

supplying the leading
water-based underfloor heating solution

warmth that
flows...



Dellava

UNDERFLOOR HEATING SYSTEMS



the only comfortable solution...

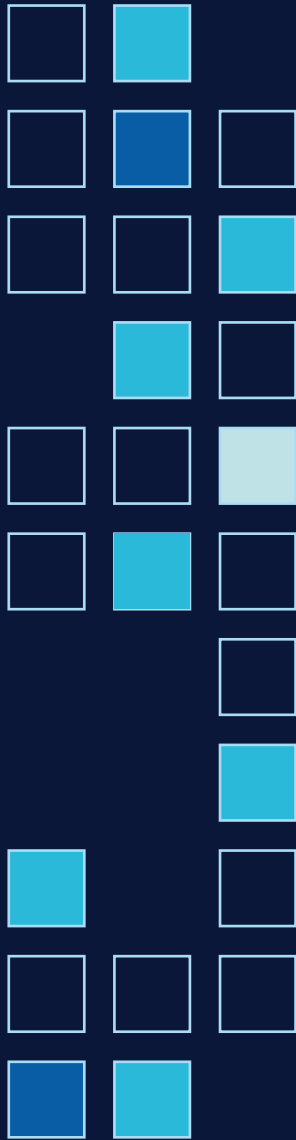
When you are starting a new project there are lots of decisions to make. We are aiming to make one of those decisions easier for you... your choice of heating system. All modern homes need to be heated and we have grown used to conventional central heating systems with radiators on the walls.

But there is another way. A better way. By taking that heating system off the walls and installing high-tech pipes in the floor you are able to transform your new home in terms of both space and comfort – you have created an underfloor heating system.

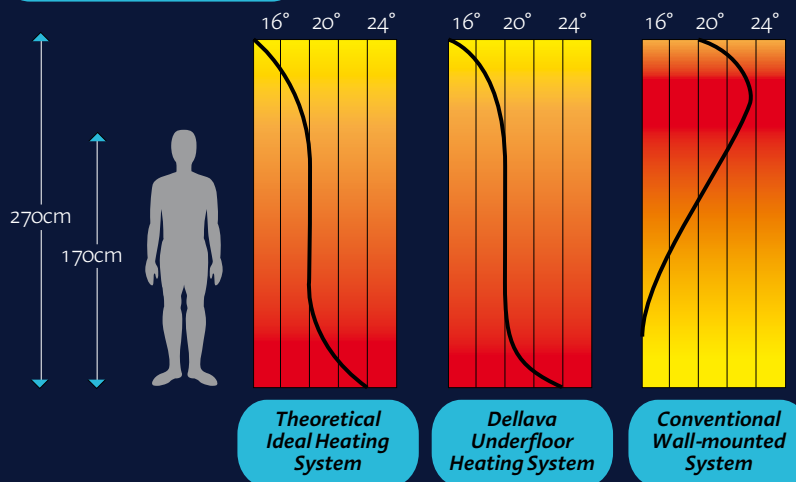
This is exactly what a Dellava underfloor heating system from Thermal Reflections Ltd will do for you. It will keep you warm day and night, summer and winter. And it'll do it more effectively and more efficiently than any conventional heating system.

Floor heating is very effective, the temperature profile generated provides a comfort level for the occupants without having to waste energy heating the total volume of the area.

This applies to all heated space in the property but is especially true in high-ceilinged areas.



Temperature Profile



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Underfloor heating is going through a massive surge of growth for one reason – **it is a far superior way to heat your home.** You and your family will benefit from the healthier living environment that underfloor heating creates.

There are no convection air currents which virtually eliminates airborne dust – great news for all and especially for allergy sufferers. You will also enjoy the lower heating bills that come with the lower temperatures and greater efficiency of the system. In addition your property will not have to be compromised in room layout because radiators are not there on the walls to dictate furniture size and placement. Live in harmony with your home.



DELLAVA UNDERFLOOR HEATING WILL BENEFIT YOUR PROPERTY. HERE'S HOW:

- SAFE** – no exposed hot surface or sharp edges to cause injury
- CLEAN** – dust laden air convection currents are virtually eliminated
- EFFICIENT** – lower running costs mean less fuel use, kinder to the environment
- INVISIBLE** – no unsightly radiators to compromise room layout
- SILENT** – no clicking pipes
- COMFORTABLE** – a gentle, even warmth throughout



A Dellava underfloor heating system from Thermal Reflections will be custom-designed and delivered to site with full instructions and CAD drawings. **You can install it yourself, your plumber can do it or we can do it for you.**



Either way, you will be covered by our comprehensive guarantees and design indemnity. You can be sure that a Dellava underfloor heating system will perform and perform well.



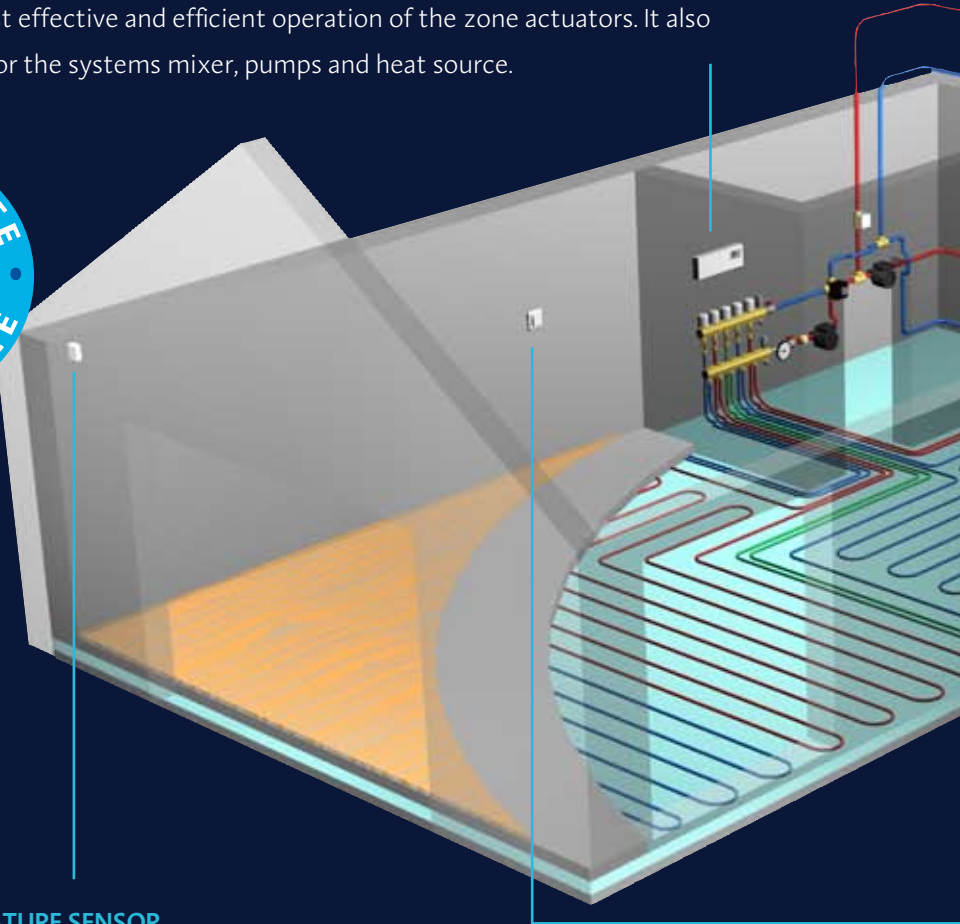
Controlling your System

Introducing “INTELLIGENT

THE INTELLIGENT MASTER CONTROL BOX

Thermal Reflections is proud to introduce INTELLIGENT CONTROL, the next generation of floor heating controls. The INTELLIGENT CONTROL is specifically designed to accurately manage a complete underfloor system to a far higher level of efficiency. The system is easy to install and easy to use, with its flexible and modular design, it can be tailored to suit your lifestyle.

The Intelligent Master Control box communicates with all the individual room sensors to achieve the most effective and efficient operation of the zone actuators. It also provides outputs for the systems mixer, pumps and heat source.

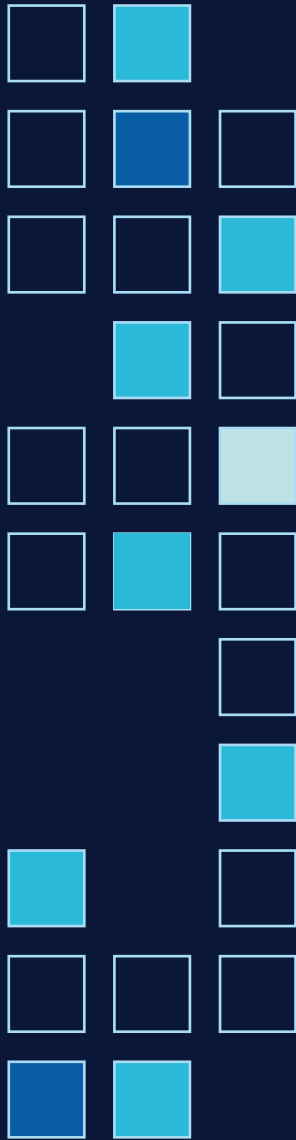


OUTSIDE TEMPERATURE SENSOR

The rate of heat loss from any building is governed by the temperature difference from inside to out. By using an outside sensor, the water temperature supplied to the system is constantly and automatically adjusted to give the most efficient and optimum control.

The intelligent control uses this feature along with self learning room sensors to provide the most comprehensive underfloor heating control system available in the UK today.

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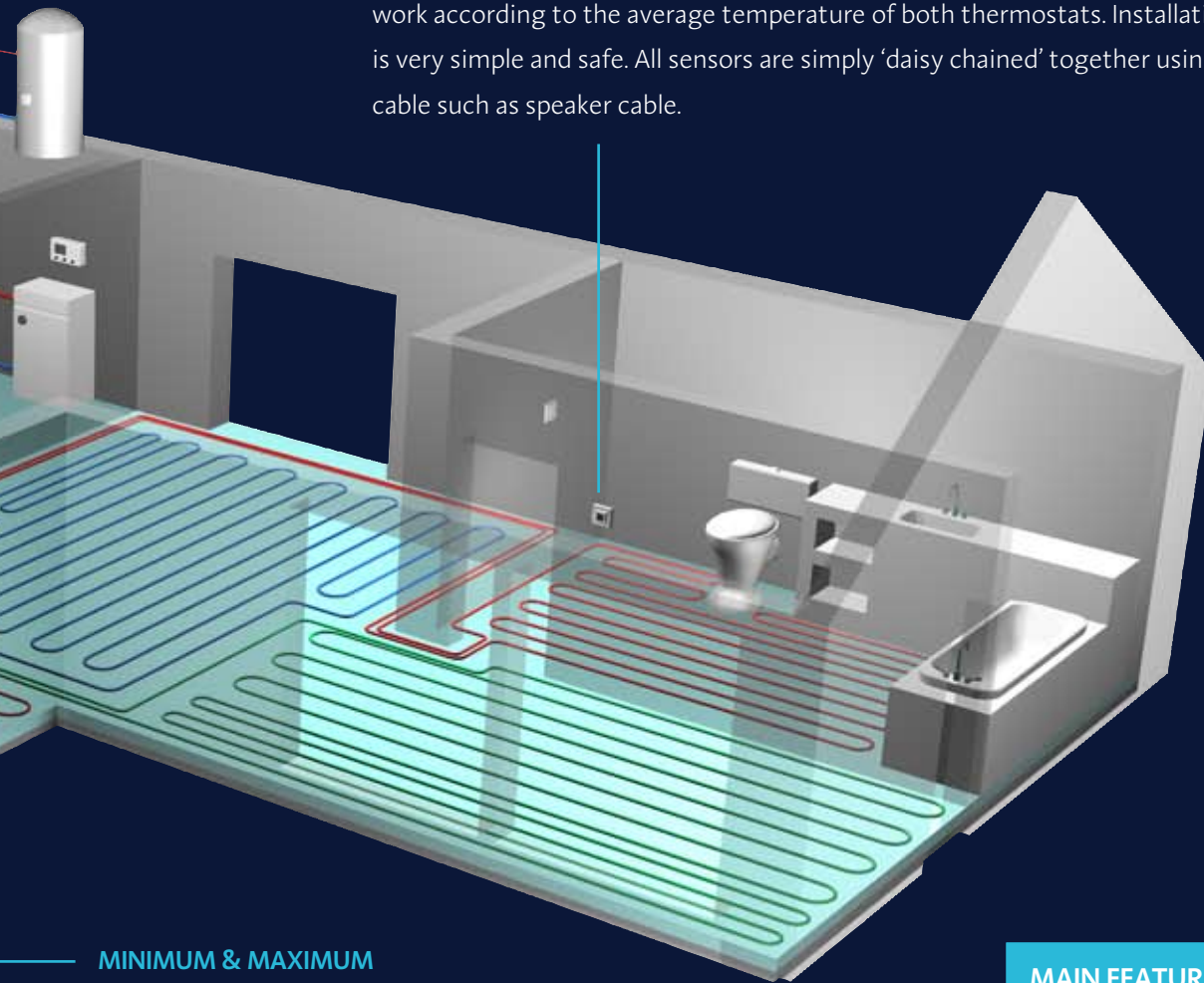


CONTROL” our premium solution...

THERMOSTATS

A full range of thermostats is available depending on the application. Each thermostat has self learning circuitry which eliminates temperature overshoot and undershoot, a problem all too common in conventional heating floor heating controls.

For larger open plan areas two thermostats can be used. The temperature control will then work according to the average temperature of both thermostats. Installation of this system is very simple and safe. All sensors are simply ‘daisy chained’ together using an inexpensive cable such as speaker cable.



MINIMUM & MAXIMUM TEMPERATURE CONTROL

In addition to accurately controlling the air temperature, the minimum controller gives the end user the ability to set a minimum temperature within the floor. This is ideal for bathrooms or areas with other heat sources (e.g. open fires or kitchen ranges).

The maximum controller gives the end user the ability to set a maximum temperature within the floor. This is ideal for protecting areas with expensive hardwood flooring.

MAIN FEATURES:

- > Easy to install, easy to use
- > Modern European Design
- > Weather Compensated
- > Silent operation
- > Wired or wireless
- > Wide range of thermostats
- > Self learning optimising sensors
- > Flexible & modular design

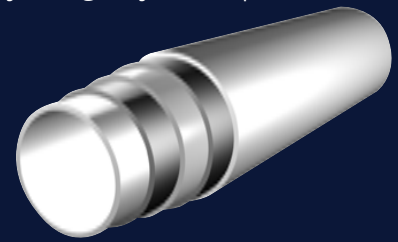


Dellava Water System

Dellava is the no.1 name for all your underfloor heating requirements. Developed by Thermal Reflections, all of our systems are of the highest quality and give you the peace of mind to know that you have made the right choice.

UNDERFLOOR HEATING PIPE

Dellava systems use flexible 17mm 5-layer PEX Pipe. This 5-layer pipe safely sandwiches the delicate EVOH oxygen barrier, protecting it from all possible physical, chemical and UV damage.



The pipe is manufactured using the highest quality materials ensuring the highest quality product. The system comes with a comprehensive 10 year guarantee, whilst the pipe itself is guaranteed for 50 years!

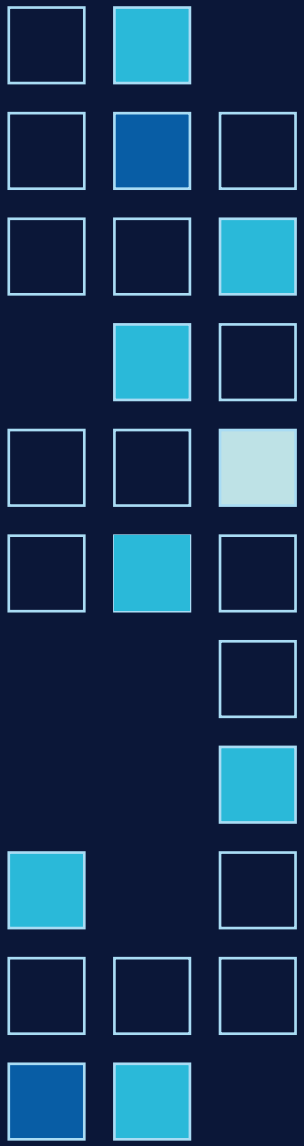
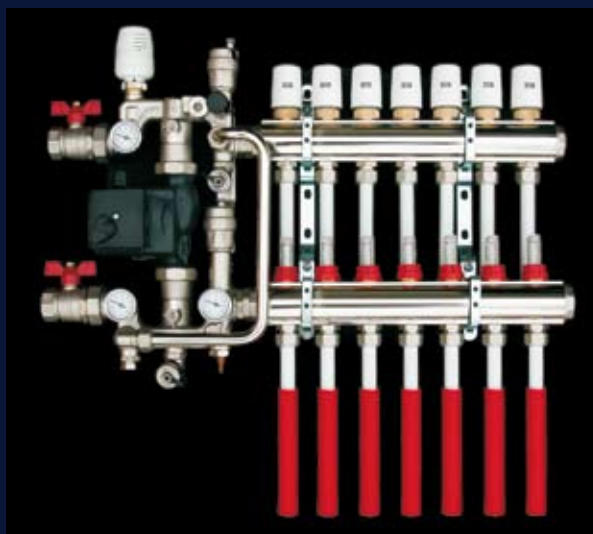
MANIFOLDS

All our large bore nickel plated 1 1/4" manifolds are sized specifically for each project. Adjustable flow meters are fitted allowing accurate balancing of the individual circuits. The specification surpasses all EU regulations and the quality control systems have been granted ISO 9001.

COMBIMIX SYSTEM – OUR STANDARD CONTROL SYSTEM

If you are looking for a less sophisticated control system, we can offer as an alternative to our INTELLIGENT CONTROL, the Combimix system. This utilises a blending valve that gives a preset water temperature of typically 50°C. It comes fully assembled and gives precise water temperature control for the underfloor heating manifold. It has been specifically designed to promote a low return water temperature, especially when radiators form part of the system. This is ideal for today's modern condensing boilers. Individual room control is achieved by room thermostats including a low voltage remote sensor type for bathrooms. The thermostats are connected to the manifold actuators via the wiring centre with setback control provided by a clock thermostat. The result is precise water temperature control.

This level of control is suited for multi-room extensions and small to medium sized domestic projects.

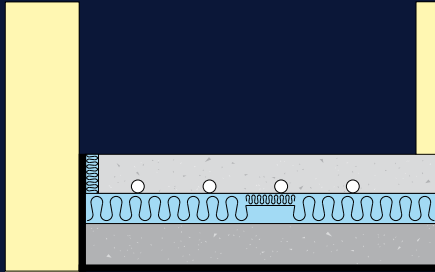


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Installation

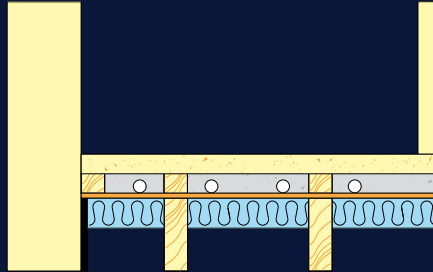
The Dellava water-based floor heating system can be installed in most types of floor construction. Pictured below are some examples of the more commonly used.

If your floor construction differs from these, just call us on tel: **01472 346795** or send an email to **enquiries@thermalreflections.co.uk**, our technical sales team will be delighted to help you.



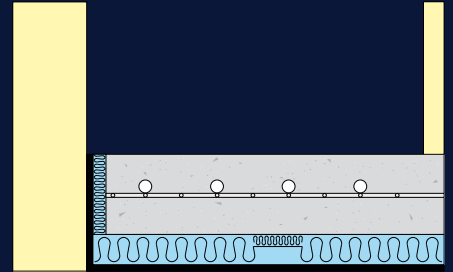
SCREEDED FLOOR

This is the most commonly used method and arguably the most effective for construction for floor heating.



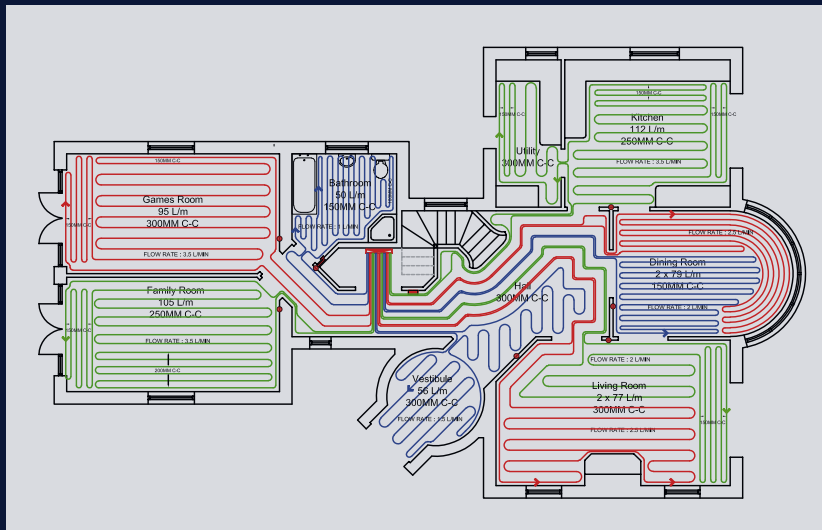
SUSPENDED JOIST FLOOR

Using this method some thermal mass is added, providing even heating of the floor finish and economy in operation.



STRUCTURAL SLAB FLOOR

Common method for 'high load' floors giving the same end result as a screeded floor, a gentle even warmth throughout your home.



PROFESSIONAL CAD SERVICE

Every system supplied will be accompanied by a professional CAD drawing showing clearly the layout of the system. This confirms the correct positioning of the pipe runs and control systems ensuring a 100% accurate installation.

“ Thanks a million for your fast service and your trust in us is greatly appreciated. Choosing your company to do business with, has proved to be the best decision we ever took. ”

KYRIAKOS MAVROU, VARMEFLOORS LTD, CYPRUS

have confidence with **Dellava**



Dellava is the brand name established by Thermal Reflections for their extensive range of underfloor heating systems, both water-based and electric. At Thermal Reflections, we are totally committed to providing top quality products backed with a level of service that is second to none. Our experienced team of professional engineers are always here to help you and excel in their level of knowledge and expertise. In short, for the best underfloor heating solution for your individual needs, contact us today.

YOUR NEXT STEP...

Contact us now for a free, no-obligation quotation or simply for further information. Our sales and technical teams will be happy to help in choosing the right system for you.

*10 year system guarantee and 50 year pipe guarantee

Dellava

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