing to ensure neat transition between floor and wall



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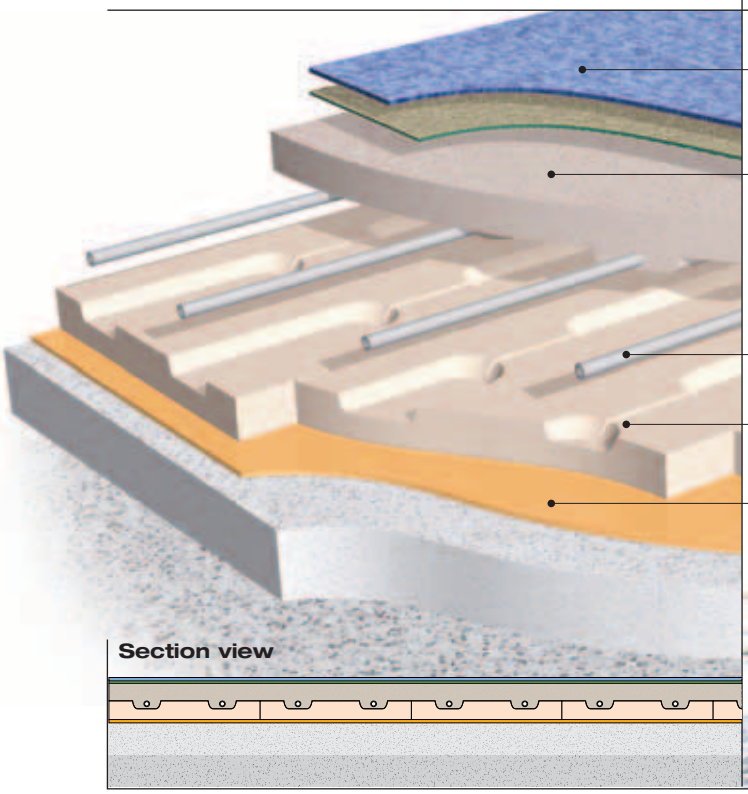
Acoustic Construction



Section view

System Construction

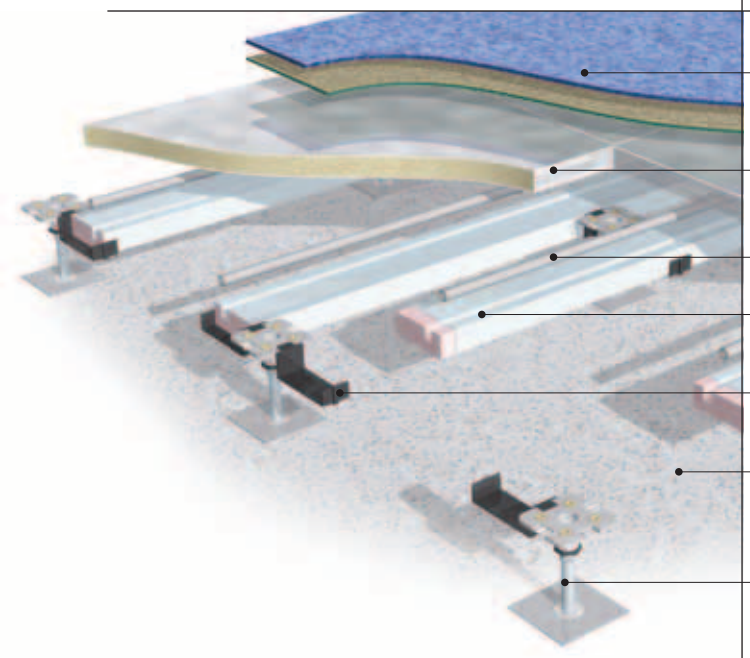
Comprising:

- *Floor finish (by others)*
- *65mm (min) sand cement screed, or 40mm propriety screed, nominal 80 kg/m² mass per unit area*
- *15mm OSMA UFH continuous pipe*
- *OSMA UFH Pocketed Polystyrene*
- *Resilient Layer 1-5mm foamed polythene layer 30-36 kg/m³*

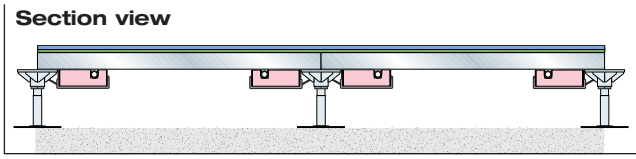
System Features

- Complete compliance with all Part E RSDs for screed floors
- Can use basic Staples or Screw-Clips, or System Plates or Pocketed polystyrene panels including bespoke panels

Raised Access Floor (RAF)



Section view



System Construction

Comprising:

- *Floor finish*
- *RAF Panel*
- *15mm OSMA UFH pipe*
- *Heating module*
- *RAF bracket*
- *Sub-floor*
- *Pedestal*

System Features

- The OSMA modules press into close contact with the galvanised steel surface of the floor panels, which acts as a diffuser
- OSMA brackets and modules can be retro-fitted to older types of Raised Access Floor
- Modules can be repositioned at any time in the future
- This totally unique system creates a heating + cooling system within a Raised Access Floor structure
- OSMA brackets plug into the pedestal caps and support Heating + Cooling modules
- Good access to the void beneath the floor is retained

OSMA UFH The Hidden Advantage 2006

Dry Timber Constructions

Introduction

Underfloor Heating can be used successfully with almost all forms of timber floor but achieving success requires specialist knowledge. It is very easy to install the wrong sort of UFH system, which can very quickly damage an expensive hardwood floor. By comparison, installing the right form of UFH can be the very best way of looking after a timber floor throughout its life. OSMA Underfloor Heating has this knowledge plus long experience and it is the only company approved by English Heritage to provide UFH systems for Grade 1 Listed timber floors.

Over the range of temperature change in a building between heating ON and heating OFF, timber does not change dimension to any significant extent. However, it does expand and contract as its moisture-content changes, which will happen naturally as the seasons change. Wood floors should be laid at a moisture-content of 10-11%. When the heating system is turned ON or OFF, and the moisture-content of the floor changes, it is very important to ensure that the moisture-contents of the upper and lower surfaces of the timber remain the same. If one surface becomes drier than the other, the timber will either cup or crown.

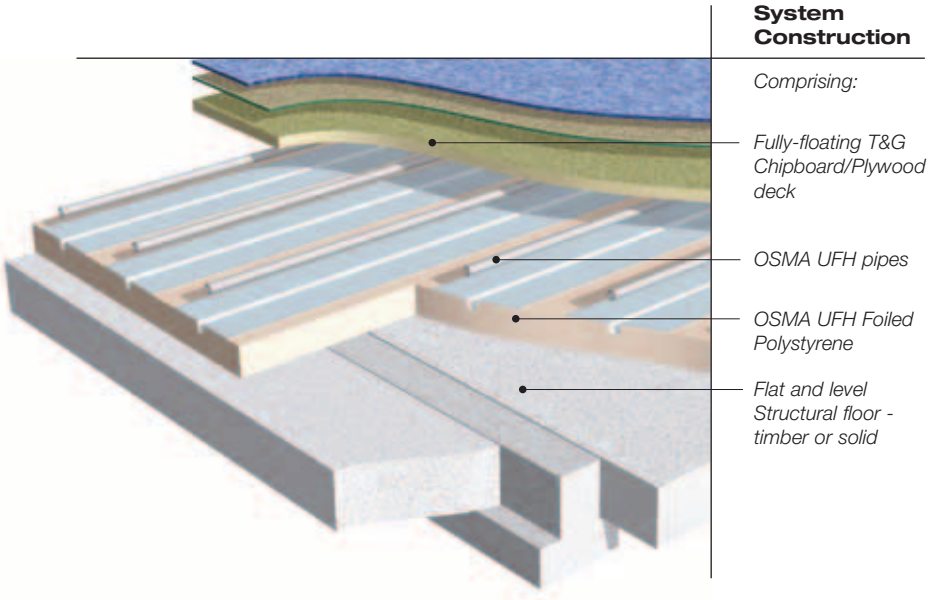
OSMA Underfloor Heating products are designed to conduct heat directly into the floor deck, rather than heat the air below the floor deck. Heating the air creates a heating system that provides much lower output than an OSMA system provides but it can also over-dry the underside of the timber floor.

OSMA products have also been designed to work within the floor construction holistically. They allow the floor deck to be glued to the tops of joists/battens so that the strength of the floor construction can be maximised while at the same time they minimise the risk of creating floors that squeak or tick.

OSMA is able to supply UFH systems that fit completely within all of the Part E RSD approved timber floor constructions.

Products that are manufactured from Polyfoam extruded polystyrene are available in different thicknesses, to suit different floor U value requirements. OSMA Underfloor Heating has developed a range of products that can be easily installed into timber constructions, including acoustic separating floors, that provide the user with the assured performance necessary for dry timber constructions.

Foiled Polystyrene



System Features

- No need to buy and install routed insulation and plates separately, and much less risk of plates being damaged and coming loose on site.
- The panels are easy to trim to size.
- There is no ‘ticking’ of plates during warm up and cool down, which can occur with thick separate aluminium plates.
- Forming the panels from high compressive – strength extruded polystyrene avoids the need for fitting edge or corner battens.

OSMA Foiled Polystyrene Heating Panels for fully floating floors, are an assembly of extruded polystyrene insulation, aluminium diffusers and polythene film.

Pipe channels are cut into the upper surface of each panel and fitted with an aluminium diffuser. A polythene film is fitted over the whole surface. This seals the diffuser to the polystyrene, minimises ‘ticking’ as the panel warms and protects the pipe channel from dirt ingress during installation.

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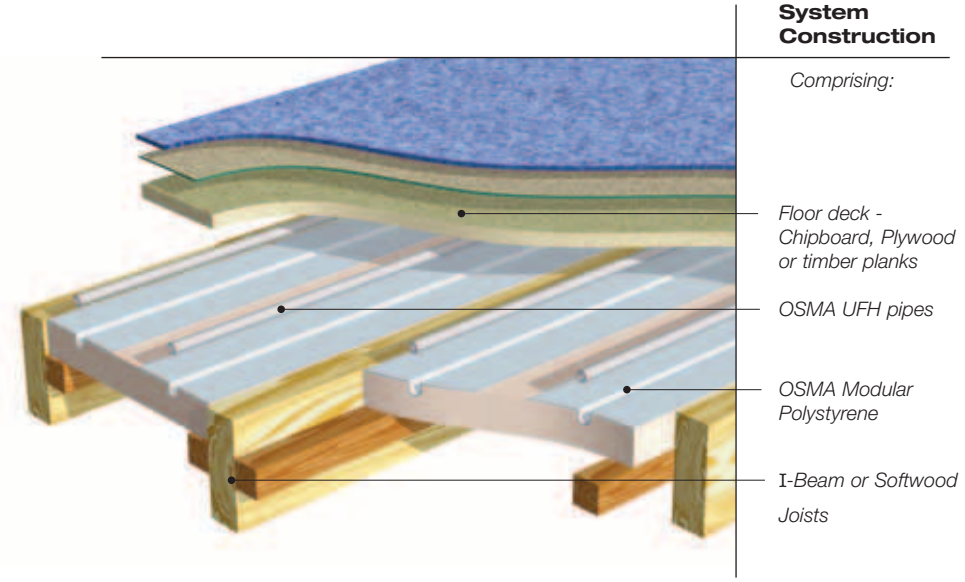
Modular Polystyrene



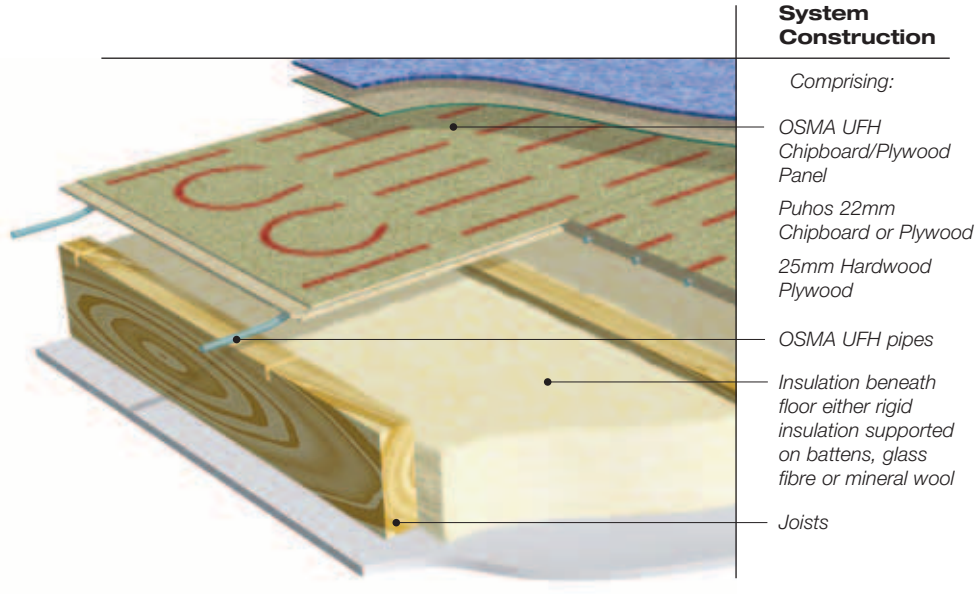
OSMA Modular Polystyrene Panels are designed for use on first floors and are similar to foiled polystyrene. They are manufactured to fit between softwood or manufactured (I beam) joists set at 400mm or 600mm centres.

Pre-piped panels are installed from below and are connected using OsmaGold fittings.

System Features

- Quick and simple installation of pre-assembled UFH modules.
- Diffusers in direct contact with underside of floor deck – maximising heat transfer.
- Allows floor deck to be installed prior to underfloor heating.
- Panels can be screwed to underside of floor deck or supported on extruded angle brackets.

Chipboard/Plywood Panel



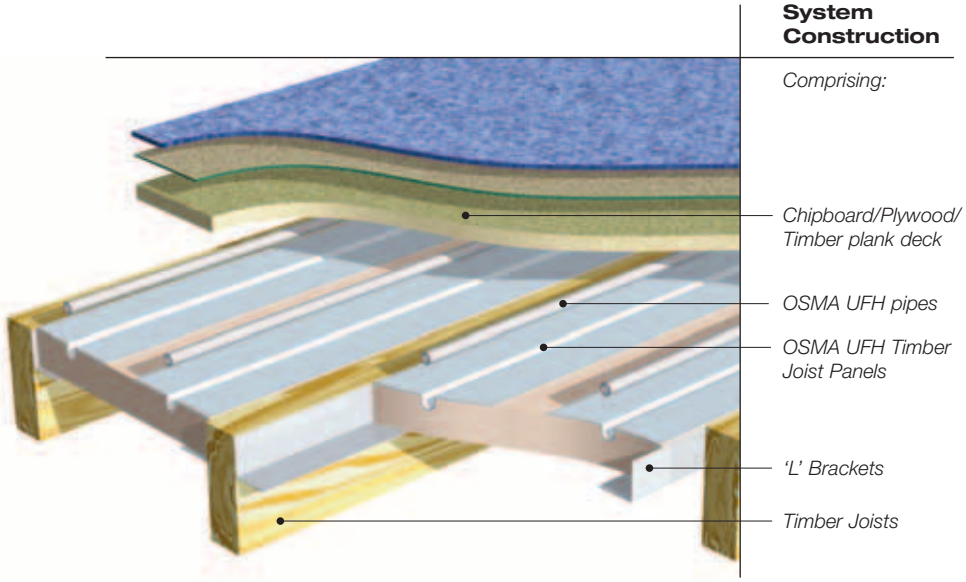
Patented OSMA Modular Chipboard panels are standard moisture resistant 2400 x 600mm flooring panels. A serpentine channel is formed into the underside, into which 10mm diameter UFH pipe is pressed.

The whole of the underside of the panel is covered with aluminium foil and the top surface is permanently printed to show the position of the pipe.

System Features

- Allows installation of a floor deck AND UFH at the same time
- Just replace some of the plain floor panels in the active area of the floor with these piped panels
- Easy to install UFH where joist spacing is random or where noggins, dwangs or other services are already installed
- High power output and low thermal mass provides fast response
- Panels can be lifted at any time, to provide access to the floor void
- Facilitates room at a time installation of UFH

Timber Joist



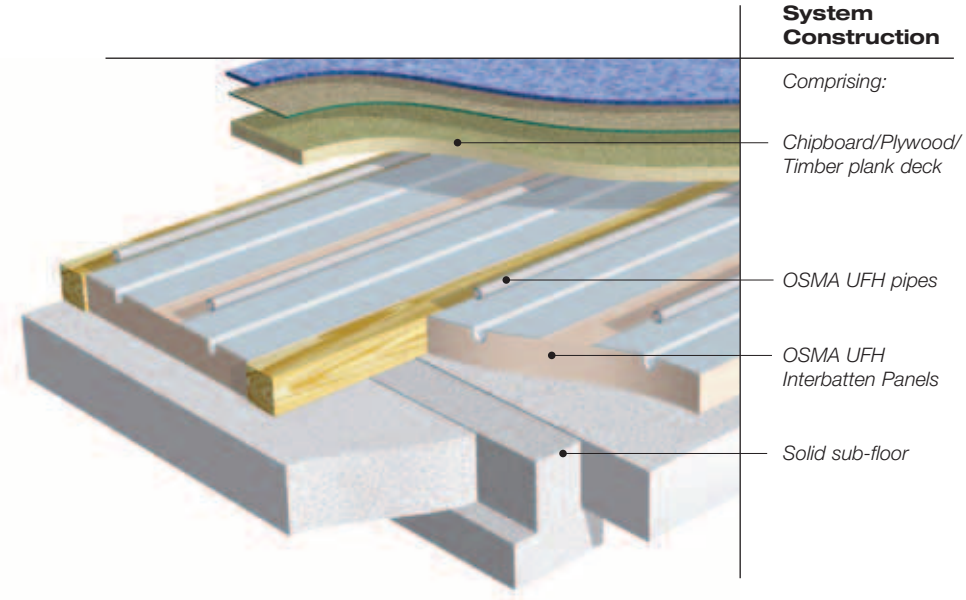
OSMA Timber Joist Panels are foiled polystyrene panels designed for fitting from above, between joists set at 400mm or 600mm centres.

Panels are installed within the joist space supported on 'L' shaped angle sections that are installed flush with the top of the joist. This provides support for the panel and ensures direct contact with the floor deck.

System Features

- No need to buy and install routed insulation and plates separately, and much less risk of plates being damaged and coming loose on site.
- The panels are easy to trim to size.
- There is no 'ticking' of plates during warm up and cool down, which can occur with thick separate aluminium plates.
- 'L' shape brackets provide faster installation.
- Panels are fitted with continuous pipe circuits.
- Panels are available in a range of thicknesses to suit project requirements.

Timber Batten



OSMA Timber Batten Panels are foiled polystyrene panels that are designed to fit between battens and are used where either a) the floor must support greater loads than a fully floating floor is designed for, or where b) square edge planks must be used.

The panels are always used with battens of the same thickness.

Plain battens can be fixed to the understructure or left floating. Understructure must be flat and level to SR1/SR2 standard.

System Features

- No need to buy and install routed insulation and plates separately, and much less risk of plates being damaged and coming loose on site.
- The panels are easy to trim to size.
- There is no 'ticking' of plates during warm up and cool down, which can occur with thick separate aluminium plates.
- Panels are available in arrange of thicknesses to suit project requirements.

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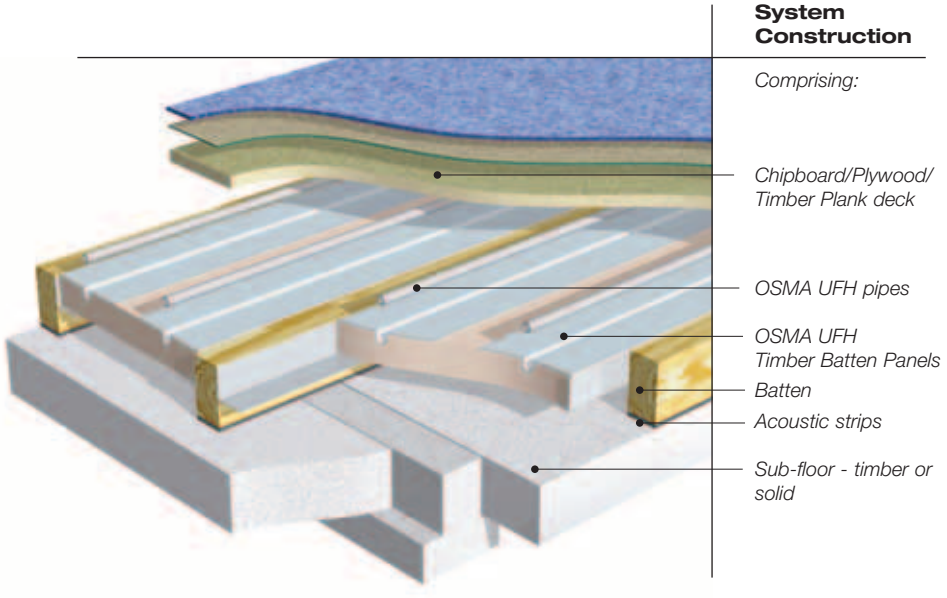
Timber Batten with Acoustic Batten

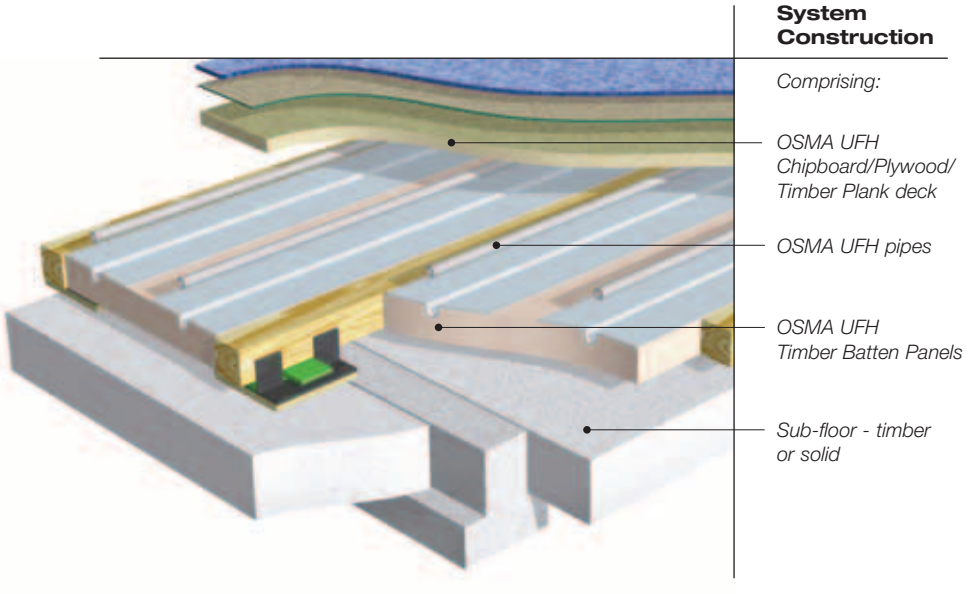


System Features

- The panels are manufactured from high performance extruded polystyrene and are available in 35mm, 50mm and 75mm to suit project requirements.
- For installation within acoustic separating floors – to suit "Part E" Robust Standard Details FFT1 and FFT3.
- Designed to be used with subfloors that are flat and level to standards SR1 or SR2.

OSMA Timber Batten panels can be installed in Acoustic Battened floors. Using 'L' shape brackets, OSMA Timber Batten panels can be supported to ensure that they are in constant contact with the floor deck regardless of the movement of the resilient layer.

Timber Batten with Acoustic Cradle



System Features

- The panels are manufactured from high performance extruded polystyrene and are available in 35mm, 50mm and 75mm to suit project requirements.
- For installation within acoustic separating floors – to suit "Part E" Robust Standard Detail FFT2.
- Designed to be used with uneven floors.
- Can be used with sprung cradles in gymnasium floors.

OSMA Timber Batten panels are foiled polystyrene panels that are supported directly by the top packer in the acoustic levelling cradle. The panels are always used with battens of the same thickness. The panels are supported in such a way that the top of each panel is in constant firm contact with the underside of the floor deck regardless of any movement in the resilient layer.

Manifolds and Controls

Within any underfloor heating system there are three constituent elements:

- The floor components
- The manifold
- The room temperature controls

In addition to the most comprehensive range of floor components, OSMA Underfloor Heating has spent the last ten years continually developing and refining the best range of manifolds and controls.

OSMA UFH Manifolds are available either in component form or as pre-assembled units.

Pre-assembled manifolds are pressure tested and mounted on a galvanised steel back plate ready for installation.

OSMA Underfloor Heating has developed a simple-to-use wiring centre that integrates in a single unit the controls required for underfloor heating, radiators, hot water cylinder and boiler.

Manifolds and water distribution

Pre-assembled manifolds combine the latest fail-safe technology with the new Grundfos Alpha Plus circulator. OSMA can also provide an upgrade to an Alpha Plus Pro, an energy efficient, “A” rated circulator.

OSMA pre-assembled manifold

Each separate 15mm heating pipe circuit is connected to a separate flow and return port on the manifold. Circuits can be controlled separately or together by individual room thermostats. These operate thermo-hydraulic actuator heads on the return port for each circuit.

If the boiler flow temperature exceeds 60˚C, the temperature must be reduced to a level suitable for underfloor heating. The lower temperature required is achieved using a water mixing valve and secondary circulator as part of the manifold assembly. The manifold is also available without the pump and water mixing valve for projects where a boiler system can directly and safely provide water at 60˚C or below.

Each engineered manifold comes with automatic air vents, control valves and return temperature gauges to aid balancing. The manifolds are available in wall recess or surface mounted boxes.

Heated towel rails can either be linked into an underfloor heating circuit or connected to the domestic hot water supply.

Branch Manifolds

Manifolds can also be assembled from individual components that can be purchased separately from the OSMA UFH standard range. These allow a manifold assembly to be configured to suit a particular preference.

The OSMA mini unit is designed to allow a small area of underfloor heating to be added to an existing heating system. The unit comes complete with circulator, water mixing valve and actuator. This unit specifically suits UFH systems that comprise 1 or 2 pipe circuits, such as in conservatories.

OSMA Mini Unit

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Wiring and Control Centres

The UH-1 wiring centre integrates controls for underfloor heating, as well as domestic hot water and radiators.

The unit is particularly useful where mixed systems are installed.

The wiring centre can be upgraded to allow for centralised control of programmable thermostats. A model is available that allows for offsite interrogation and switching.

The wiring centre incorporates LED's allowing for fast, efficient system commissioning, ongoing monitoring and problem solving.

The UH-1 wiring centre and RT-N thermostats (see below) are 12v and only require CAT5E cabling. In certain circumstances this allows a room thermostat to be sited in a bathroom. The unit can also be linked to a computer system via the internet, thus allowing remote access and control of a heating and domestic hot water system.

UH-1

The UH-1 allows connection between

room thermostats and actuators controlling underfloor heating circuits. Up to 8 zones can be controlled. The unit also provides switching for the boiler and has the ability to control the Domestic Hot Water and radiator circuit. The UH-1 has LED's that show zone and fuse status.

UH-1M

The UH-1M is a smaller 4 zone unit. The

thermostats are 240V rather than 12V as with the UH-1. The unit is designed to control smaller manifolds. The UH-1M only allows the UFH system to come on when the boiler is 'ON'.

TR-1

Addition of an OSMA TR-1 Telephone

Remote Control unit enables a heating system to be interrogated, monitored or adjusted from a remote location, via a telephone/internet line.

MC-1

By connecting an OSMA MC-1 unit

(Master Keypad) to the UH-1 up to 16 RT-N low voltage thermostats can be controlled from one central point. From the central keypad, each thermostat can be programmed, giving easy management of the comfort levels throughout a building.

Room Thermostats

OSMA Underfloor Heating can supply a range of proprietary thermostats in addition to its own range.

The OSMA range of thermostats are 12V and can be situated in areas where 240V thermostats are unsuitable. The range includes controls for domestic hot water, radiators systems and for in-floor temperature control.

OSMA large format LCD room thermostat

RT-N

A unique multifunctional "dual mode"

thermostat. This unit can be set to work as a simple digital thermostat or switched to become a fully programmable thermostat. In addition the unit features frost protection modes and can be locked to avoid unauthorised adjustment.

PRT-NR

Where control over the floor surface

temperature is also necessary the PRT-NR works in conjunction with a remote floor sensor. The thermostat can be programmed to switch off the heating when the floor sensor reaches the set point.

RM-1

A hand held remote control is available for use with any of the OSMA room thermostats.

Underfloor Heating
The Hidden Advantage

An **Introduction** to **Solutions** from **OSMA Underfloor Heating**

OSMA Underfloor Heating Systems
A Partnership of Experience

OSMA Underfloor Heating combines the specialist skills and experience of two companies:

- **Wavin** is Europe's largest manufacturer of industrial plastic products, and one of the largest producers of plastic pipe and fittings in the world
- **ThermoBoard** is the UK's leading manufacturer of innovative underfloor heating systems. The company has pioneered the development of product-based solutions to underfloor heating and holds patents on three systems

Bespoke System Design Service

OSMA Underfloor Heating provides a complete warranted system design service with direct-to-site delivery of all materials, installation drawings and instructions for projects that are not suited to a component solution.

UFH Components

For straightforward smaller UFH projects, OSMA Underfloor Heating provides a range of components that can be used by heating engineers when they design heating systems themselves.

Market Leader

OSMA Underfloor Heating is one of the largest UK suppliers of UFH and the technical leader. It supplies UFH to the widest range of projects from Conservatories to major Hospitals and Schools, as well as to specialist projects such as Zoos and Boats.

Availability

Supply

All OSMA systems are supplied through a nationwide network of merchant distributors. For details of your nearest stockist, contact OSMA Underfloor Heating.

Conditions of sale

The company will not accept responsibility for the malfunction of any installation which includes components not supplied by OSMA Underfloor Heating. Goods are sold subject to company conditions of sale.

For sales enquiries, or to place an order

Please contact OSMA Underfloor Heating:

SALES/ORDERS
Tel: 01392 444122
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Email: info@osmaufh.co.uk

OSMA can design and supply bespoke systems to meet specific application requirements or to suit specialised construction projects. These include acoustic and sprung floors, specialist screeds, high strength floating floors, and industrial floors – or for multiple unit projects requiring large numbers of identical installations (housing or flats). OSMA UFH technology can also be used for cooling. *For information, contact OSMA Underfloor Heating.*

ISO 9001:2000

OSMA Underfloor Heating is a member of the Underfloor Heating Manufacturers Association

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