

UNDER FLOOR HEATING

THE MOST EFFICIENT SOLUTION
FOR THE MODERN FAMILY HOME!



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We offer a full design service in accordance with industry standards.

BENEFITS OF UNDERFLOOR HEATING



Underfloor heating systems are easy to install, low maintenance and very cost-effective to run. Rooms are heated mostly by radiation (which is the most natural and comfortable form of heating). This creates a uniform environment with no hot or cold draughts.



[1] EFFICIENCY

Underfloor heating as a radiant heat is a very efficient system for the delivery of heat at lower flow temperatures. It is proven to be more efficient than conventional radiators, the whole floor becomes the heat source. It provides an evenly distributed heat with the floor (the warmest) and the ceiling (the coolest) areas of the room.



[2] TEMPERATURE CONTROL

Individual room control allows accurate temperature and time control. This zoning of the house provides greater flexibility in room by room control where individual rooms have different heat losses and temperature requirements.



[3] INTERIOR DESIGN

Underfloor heating allows complete freedom with room design as there are no radiators. Perfect for modern, open planned rooms with minimal wall space.

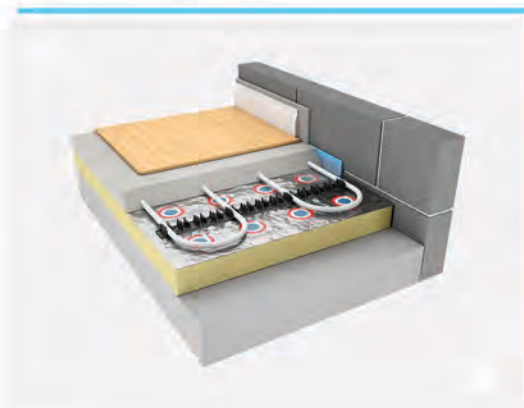


[4] HEALTH

Moisture levels in the floor are reduced, virtually eliminating dust mites. Airflow convection is non-existent, reducing the circulation of bacteria and pollen. Beneficial for people with allergies and asthma.

UNDERFLOOR HEATING SYSTEMS

Underfloor heating can be used with nearly every floor structure and can be fitted to any type of solid floor that has a screed finish. Detailed below are the most common fixing systems for solid floors. Joisted floors and bespoke systems are available upon request.



[1] CLIP-RAIL

One of the most traditional systems. Clip-rail is fixed to the floor insulation at 800-1000mm centres. 50mm spacings on the cliprail provides clear spacing for the installer with good layout and structure. Railfix is available with pre-fixed barbs to reduce installation time further.



[2] TACKER SYSTEM

Tacker staples are used to secure the underfloor pipe to the insulation with a special tacker gun. Especially used for spiral layout patterns and improved speed of installation. It also provides greater versatility for the installer.



[3] CASTELLATED PLATES

Castellated plates are interlocking sheets which incorporate pipe-locating castles. The sheets are laid over the sub-floor with a 75mm overlap. These plates are useful where there is a restricted floor depth. The underfloor pipe is fixed into the panels providing a robust fixing.

5 LAYER PE-RT UNDERFLOOR HEATING PIPE

This Polyethylene Raised Temperature tube is made of 5 layers. The first and the fifth layer are made of PE-RT type 1. The second and fourth layers are an adhesive layer for the attachment of the third layer, the EVOH layer. This layer guarantees that the tube stops the oxygen diffusion. The U-tube is impermeable to oxygen diffusion according to DIN 4726.

FEATURES

The PE-RT type 1 resin has a good flexibility. It is a polyethylene copolymer with a unique molecular structure, based on a controlled distribution in longitudinal chains. Consequently, it proves its higher behavior with respect to the lifetime until breakdown, without requiring the crosslinking PEX.

The PE-RT type 1 resin is optimally stabilised anti-ageing, so that the piping systems fitted on these PE-RT have a calculated lifetime of at least 50 years under normal operating conditions, based on the internationally accepted regulations.

The tubes made of PE-RT type 1 resin may be used at a temperature range of 5°C to 80°C. The short-term peak charges of up to 95°C at an internal hydrostatic overpressure of 6 bar at most are supported without any issues.



TECHNICAL DETAILS

Temperature Range
50°C - 80°C, Peak 95°C

Density
0.933g | cm³ (ASTM D792)

Linear Expansion Coefficient
20°C-70°C 0.19 mm
mK (DIN 53752 A)

Thermal Conductivity at 60°C
0.4 W | mK (DIN 52612-1)

Softening Point (Vicat)
122°C (ASTM D-1525)

Max. Elongation at Break
800% (ISO 527-2)

Bending Radius
5x Diameter

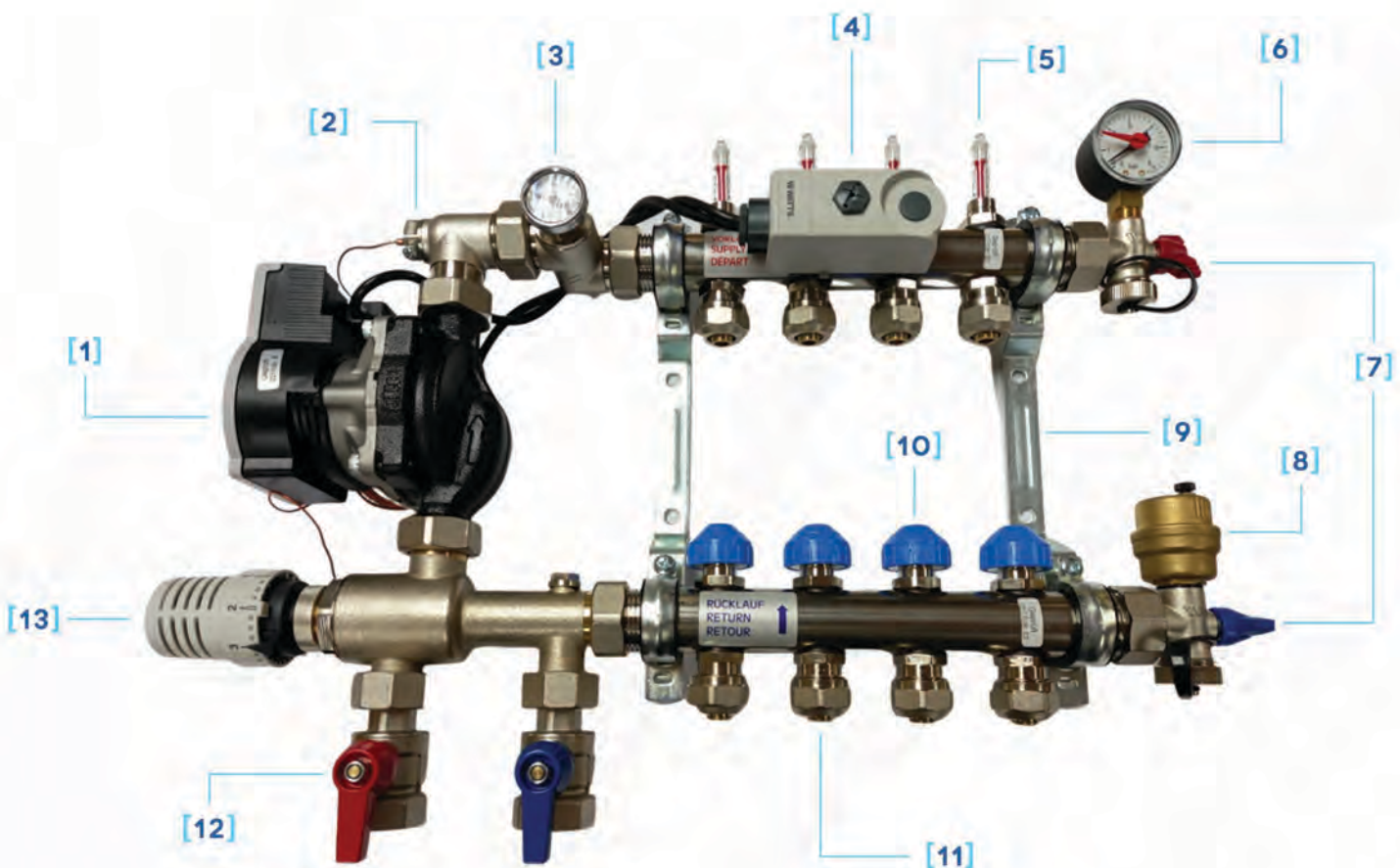
Oxygen Density
EVOH layer (DIN 4726)

Certification
KOMO, MPA, SKZ A725

Warranty
50 years, first 10 years with
consequential damage.

UNDERFLOOR HEATING MANIFOLD

Underfloor heating manifolds are the centre piece of any underfloor system. The stainless manifold is German manufactured with a high specification. It is available in sizes 2 – 12 ports ready-mounted on wall brackets and with all components to complete the installation.



SR COMPOSITE BLENDING MANIFOLD

- [1] Circulating Pump
- [2] Immersion Sleeve for Capillary Tube
- [3] Flow Temperature Gauge
- [4] High Limit Thermostat
- [5] Flow Rate Indicator (0-4 l/min)
- [6] 6 Bar Pressure Gauge
- [7] Fill and Drain Valves
- [8] Automatic Air Vent (AAV)
- [9] Wall Mounting Bracket
- [10] Regulating and Shut Off Valve with M30x1.5mm adaptor
- [11] Pipe Connectors (16x2mm)
- [12] 1" F&R Ball Valve Set
- [13] Thermostatic Head with Capillary Sensor

MANIFOLD CONTROL UNIT ISOMIX-F

Our stainless steel underfloor manifold can be combined with the ready to mount compact control to offer a simple ready to use solution for high temperature heat sources such as oil or gas.

Underfloor heating needs to operate at a temperature of between 35 - 50°C and the compact control set ensures this is achieved.

The Compact control set can operate with underfloor heating systems up to a 14kw demand. With a pre-wired pump and temperature limiter, it can be mounted on both the left and right hand side of the manifold.

FEATURES

The ISOMIX-F is a control unit designed for use in systems with combined panel heating/cooling.

In heating mode, the control unit ensures fixed value control of the flow temperature and circulation of the hot water in heating circuits.

Supply temperature setting range: 20–70°C.

Temperature limiting and locking facility on thermostatic head. Pre-wired pump and temperature limiter preset at 60°C.

Can be mounted on the right or left side of the manifold. Suitable for all 1" M heating circuit manifolds.



TECHNICAL DETAILS

Operating Ambient Temperature
0-40°C

Operating Medium Temperature
0-80°C

Max. Operating Pressure
10 bar

Setting Range Supply Temperature
20-70°C

Heat Demand
appr 14 kW, $\Delta T=10K$

Voltage
230 V-50Hz

Kvs Value
3,2

Differential Pressure
Max. 500 mbar

Connections Primary Circuit
1" M with flat seals

Connections Secondary Circuit
1" union nut with flat seals

MATERIALS

Fittings
Brass CW617 N, nickel-plated

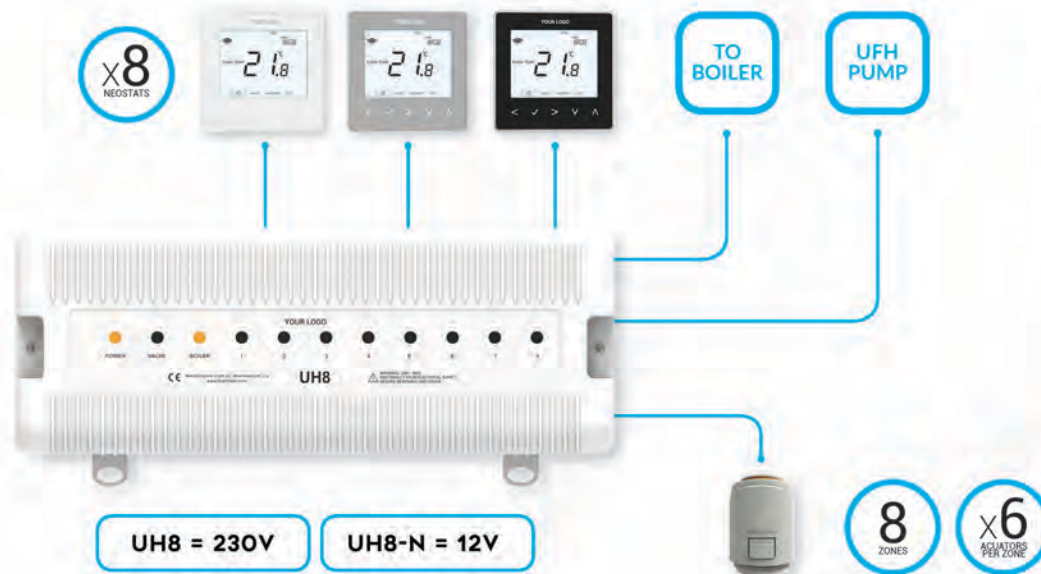
Plastics
Impact and temperature resistant

Flat seals
AFM 34/2



HEATMISER NEO WIRED SYSTEM 230V/12V

The wired system comes in both 230v & 12v options with 8 zone wiring centres designed for use with the neoStats. Up to 6 actuators can be wired to each of the 8 zones and an output is provided for the boiler, underfloor heating pump and valve.



RADIATOR ZONE

The UH8/UH8-N provide an output for a single radiator zone, making these wiring centres suitable for those systems with UFH and radiators. When used, this zone doesn't enable the underfloor heating pump, valve or boiler.



PUMP, VALVE & BOILER OUTPUT

The wiring centre provides on board switching for the boiler, underfloor heating pump and the valve. This means you will not have to purchase any expensive add-on modules because everything is included.



6 ACTUATORS PER ZONE

Up to 6 actuators can be connected to each zone, making the wiring centre perfect for systems with larger zones, where multiple heating loops are installed. Across all 8 zones, the wiring centres have a total load of 5A.



DIN RAIL & NEON OUTPUT INDICATION

The UH8/UH8-N incorporate DIN rail mounting, so can easily be mounted adjacent to other electrical equipment. In addition, it has Neon output indications for each zone, so installers and end users can easily identify the heat status of any zone.

HEATMISER NEOSTAT

NeoStat can be configured in software to work in non-programmable, programmable or timer mode. This adjustable mode setup provides greater flexibility for the end user.

NeoStat has been designed to be simple to use and make programming simple with the intuitive menu navigation. The neoStats can be controlled from anywhere thanks to the plug and play neoHub and are available in Glacier White, Sapphire Black and Platinum Silver.

KEY FEATURES



HEAT OR TIMER OPTION

The neoStat has been designed to work as a thermostat or timer, selectable in software.



ENERGY SAVING OPTIMUM START

The neoStat will calculate the amount of heat up time required for your home.



APP CONTROLLABLE

Up to 32 zones can be controlled from a single neoHub in Windows 10, iOS & Android.



AIR & FLOOR SENSING

The neoStat can be used with a remote air and remote floor sensor.



EASY NAVIGATION

Easy to navigate system, providing all of the options across the bottom of the display.



SYSTEM COMPATIBILITY

Compatible with solar, heat pump and most boiler technologies.



MESH NETWORKING

neoStat and neoAir Smart Thermostats communicate wirelessly to the neoHub to offer a reliable and scalable network system.



KEY LOCK FEATURE

Key locking is standard on all of the Neo Series and is an excellent way to reduce tampering of the heating system.



NEW BUILD & RETROFIT

The neoStat & neoAir Smart Thermostats are perfect for the new build & retrofit market.



SELF LEARNING PREHEAT

Calculates the amount of heat up time required to ensure your home is warm when you wake and return home.

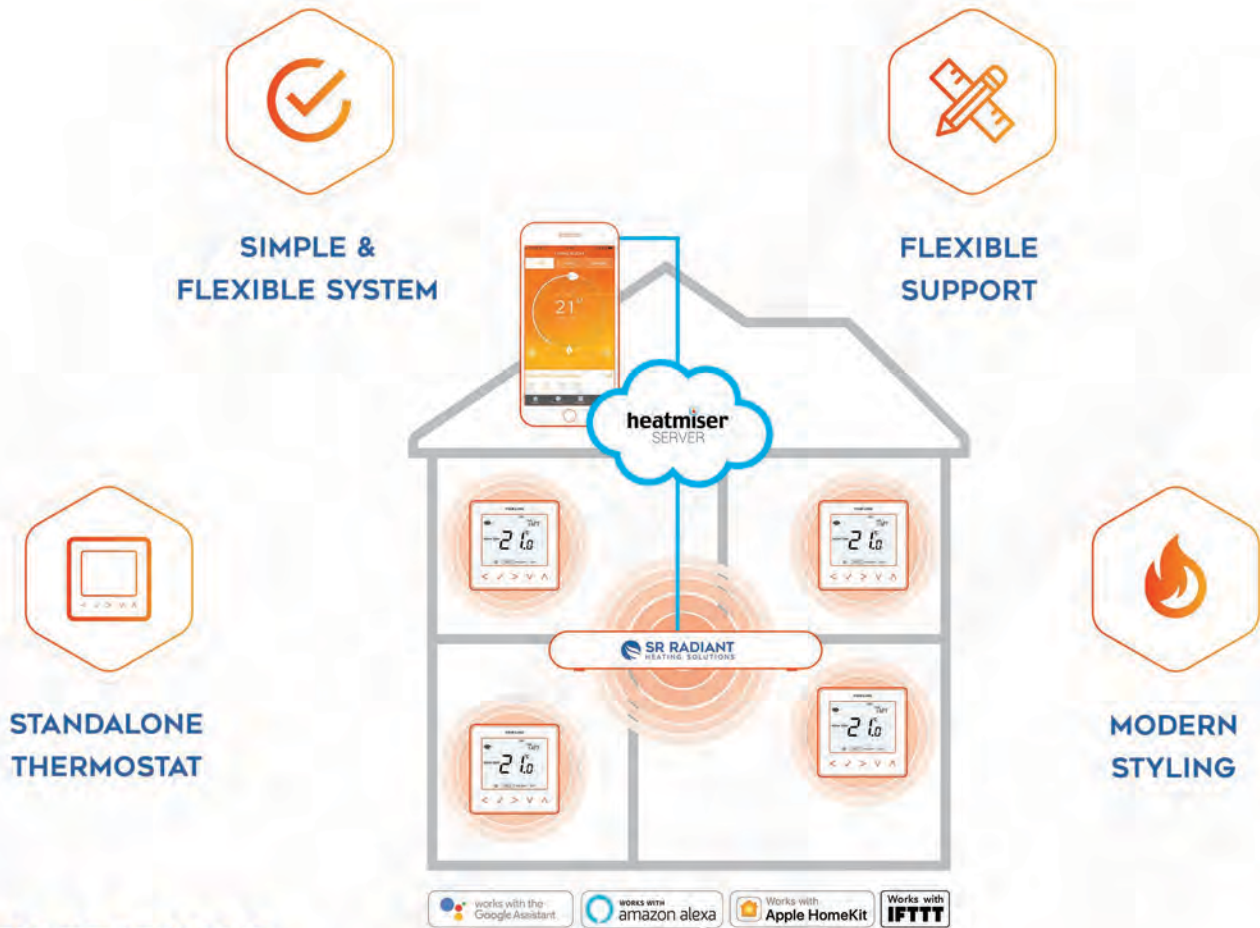


TEMPERATURE HOLD

Allows you to hold a set temperature for a specific duration - ideal for parties.

HEATMISER NEOHUB SYSTEM OVERVIEW

The neoHub is the gateway to the neo system, providing remote control of the neo system from your Windows, iOS and Android mobile apps. The neoHub connects to your home broadband router and wirelessly to the neoStats in your home.



KEY FEATURES



SMART PROFILES

Enable users to program time and temperature settings and apply them to a number of zones.



MESH NETWORKING

Greatly increase the communication distance of the system with the Mesh Networking feature.



GEOLOCATION FACILITY

Automatically turn the heating off when the home owner leaves and back on when they return.



MULTI ZONE (UP TO 32)

Can be controlled from anywhere, large systems are easily controlled using the Global features.



SUBSCRIPTION-FREE

No ongoing costs for the user and the system improves over time with regular system updates.



REMOTE UPDATES

Download updates and apply new features & patches to the connected devices automatically.

BESPOKE DESIGN SERVICE

SR Radiant Heating Solutions provide a full design service, tailored to individual requirements in accordance with the EN1264 Underfloor Industry Standard.

Tabular or layout drawings provide full data for the installer; pipe spacings, heating circuits, flow rates and pressure loss calculations etc. to ensure an efficient and accurate underfloor system is installed.

The software includes a full range of floor types enabling project specific adjustments for floor screeds, insulation and floor coverings enabling our engineers to enter job specific data. This is very important to ensure accurate design calculations are produced.

Our team have many years of experience in the underfloor heating industry. This knowledge ensures our systems are provided hassle-free.



FAST QUOTATION

Bespoke quotation turnaround time of 24-48 hours.



FAST DESIGN

Full design turnaround time of 5-7 working days upon receipt of order.





SR RADIANT

HEATING SOLUTIONS



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