



Products for the built environment.

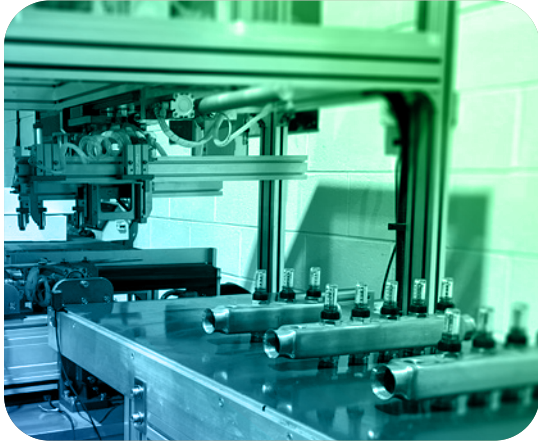
Underfloor Heating | Press Fittings | Controls | Heating & Cooling | OEM

www.tioclimatesolutions.co.uk



Our Promise

Products for the Built Environment



Based in the UK, our team is always available, openly communicative and efficient. Due to our supply chain process and open communication channels, we ensure that service levels exceed customer expectations.

We have built a culture that puts the quality of the products we manufacture, assemble and sell at the forefront of everything we do, only outweighed by the service and support that we offer.

Tio has access to over 11 manufacturing facilities in 7 different countries. Our vast knowledge in the underfloor heating industry enables us to capacitate crucial features for our customers, allowing for both simple and complete control of their household's heating requirements.



Service

Tio provides a personable service which supports all businesses in the built environment industry. Our team prioritises timely communication and thoughtful solutions.



Support

UK based technical support with direct links to manufacturers to ensure prompt, relevant and accurate technical support. Our website has a dedicated technical page, with videos and instructions.



Quality

All products are tested to industry standards. We offer high quality products which are manufactured to strict quality plans. Independent UK testing by BSRIA.




Product

Our design and development team research the market in depth, to bring the best quality and most suitable products to our portfolio. We offer a full range of components to suit all UFH system types.

Contact Us

 01235 242 710

 office@tioclimatesolutions.co.uk

 www.tioclimatesolutions.co.uk

Living with Underfloor Heating

Underfloor heating works by circulating hot water through a network of pipes laid beneath your floor. These pipes connect to a manifold, which in turn links to your boiler or heat interface unit. Room thermostats monitor the temperature and control valves on the manifold, allowing hot water to flow when needed and stopping it once the desired temperature is reached.

This system operates differently from traditional radiators, as it heats the surrounding materials like walls and floors. As a result, it takes longer to reach target temperatures. During colder months, it's best not to switch the system off completely. If the building materials cool down fully, it can take one to two days to bring the temperature back up.

Delivering radiant heat, similar to sunlight, which often feels warmer than conventional heating; you usually don't need to set the thermostat higher than 19–22°C for comfort. Exceeding this range can risk damaging certain floor finishes.

To maintain efficiency, avoid leaving windows open or running extractor fans constantly, as radiant heat escapes through drafts. Don't place rugs or heavy coverings on the floor, as they can block the heat. The floor itself acts as a radiant panel, and anything covering it will reduce its effectiveness.

Thermostats can be programmed with daily schedules tailored to your routine, including different settings for weekdays and weekends. It's also important to remember that underfloor heating warms the space rather than the entire floor surface evenly. Areas near walls, kitchen units, or appliances may feel cooler where fewer pipes are present.



Contents

Manifolds & Mixing Units

Manifolds	06
Manifold accessories	07
Mixing units	09
Pump sets	11

Underfloor Heating Pipe

MLC Pipe	14
PE-RT EVOH Pipe	15
MLC Insulated Pipe	16

Controls

Thermostats	18
Dial thermostats, actuators and upgrade kit	19
Wiring Centre, sensors and enclosures	20
TEVO Range	21
Heating & Cooling	22

Floor Systems

Castellated mats	26
XPS boards	27
Tile backer board	28
Aluminium plates and gypsum fibre	29
Clip rail, edge strip, cement and tile adhesive	30

Accessories

Clip gun and spare parts	32
Pipe and manifold accessories	35
Pipe conduit, clips and adhesive	36

Press Fittings

Couplings	38
Brass adaptors	39

OEM

Automated & Intelligent Manufacture	44
-------------------------------------	----

InHeat

Radiant Heating & Cooling	48
---------------------------	----

Deliveries

Terms & Conditions	50
-------------------------------	----

51

Manifolds & Mixing Units.

Underfloor heating manifolds are pivotal components within the heating system, responsible for controlling and distributing the heated water that circulates through the underfloor pipes. These manifold systems act as centralized hubs, regulating the flow and temperature of the water to ensure consistent warmth throughout the designated spaces.



Pre-assembled manifold with pressure gauge & auto air vent

Tio's premium 304 stainless-steel manifold is a pre-assembled unit for use within either underfloor heating systems or wall-hung radiator systems.

The unit is pre-assembled and complete with an auto air vent (AAV), 10 bar pressure gauge, flow meters with 0-5 l/m indicators.



Integrated with filling and drain off valves to ease long term maintenance.

Pin valve set to adjust water flow for each individual zone.

Compatible with various pipe sizes up to 20mm.



Flow Meter
TIOSPA0018



Pin Valve Set
TIOSPA0003



Drain Valve
TIOSPA0004



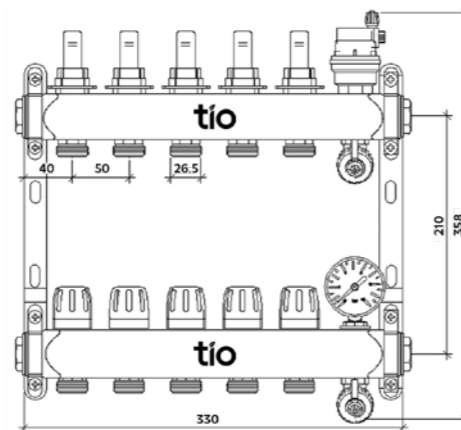
Auto Air Vent
TIOSPA0004



Pressure Gauge
TIOSPA0004

Tio premium manifolds have a standard UK distance of 210mm between the flow and return bars. This makes the unit versatile with various mixing units.

The unit has a spacing of 50mm between each port from the centre point advocating for various pipe sizes and materials to be installed. For ease of installation, we recommend



no larger than 20mm pipe to be installed with the Tio manifold connectors.

The unit has 1" threaded inlets to house isolation valves and, the bottom rail has a modulating pin that can be either, manually adjusted with the white adjusting caps, or to achieve electronic control, an actuator can be installed.

Product Code	Product Description	Gap Width
TIOAN0002	2 Port Manifold with PG and AAV	180mm
TIOAN0003	3 Port Manifold with PG and AAV	230mm
TIOAN0004	4 Port Manifold with PG and AAV	280mm
TIOAN0005	5 Port Manifold with PG and AAV	330mm
TIOAN0006	6 Port Manifold with PG and AAV	380mm
TIOAN0007	7 Port Manifold with PG and AAV	430mm
TIOAN0008	8 Port Manifold with PG and AAV	480mm
TIOAN0009	9 Port Manifold with PG and AAV	530mm
TIOAN0010	10 Port Manifold with PG and AAV	580mm
TIOAN0011	11 Port Manifold with PG and AAV	630mm
TIOAN0012	12 Port Manifold with PG and AAV	680mm

2 Port Manifold Extender

For when more ports are required than initially anticipated, or for designs which require 14 ports.

Product Code	Product Description
TIOEXT0002	2 Port Manifold Extender Pack

Manifold cabinets

Cabinets are used for water and heating manifolds, as well as underfloor heating mixing units.

These cabinets are designed to be mounted on a wall surface and come in 3 different sizes.

Design:

- Side walls with holes for the supply and return pipe of heating medium.
- Screws for fixing the manifold.
- Removable front door.
- Cabinet doors with a lock mechanism.

Material: Hot-dip galvanized steel sheet 0.8 mm thick, powder coated in white.



Product Code	Product Description	Dimensions
TIOACAB0002	Manifold Cabinet	760 x 580 x 120mm
TIOACAB0003	Manifold Cabinet	845 x 580 x 120mm
TIOACAB0004	Manifold Cabinet	1015 x 580 x 120mm

3 piece manifold connector

Our 3-piece connectors are used to connect pipe to the manifold thus, creating a reliable and secure connection between components.

Available in various sizes these can be denoted by the outer diameter of the pipe and the wall thickness.



Product Code	Product Description	Dimensions
TIOCON0010	Manifold Connector	3/4" x 10 x 1.25mm
TIOCON0012	Manifold Connector	3/4" x 12 x 2mm
TIOCON1216	Manifold Connector	3/4" x 12 x 1.6mm
TIOCON0015	Manifold Connector	3/4" x 15 x 2mm
TIOCON0016	Manifold Connector	3/4" x 16 x 2mm
TIOCON1618	Manifold Connector	3/4" x 16 x 1.8mm
TIOCON1720	Manifold Connector	3/4" x 17 x 2mm
TIOCON0020	Manifold Connector	3/4" x 20 x 2mm

Isolation valves

Boxed as a pair, these isolation valves will fit directly onto the manifold mixing unit.

We recommend isolation with every system to allow for easy maintenance in the future.

Product Code	Product Description
TIOVAL0001	Pair of 1" isolation valves
TIOVAL0002	Pair of 1" isolation valves with gauge
TIOVAL0004	Pair of 3/4" ball valves
TIOVAL0006	Pair of 1" 90° angled valves



230v 22mm motorized valves

These motorized zone valves have been designed to control the flow of water in iron and copper pipe systems. Although specifically designed for small bore central heating systems, the valve can be used in commercial and industrial applications.

- Power Supply: 230 Volts AC 50Hz
- Switch Rating: 2.2A
- Switch Type Power: SPST (22mm)
- Consumption: 6W
- Ambient Temperature: 50°C max
- Flow Temperature: 5°C to 88°C max
- Static Pressure: 8.6 bar max



Product Code	Product Description
TIOMZV-22-2	2-way 230v 22mm motorized valve
TIOMZV-22-3	3-way 230v 22mm motorized valve

Low loss header

Hydraulic headers are connected before the distribution header. This hydraulically isolates the primary and secondary circuits hence, allows the primary flow to be maintained at the boiler manufacturer's requirements and provides greater volumetric flow in the distribution header to all circuits.

- Allows for water flow of 6600 L/h.
- 1" male threaded inlets with integral drain valve, automatic air vent and insulating sheath.



Product Code	Product Description	Dimensions
TIOLLH0001	Low loss header	515 x 76.2mm - 1899ml

ESBE 4-way valve and mixing unit with Grundfos pump - 210mm

To work in unison with underfloor heating manifolds, this mixing valve is adjustable between 20°C - 55°C which complies with the requirement B51264 and makes it suitable for force screed drying.

- 210mm between the centres of flow and return arms.
- Max output of 18kW.
- Max supply pressure of 10 bar.
- 'A' rated pump.
- Temperature gauge.
- Assembled in the UK: Pre-tested, packaged and ready for instant installation.
- Fully reversible (left or right sided manifold).

Product Code	Product Description
TIOMIX0005	ESBE 4-way valve and mixer with Grundfos pump - 210mm



ESBE 4-way valve and mixing unit with Grundfos pump - 200mm

For use with underfloor heating manifolds, this mixing valve has a temperature range between 20°C - 55°C. Therefore, complying with the requirement B51264 and making it suitable for force screed drying.

- 200mm between the centres of flow and return arms.
- Max output of 18kW.
- Max supply pressure of 10 bar.
- 'A' rated pump.
- Temperature gauge.
- Assembled in the UK: Pre-tested, packaged and ready for instant installation.
- Fully reversible (left or right sided manifold).

Product Code	Product Description
TIOMIX0007	ESBE 4-way valve and mixer with Grundfos pump - 200mm



ESBE 4-way valve and mixing unit with Grundfos pump - Off-set 210mm

The off-set capabilities of this mixing unit gives it unique potential for installers. Used with underfloor heating manifolds, this mixing valve is adjustable between 20°C - 55°C which complies with the requirement B51264. This makes it suitable for force screed drying.

- 210mm between the centres of flow and return arms.
- Max output of 18kW.
- Max supply pressure of 10 bar.
- 'A' rated pump.
- Integrated check valves for easy filling.
- Temperature gauge.
- Assembled in the UK: Pre-tested, packaged and ready for instant installation.
- Fully reversible (left or right sided manifold).

Product Code	Product Description
TIOMIX-OC-15	ESBE 4-way valve and mixer with Grundfos pump - offset 210mm



Tio mixing unit and probe with Tio T6-130-L pump

Harmonising the Tio High Efficiency Pump T6-130-L and mixing valve with remote probe actuation to give a temperature range between 20°C - 60°C, making it suitable for screed drying purposes. It includes a throttle to increase Kv for larger systems, 1" M manifold connections with O-ring seals and 1" M connections for primary flow and return. A temperature gauge for measuring the mixed flow temperature, manual air vent and bracket to support the weight of the pump are also included.

- Pre-assembled pump and blending unit reduces installation time and allows for easy control of the underfloor heating system.
- Inclusive temperature control ensures that the water temperatures entering the floor do not exceed design temperatures.
- Built in thermostatic actuator with a temperature range between 20°C - 60°C for system design across all floor constructions.
- Integrated flow rate control valve for increased regulation of the flow rate and temperature of the underfloor heating system.
- Standard 210mm manifold spacing and 1" BSP connections
- 0.5A drawn current.



Product Code	Product Description
TIOMIX0008	Tio mixing unit and probe with Tio T6-130-L pump - 210mm

Single Zone Mixing Pack

Designed for use on small rooms or extensions, provides temperature controlled mixed water to underfloor heating systems with a heat output of upto 3kW, satisfying underfloor heating areas up to 40 sqm.

- Compact bolt-on unit providing quick and simple installation
- Provides mixed temperature water to underfloor heating systems with a heat output up to 3Kw
- Easy set up with adjustable temperature range
- Controls flow temperature +/-2°C even with fluctuating temperature and flow from boiler
- 'A' rated circulating pump



Product Code	Product Description
TIOSZP0001	Single Zone Mixing Pack

Tio high efficiency pump

Intelligent frequency conversion circulation pump. For systems which require a more powerful pump.

- No requirement for a mixing valve.
- High performance modulating pump.
- Optional pulse width modulation (PWM).
- Simple & easy retro-fit in most boiler brands.
- Easy set up to maximise boiler efficiency.
- 1-year manufacturers warranty.
- ErP Compliant.



Product Code	Product Description
TIOAPE25-6-130T1	25 x 130mm Connection - 6m head
TIOAPE25-8-130T1	25 x 130mm Connection - 8m head

ESBE non-mixing circulating set with Grundfos UPM3 pump - 210mm

This heat pump set is designed for low temperature systems, that do not require water temperature mixing at the manifold, and is suitable for a maximum output of 20kW.

- No requirement for a mixing valve.
- Compact design.
- Integrated check valves for easy filling.
- 'A' rated pump.
- Temperature gauge.
- Assembled in the UK: pre-tested, packaged and ready for instant installation.
- Fully reversible (left or right sided manifold).
- Side or bottom entry connections.



Product Code	Product Description
TIOPUM0001	ESBE non-mixing 4-way set with Grundfos UPM3 pump - 210mm

Tio non-mixing 4-way set with T6-130-L heat pump - 210mm

Combining our in-house components with our high efficiency pump. The power supply voltage of the electric pump is single phase 220-240V, at 50/60hz.

- No requirement for a mixing valve.
- High performance modulating pump.
- Optional pulse width modulation (PWM).
- Simple & easy retro-fit in most boiler brands.
- Temperature gauge.
- 1-year manufacturers warranty.
- Easy set up to maximise boiler efficiency.
- ErP Compliant.



Product Code	Product Description
TIOPUM0002	Tio non-mixing 4-way set with T6-130-L heat pump - 210mm

Made in the EU.

tio MLC PIPE PE-RT / AL / PE-RT (PE-RT type II) ISO 21003 DIN 16833 α 16 \times 2 0 mm CL 00

CLASSE 1 2 4 5/6 bar 14 18/11/21 12.05 00-464/21 Made in Portugal

MLC METRUC

Pipe.

Underfloor heating combines sophistication with practicality, offering efficient and discreet heating solutions. A modern heating method installed beneath the floor surface, using electric cables or water-filled pipes. It provides even warmth throughout a space by radiating heat upward. The system also minimizes the circulation of dust and allergens, contributing to a healthier indoor environment.

tio MLC PIPE

Multilayer PE-RT/ AL/ PE-RT



Tio multilayer pipes cross-link the best qualities of both metal and plastic pipes in one single system. It combines the advantages of aluminium with the corrosion resistance of plastic. The stability of the TIOMLC pipe is ensured by the laser edge welded aluminium. The pipe is built on a 5 layer structure, where the internal and external layers are made of PE-RT type II and the middle layer is made of aluminium and all layers are connected by a special bonding agent.

The pipes internal wall surface is extremely smooth, avoiding corrosion phenomena, limescale or deposits. TIOMLC pipes are flexible and easy to bend. The lightweight of the pipe is also an advantage for its use on wall-mounted installations. TIOMLC pipes can be used for drinking water applications as well as for heating and cooling systems and other industrial applications.

Applications:

- Heating and Underfloor
- Cooling Systems
- Industrial Facilities
- Snow and Ice Removal Systems
- Surface Heating/Cooling
- Hot and Cold Water Distribution

Product Code	Product Description	Dimensions
TIOMLC0001	PE-RT / Alu / PE-RT multilayer pipe	16 x 2mm - 100m coil
TIOMLC0002	PE-RT / Alu / PE-RT multilayer pipe	16 x 2mm - 240m coil
TIOMLC0003	PE-RT / Alu / PE-RT multilayer pipe	16 x 2mm - 500m coil
TIOMLC0004	PE-RT / Alu / PE-RT multilayer pipe	16 x 2mm - 200m coil
TIOMLC2020	PE-RT / Alu / PE-RT multilayer pipe	20 x 2mm - 50m coil
TIOMLC2525	PE-RT / Alu / PE-RT multilayer pipe	25 x 2.5mm - 50m coil
TIOMLC3230	PE-RT / Alu / PE-RT multilayer pipe	32 x 3mm - 50m coil

PE-RT EVOH



Tio PE-RT EVOH pipe can be easily bent and curved in cold without special tooling, saving unions and installation time. Layers are very resistant to calcium, dirt and substances derived from galvanic corrosion. It weighs 7 times less than copper and 13 times less than iron on equivalent diameters. It does not modify the organoleptic characteristics of drinking water and the corrosion absence avoid proliferation of bacteria. Thus, providing energy savings by reducing heat loss.

Much lower roughness than metallic pipes reducing energetic consumption and allowing a higher flow with the same internal pipe diameter. Recovering the original shape when hot air is applied allowing it to be repaired.

Applications:

- Heating and Underfloor
- Cooling Systems
- Industrial Facilities
- Snow and Ice Removal Systems
- Surface Heating/Cooling

Product Code	Product Description	Dimensions
TIOPER0001	3 layer PE-RT pipe	16 x 2mm - 100m coil
TIOPER0002	3 layer PE-RT pipe	16 x 2mm - 240m coil
TIOPER0003	3 layer PE-RT pipe	16 x 2mm - 500m coil
TIOPER0004	3 layer PE-RT pipe	12 x 2mm - 80m coil
TIOPER0005	3 layer PE-RT pipe	12 x 2mm - 240m coil
TIOPER0006	3 layer PE-RT pipe	20 x 2mm - 400m coil
TIOPER0007	3 layer PE-RT pipe	10 x 1.25mm - 80m coil
TIOPER0008	3 layer PE-RT pipe	10 x 1.25mm - 240m coil

Multilayer PE-RT/ AL/ PE-RT Insulated Pipe



The insulated pipe is made of polyethylene (PE) foam, complying with EN ISO 14313 regulations. This foam provides excellent protection and exceptional resistance against abrasion. In addition, it is light, flexible, and has a high thermal insulation capacity, which makes it ideal for various applications.

Tio multilayer pipes cross-link the best qualities of both metal and plastic pipes in one single system. It combines the advantages of aluminium with the corrosion resistance of plastic. The stability of the TIOMPI pipe is ensured by the laser edge welded aluminium. The pipe is built on a 5 layer structure, where the internal and external layers are made of PE-RT type II and the middle layer is made of aluminium and all layers are connected by a special bonding agent.

The pipes internal wall surface is extremely smooth, avoiding corrosion phenomena, limescale or deposits. TIOMPI pipes are flexible and easy to bend. The lightweight of the pipe is also an advantage for its use on wall-mounted installations. TIOMPI pipes can be used for drinking water applications as well as for heating and cooling systems and other industrial applications.

Applications:

- Heating and Underfloor
- Industrial Facilities
- Surface Heating/Cooling
- Cooling Systems
- Snow and Ice Removal Systems
- Hot and Cold Water Distribution

Product Code	Product Description	Dimensions
TIOMPI1602-B	PE-RT / Alu / PE-RT blue insulated pipe	16 x 2mm - 100m coil
TIOMPI1602-R	PE-RT / Alu / PE-RT red insulated pipe	16 x 2mm - 100m coil
TIOMPI2002-B	PE-RT / Alu / PE-RT blue insulated pipe	20 x 2mm - 50m coil
TIOMPI2002-R	PE-RT / Alu / PE-RT red insulated pipe	20 x 2mm - 50m coil
TIOMPI2525-B	PE-RT / Alu / PE-RT blue insulated pipe	25 x 2.5mm - 50m coil
TIOMPI2525-R	PE-RT / Alu / PE-RT red insulated pipe	25 x 2.5mm - 50m coil
TIOMPI2630-B	PE-RT / Alu / PE-RT blue insulated pipe	26 x 3.0mm - 50m coil
TIOMPI2630-R	PE-RT / Alu / PE-RT red insulated pipe	26 x 3.0mm - 50m coil
TIOMPI3203-B	PE-RT / Alu / PE-RT blue insulated pipe	32 x 3mm - 25m coil
TIOMPI3203-G	PE-RT / Alu / PE-RT grey insulated pipe	32 x 3mm - 25m coil
TIOMPI3203-R	PE-RT / Alu / PE-RT red insulated pipe	32 x 3mm - 25m coil



Controls.

Collating various design and functionality features through customer review, has allowed us to fine comb our control solutions and provide effective output in every scenario. Perfectly catered for underfloor heating, our range of products deliver on every aspect.

7 day programmable thermostats

Our 7 day (5+1+1) Programmable thermostat gives users 6 periods throughout the day to adjust their heating requirements. It's sleek design, easy to use functionality and affordable price, makes it the perfect choice for any home.

Available in black and white.

Product Code	Product Description
TIOSTA0003	230v black programmable thermostat
TIOSTA0004	230v white programmable thermostat
TIOSTA0006	24v white programmable thermostat



Smart thermostat (Wi-Fi)

The Tio Smart has the same design and features as the programmable Tio thermostat. Utilising Wi-Fi capabilities to link with the Tio Smart home system.

Available in black and white.



Product Code	Product Description
TIOSTA0001	230v black smart Wi-Fi thermostat
TIOSTA0002	230v white smart Wi-Fi thermostat
TIOSTA0005	24v white smart Wi-Fi thermostat



Electric underfloor thermostat

Available in both smart and programmable versions, Tio's 16 amp electric underfloor thermostat is the perfect solution for electric underfloor heating.

Available in white.

Product Code	Product Description
TIOSTA0007	230v white programmable thermostat
TIOSTA0008	230v white smart Wi-Fi thermostat



RF thermostat with single channel receiver

Wi-Fi Wireless Heating thermostat with single channel receiver. Incorporating 7 day programming with smart app capability.

Available in white.



Product Code	Product Description
TIOSTA0012	230v white RF thermostat with single channel receiver



Tio thermostat upgrade kit

For those who wish to upgrade their thermostat, our simple clip-on upgrade kit is a practical solution.

Product Code	Product Description
TIOUGK0001	230v white Programmable to Smart thermostat upgrade kit



Dial thermostats

Perfect for water heating systems, these dial thermostats offer temperature adjustability between 0°C - 35°C.

Includes LED indication when heating is activated.

Product Code	Product Description
TIODIA0003	230v tamper proof electric thermostat
TIODIA0004	230v on-wall dial thermostat
TIODIA0004s	230v on-wall dial thermostat with floor sensing



Single channel timer and hot water controller

Single channel time clock for multiple applications including hot water. Wi-Fi enabled.



Product Code	Product Description
TIOTIM0001	230v Digital timer switch



Reversible floor heating and cooling thermostat

The Tio Reversible Floor Heating and Cooling System offers a simple and cost-effective solution for floor heating systems where a heat source is able to deliver cool water in summer periods for circulation through a normal Underfloor heating set up.

Product Code	Product Description
TIOSTA0013	230v white floor heating and cooling thermostat
TIOSTA0014	230v black floor heating and cooling thermostat



Manifold actuators

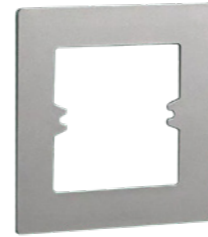
Easy install actuator in 230v or 24v options. The unit comes normally open (NO) with a retaining clip. Once removed the opening function is normally closed (NC). The cable has 2 wires, neutral and live, with an extended length of 900mm.

Product Code	Product Description
TIOACT0001	230v Tio manifold actuator
TIOACT0002	24v Tio manifold actuator
TIOACTXL03	230v Tio manifold actuator (3m cable)



Backplate Thermostat Frame

Combining the functionalities of a digital timer switch and a thermostat to control heating or cooling systems based on both time schedules and temperature settings.



Product Code	Product Description
TIOFRA0001	Space grey backplate thermostat frame

Wiring Centre

Our functional 230v wiring centre has easy fit connector terminals and also LED indicators. The unit is fitted with boiler/pump/valve and timer port for use with underfloor heating systems.



Product Code	Product Description
TIOWIR0004	8 zone wiring centre with port and valve timer
TIOWIR0002	5 zone wiring centre with port and valve timer

Seitron 24v Wiring Centre

Utilising easy fit connector terminals and also LED indicators, this unit is fitted with boiler, pump, valve and timer port for use with underfloor heating systems.



Product Code	Product Description
TIOWIR0006	Seitron 24v 8 zone wiring centre

Sensor probe

Thermostat floor sensor can be used with any Tio Thermostat to allow more precise floor sensing.



Product Code	Product Description
TIOSEN0001	10k sensor probe for thermostats
TIOSEN0002	Dew point sensor

Room sensor enclosure

Purpose-built enclosure designed for use with remote air probes, offering a practical and convenient solution for integrating ambient air temperature sensing with thermostats; making it particularly suitable for use in bathrooms and wet areas.



Product Code	Product Description	Dimensions
TIOENC0001	White sensor enclosure	80x 80 x 22mm
TIOENC0002	Black sensor enclosure	80x 80 x 22mm

Smart RF Wi-Fi thermostat

Partnering the TEVO with our RF wiring centre and gateway you can enjoy managing your heating from your phone as well as locally. A simple and minimal user interface allows users to enjoy a clear and easy to use one touch control panel. Internal and external sensor to control both air and or floor temperatures. Our 5+1+1 six period programming system enables flexible temperature control. Utilising 2x AA batteries for your convenience.



Available in black and white.



Product Code	Product Description
TIOEVO0001	230v white smart RF thermostat
TIOEVO0002	230v black smart RF thermostat

Wireless RF central control centre

Most commonly used for underfloor heating applications, this wiring centre can also be used for central control of multi-use systems by utilising the independent control outputs for hot water zone control and a dedicated channel for a radiator zone valve. This wiring centre can control the heat source activation through volt free output as well as offering a 230v output to the manifold circulation pump. Includes optional pump delay functionality, pump exercise function, commissioning switches and LED zone indicators.



Product Code	Product Description
TIOEVO0003	Wireless RF central control box

Multifunctional Gateway

Synergising the TEVO thermostat with the wireless RF central control box, this multifunctional gateway harnesses the smart Wi-Fi capabilities of both devices. Supporting both ZigBee and Bluetooth protocols, users can design multi-device systems using the Smartlife and Tuya apps.



Product Code	Product Description
TIOEVO0004	Gateway hub for app functionality

Smart Thermostatic Radiator Valve

Modern and sleek design which encompasses both easy to use dial mechanism locally and smart features via app control.

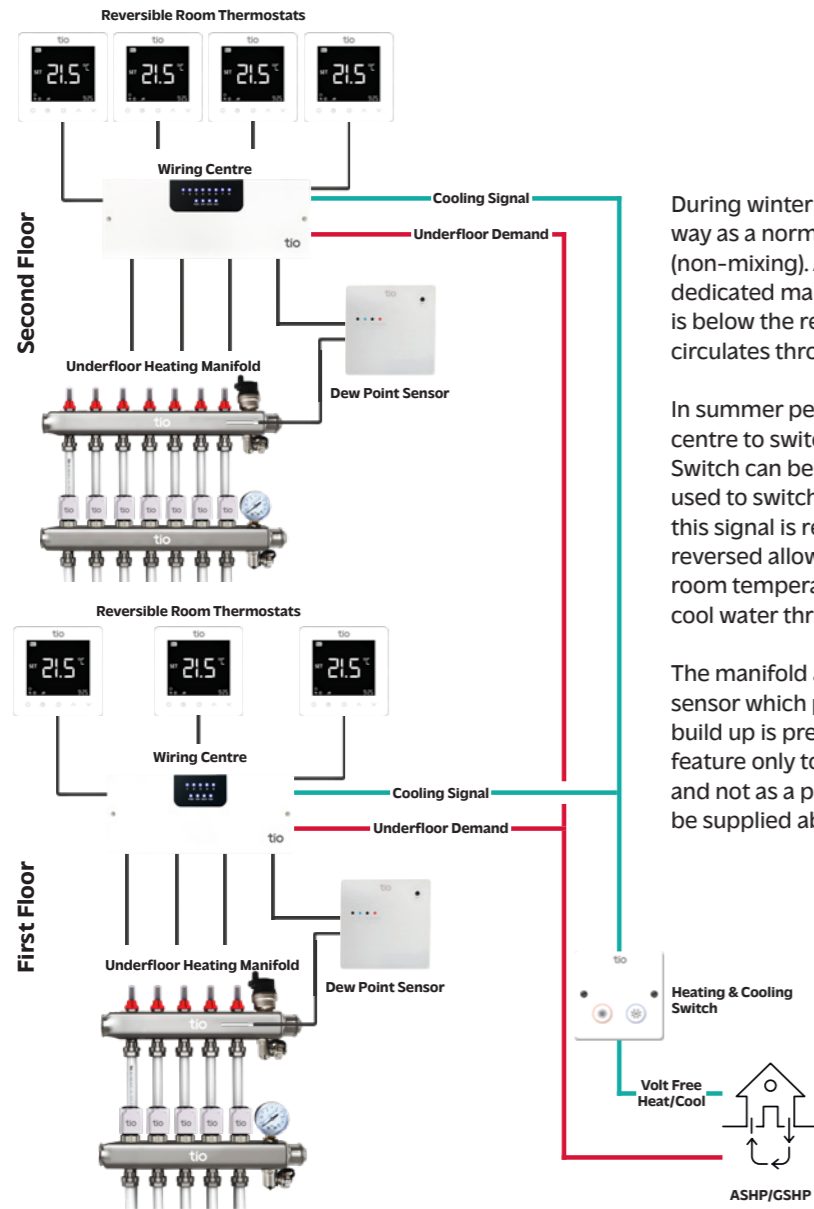
Pairing with a TEVO Gateway advocates for app configuration thus, allowing users to enjoy customisation on their phones at any time or place. Incorporating a 7 day - 4 period control programming system which can be exclusively altered in app. Heating boost, window detection, anti-freeze and anti-calcification protection settings can all also be controlled in-app.

2x AA batteries are required.



Product Code	Product Description
TIOTRV0001	230v white smart RF thermostat





During winter heating periods the system operates in the same way as a normal UFH system, with a basic distribution manifold (non-mixing). A Tio Reversible Room Thermostat allows a dedicated manifold valve to open when the room temperature is below the required temperature set point, the warm water circulates through the floor heating the room.

In summer periods a 230v signal is sent to the manifold wiring centre to switch the unit into cooling mode (the Tio Smart Switch can be used to generate this signal and can also be used to switch a volt free signal from the ASHP/GSHP). When this signal is received, the system and thermostat operation is reversed allowing manifold valve actuators to open when the room temperature is above the desired set point thus allowing cool water through the manifold loops in order to cool the room.

The manifold and wiring centre are fitted with a Dew Point sensor which prevents the system running if condensation build up is present on the manifold body. This is used as a safety feature only to protect building fabric in times of high humidity and not as a primary control, cool water to the manifold should be supplied above dew point.

The manifold and wiring centre are fitted with a Dew Point sensor which prevents the system running if condensation build up is present on the manifold body. This is used as a safety feature only to protect building fabric in times of high humidity and not as a primary control, cool water to the manifold should be supplied above dew point.

The system is only suitable for basic distribution manifolds (non-mixing) as there is no capacity for localised blending of water temperature, water must be supplied to the manifold at suitable temperature to circulate through the floor, typically 35°C - 45°C for heating and 15°C - 20°C (above dew point) for cooling.

There are 5 key components to a heating and cooling system. The manifold, wiring centre, thermostat, heating and cooling switch and a dew point sensor.

Operating your thermostat as you would regularly for heating, setting the temperature to your desired value using up and down, whilst ensuring the switch is in heating mode. Your thermostat will display a sun when it is in heating mode. You will see the wiring centre activate the designated zone.

To switch into cooling mode, toggle the heating and cooling switch into cooling mode. A snowflake icon will appear on your thermostat. You will now have to lower the temperature setting on your thermostat in order to activate the function. You will notice the desired zone on the wiring centre light up.

System breakdown

The Tio Reversible Floor Heating and Cooling System offers a simple and cost-effective solution for floor heating systems where a heat source is able to deliver cool water in summer periods for circulation through a normal Underfloor heating set up.

Product Code	Product Description
TIOSTA0013	230v white floor heating and cooling thermostat
TIOSTA0014	230v black floor heating and cooling thermostat
TIOSWI0001	Tio Smart switch
TIOSEN0002	Tio Dew point sensor
TIOWIR0002	5 Zone wiring control Centre with valve and timer port (230V)
TIOWIR0004	8 Zone wiring control Centre with valve and timer port (230V)

System overview. Switch is set to heating mode, thermostat is not yet calling for heat. (Sun icon visible)

Thermostat is now calling for heat. Zone 1 loop on wiring centre now open and LED signal ON.

Switching the Smart Switch into cooling mode, the snowflake icon is now visible. Thermostat is set to a low value for cooling. Now calling for Zone 1 loop to open for cooling.

Floor Systems.

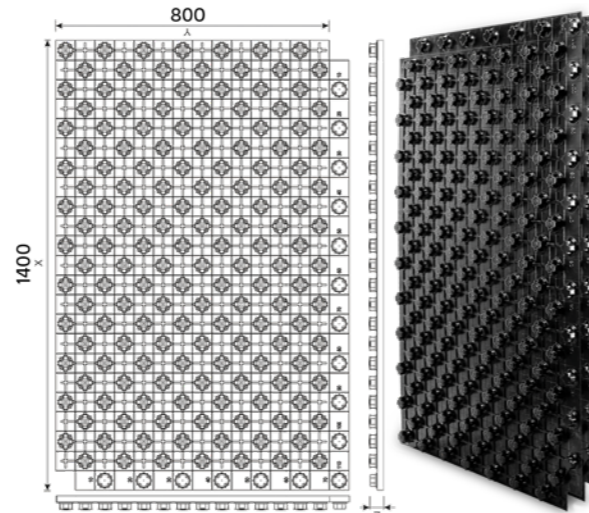
Underfloor heating floor systems encompass various components designed to optimize the efficiency and functionality of this innovative heating method. These components create a comprehensive underfloor heating system, optimizing warmth distribution and ensuring effective integration with various flooring materials for both functional and aesthetic benefits.

Castellated Mat

This system mat is designed for running pipe heating loops on the heating surface. Regular, properly shaped and numerous tabs ensure fast and firm installation of heating pipes.

Benefits include:

- Laying the underfloor heating without the use of clips.
- Rigid structure to prevent the pipe from falling out.
- Metric graduation for easy size adjustment.
- The shape of the tab enables a solid mats connection.



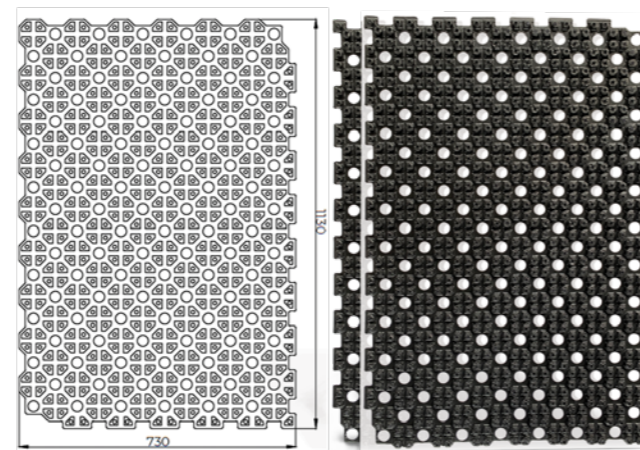
Product Code	Product Description	Dimensions
TIOCAS0001	Castellated mat	1400 x 800 x 20mm

Lowtop Castellated Mat (Adhesive)

Thermoformed and perforated mat for low-profile underfloor heating with the usage of special underlays.

This mat allows assembly of a wet-built floor covering up to 3cm high.

Our lowtop mat is dedicated to renovated buildings and other buildings where the technical conditions make it impossible to perform underfloor heating in a traditional form.



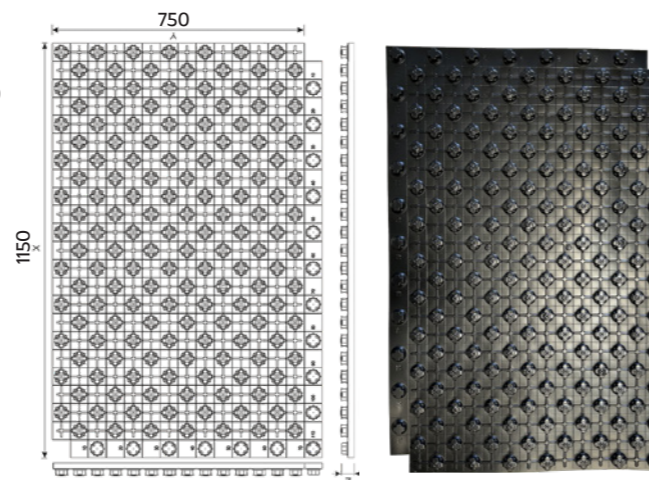
Product Code	Product Description	Dimensions
TIOCAS0002	Lowtop castellated mat with adhesive	1120 x 730 x 13mm

Castellated Mat with adhesive back

This system mat is designed for running pipe heating loops on the heating surface. Regular, properly shaped and numerous tab ensure fast and firm installation of heating pipes.

Benefits include:

- Laying the underfloor heating without the use of clips.
- Rigid structure to prevent the pipe from falling out.
- Metric graduation for easy size adjustment.
- The shape of the tab enables a solid connection.
- Adhesive back for easy installation.

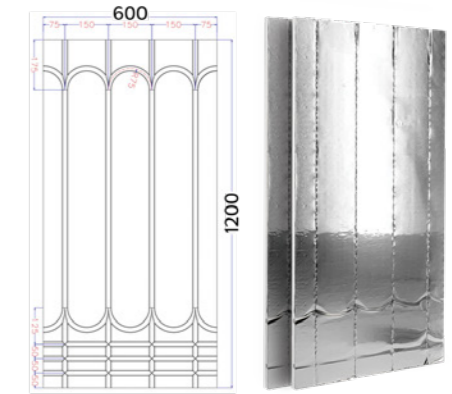


Product Code	Product Description	Dimensions
TIOCAS0003	Castellated mat with adhesive back	1150 x 750 x 20mm

Expanded Polystyrene Insulation Board with Aluminium Foil

Alu Standard XPS 400 is used as a load-bearing element for pipes in dry underfloor heating systems. Due to the physical characteristics of XPS 400, the product ensures optimal thermal and acoustic insulation simultaneously.

The aluminium foil cover is a radiator, which collects the heat from the side of the pipe and distributes it over the surface of the board. Furthermore, foil facing adds an additional layer of moisture resistance, making these boards suitable for areas prone to humidity.



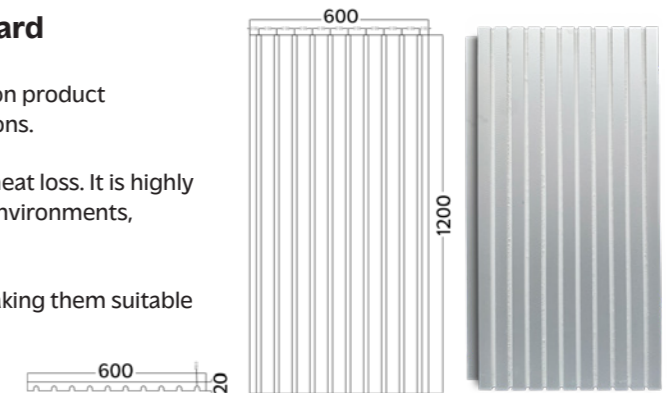
Product Code	Product Description	Dimensions
TIOXPS0001	XPS 400 with aluminium foil	1200 x 600 x 20mm

Extruded Polystyrene Insulation Transition Board

Extruded Polystyrene, referred to as XPS, is a closed cell insulation product commonly used in re-modelling and new construction applications.

XPS provides excellent thermal resistance, helping to minimize heat loss. It is highly resistant to moisture absorption, making it suitable for various environments, including below-grade applications.

XPS boards are strong and can withstand compressive loads, making them suitable for use in areas with heavy traffic.



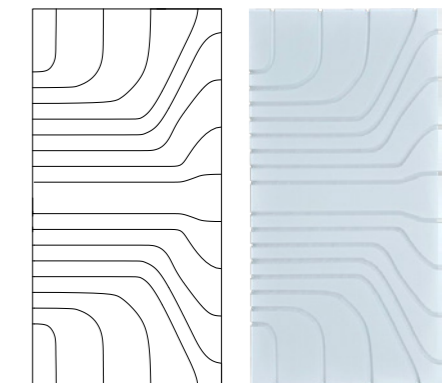
Product Code	Product Description	Dimensions
TIOXPS0002	XPS transition board	1200 x 600 x 20mm

Splayed Polystyrene Insulation Transition Board

Extruded Polystyrene, referred to as XPS, is a closed cell insulation product commonly used in re-modelling and new construction applications.

XPS provides excellent thermal resistance, helping to minimize heat loss. It is highly resistant to moisture absorption, making it suitable for various environments, including below-grade applications.

XPS boards are strong and can withstand compressive loads, making them suitable for use in areas with heavy traffic.



Product Code	Product Description	Dimensions
TIOXPS0004	XPS splayed transition board	1200 x 600 x 20mm

Styrobond 551 Adhesive for XPS Boards

A high performance, high solids solvent-based adhesive which has been especially developed for bonding polystyrene to itself, and to a wide variety of substrates including plasterboard, concrete, brickwork and metal.

Product Code	Product Description
TIOADH0001	Styrobond 551 adhesive for XPS boards

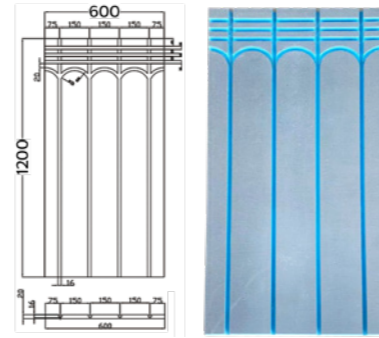


XPS tile backer board for 16mm pipe

Made using high density XPS 400kPa which is thermally insulating, lightweight, waterproof and faced with a reinforced cement coating. The panels provide a quick and easy solution for the placement of pipework for domestic and commercial underfloor heating applications.

Providing a robust surface that is ideal for direct bonding of tiles.

Available in two configurations.

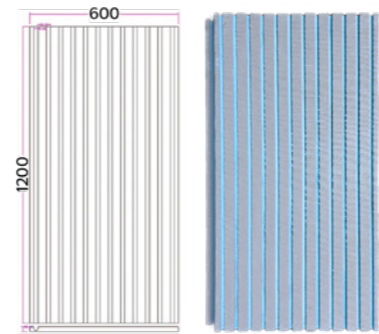


Product Code	Product Description	Dimensions
TIOTBB0001	XPS tile backer board	1200 x 600 x 20mm - 150mm centers
TIOTBB0002	XPS tile backer board	1200 x 600 x 20mm - 200mm centers

Grooved XPS transition tile backer board for 16mm pipe

Ideal in every scenario, these panels are quick and easy to use. Although lightweight, these panels provide high end thermal insulation, perfect for underfloor heating.

Grooved to allow for effective placement of pipe, in order to create even heat distribution.



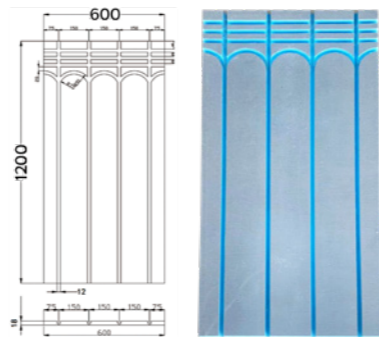
Product Code	Product Description	Dimensions
TIOTBB0004	Grooved XPS tile backer board	1200 x 600 x 20mm

XPS tile backer board for 12mm pipe

Manufactured from high density XPS 400kPa which is thermally insulating, lightweight, waterproof and faced with a reinforced cement coating.

The panels provide a quick and easy solution for the placement of pipework for domestic and commercial underfloor heating applications.

Additionally, the robust surface is ideal for direct bonding of tiles.

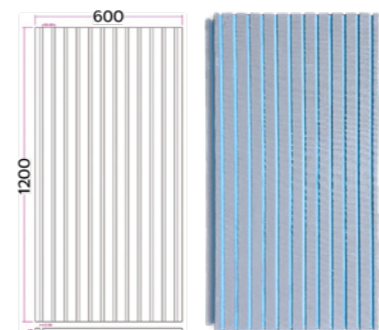


Product Code	Product Description	Dimensions
TIOTBB0003	XPS tile backer board	1200 x 600 x 20mm - 150mm centers

Grooved XPS transition tile backer board for 12mm pipe

Manufactured with installers in mind, these panels are quick and easy to use. Although lightweight, these panels provide high end thermal insulation, perfect for underfloor heating.

Grooved to allow for effective placement of pipe, in order to create even heat distribution.



Product Code	Product Description	Dimensions
TIOTBB0005	Grooved XPS tile backer board	1200 x 600 x 18mm

Washer and screw pack

Washers provide protection, distribute the load of the screw and prevent looseness when attached to a backer board.

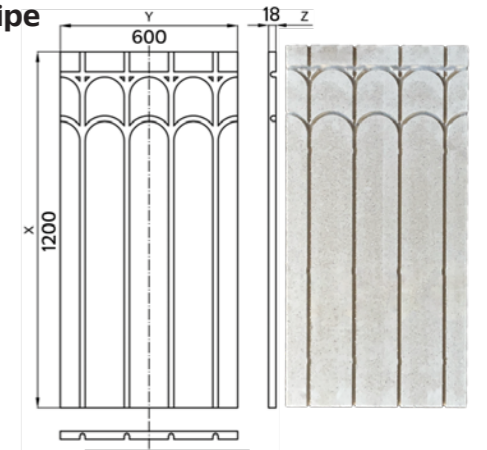


Product Code	Product Description
TIOWAS0100	40mm screws - pack of 100

Gypsum Fiber Board with double torsion ending for 12mm pipe

Fermacell fiber-gypsum panels are used as a load-bearing elements for pipes in dry underfloor heating. The physical properties of the fiber-gypsum boards make the product an effective heat distributor, without using aluminium plates.

The boards are available in various configurations based on the technical conditions of the built environment. Supplied in two pre-routed panels - straight boards with in-built return groove. The board gives a low thermal resistance, owing to its cementitious properties. This in turn gives evenly projected heat throughout the floor area.



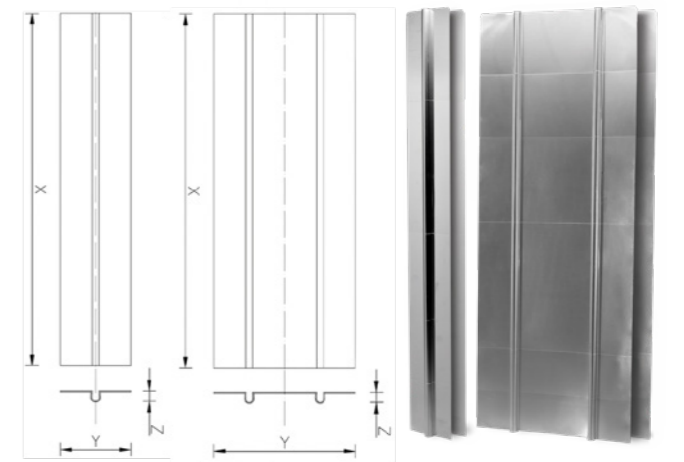
Product Code	Product Description	Dimensions
TIOBLB0001	Gypsum fibre board	1200 x 600 x 18mm

Aluminium plates

Aluminium heat transfer plates are used for installing floor and wall heating systems with the use of low-profile underfloor heating.

Aluminium heat transfer plates allow the heat to spread effectively across the heating area.

Thanks to its special shape, heat transfer plates also act as pipe mounting elements.

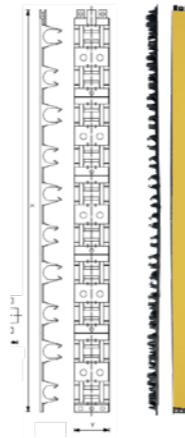


Product Code	Product Description	Dimensions
TIOPLA0001	Aluminium plate	1000 x 120 x 0.4mm
TIOPLA0002	Aluminium plate	1000 x 390 x 0.4mm

1M Clip Rail with Taped Back

Universal rail for mounting underfloor and wall heating systems for use on large surfaces. Designed for pipes with diameters of 16-18 or 25mm to simplify and shorten the installation time. The rail is available in 1000 mm lengths, consisting of two 500mm sections. Elements can easily be combined with each other.

A sticky-back tape is also used to allow installers to simply stick the rail to a surface in order to fix it's position.



Product Code	Product Description	Dimensions
TIORAI0001	Clip rail with taped back	1000 x 45 x 29mm

150mm Edge with Tape & Overlap

Edge strip is placed where the screed meets the vertical structural elements. They help compensate for thermal elongations of the heating floor. Our edge strip provides working space for materials that change their volume under the influence of temperature.

Available in 2 different lengths.



Product Code	Product Description	Dimensions
TIOEDG0002	Edge strip with tape and overlap	150 x 8mm - 50m
TIOEDG0003	Edge strip with tape and overlap	150 x 8mm - 25m

EasyCem TX Leveling Compound

Ideal for application over a wide range of substrates including concrete, sand and cement screeds. Applicable at thicknesses ranging from 5mm to 50mm. EasyCem TX is fast setting and can receive a tiled floor finish after 3 hours or most other types of finish at 24 hours (at 20°C). This product is shrinkage compensated and contains fibre reinforcement, providing the perfect smoothing material for most floor finishes.



Product Code	Product Description
TIOCEM0001	Tio EasyCem TX leveling compound - 25kg

BritFlex Rapid RS Flexible Tile Adhesive

BritFlex Rapidset is a cementitious tile adhesive, suitable for fixing different tiles including ceramics, slate, limestone, marble, porcelain, terrazzo and mosaics to a variety of surfaces.

Suitable for matted underfloor heating.



Product Code	Product Description
TIOFTA0001	Tio Flexi Tile Adhesive - 20kg

Accessories.

Collectively, these accessories contribute to the seamless operation of underfloor heating, offering control, efficiency, and enhanced performance for a comfortable living environment.



Clip gun

Ergonomic device used for the effective fixing of underfloor heating pipe using clips. The device has an appropriate adjustment system which, protects the clips from falling out and allows to set the force of the arm to return to the base position. An inspection window with flap simplifies the removal of blocked clips.

Product Code	Product Description	Dimensions
TIOSPA0001	Tio clip gun	367 x 934 x 62mm



Pin set

Manifold return pin valve set.

Product Code	Product Description
TIOSPA0003	Pin set for manifold



Drain valve

1/2" male connection with 3/4" hose connection. For easy drainage of systems.

Product Code	Product Description
TIOSPA0004	Drain valve



Pair of brackets

Used for mounting manifolds.

Product Code	Product Description
TIOSPA0005	Manifold brackets - 210mm
TIOSPA0024	Manifold brackets - 200mm



1" End cap

Cap off the manifold during fitting and commissioning.

Product Code	Product Description
TIOSPA0006	1" end cap



Automatic air vent

Discharging air during normal operation without the need of manual intervention.

Product Code	Product Description
TIOSPA0007	Automatic air vent



3/4" blanking plug

Temporarily or permanently close off unused manifold ports.

Product Code	Product Description
TIOSPA0008	3/4" blanking plug



Pressure gauge

Measures the manifolds water pressure 0-10l/m.

Product Code	Product Description
TIOSPA0009	10 bar pressure gauge



16mm compression straight connector

Supplied as a barrel and two connectors.

Product Code	Product Description
TIOSPA0010	16mm repair coupling



Pipe cutter

Ideal for use with PE-RT pipe, gives a clean straight cut through pipe.

Product Code	Product Description
TIOSPA0011	Pipe cutter



Screw for automatic air vent

Replacement screw for automatic air vent.

Product Code	Product Description
TIOSPA0012	Screw for AAV



Manifold port splitter fitting

This flow splitter is used for underfloor heating manifold. It divides a flow from one port into two separate flows.

Product Code	Product Description
TIOSPA0013	Port splitter fitting



Gasket for pumps and mixing units

Used to seal the flange segments that hook the pump to the inlet and outlet pipes.



Product Code	Product Description
TIOSPA0014	Gasket

3/4" male to male fitting

These adapters permit the user to convert female connections to male connections, and are especially useful in confined installations or where rigidity is required.



Product Code	Product Description
TIOSPA0015	3/4" male to male fitting

Clip-on pipe label

Ideal for labelling pipe according to zone allocation.



Product Code	Product Description
TIOSPA0016	Red clip-on pipe label
TIOSPA0017	Blue clip-on pipe label

Taconova flow meter

Taconova design 5 bar flow meter. A device that measures how much liquid moves through a pipeline in a given period of time.



Product Code	Product Description
TIOSPA0018	Taconova 0-5l/m flow meter
TIOSPA0031	Taconova 0-2.5l/m flow meter

12mm round cable clip

The white moulding securely grips the cable without damaging it, while the hardened nails keep them fastened in place. Allowing for a neat and professional finish.



Product Code	Product Description
TIOSPA0019	12mm round cable clip

Manual air vent

The manual cap allows manual venting for system commissioning.



Product Code	Product Description
TIOSPA0022	Manual air vent for manifold

Male to male connector

Used to connect manifolds together.



Product Code	Product Description
TIOSPA0034	Straight male 1" x 1" male connector

Pipe repair kits

Combining our TIOSPA0015 with different connector sizes to build a repair kit.



Product Code	Product Description
TIOSPA0026	16mm pipe repair kit
TIOSPA0027	12mm pipe repair kit
TIOSPA0037	20mm pipe repair kit

Star reamer

Used to prepare MLC pipe prior to insertion into a fitting. Ensures that the pipe is round, free from burrs.



Product Code	Product Description
TIOTO00001	Star reamer

Chamfering device

Used to deburr and chamfer both the inner and outer diameters of pipe.



Product Code	Product Description
TIOTO00002	Chamfering device

Manifold connector flat spanner 29mm

Gives a mechanical advantage in applying torque to turn manifold connectors.



Product Code	Product Description
TIOTO00003	29mm flat spanner

Backer board washer with 40mm screw

Washers provide protection, distribute the load of the screw and prevent looseness when attached to a backer board.



Product Code	Product Description
TIOWAS0100	40mm screws - pack of 100

Pipe bend support

The pipe bend support allows bending of heating pipes in a 90-degree bow. It's elbow can be used to guide pipes through floors, ceilings and to a manifold cabinet.
Working temperature: 0°C - 65°C.



Product Code	Product Description
TIOBEN0001	14-18mm pipe bend support
TIOBEN0002	10-12mm pipe bend support
TIOBEN0005	20-22mm pipe bend support

Pipe decoiler

Pipe decoiler is used for quick pipe unrolling during the installation of underfloor heating. Facilitating efficient workflow for installers.
Can be used with coils up to 600m.



Product Code	Product Description	Dimensions
TIODEC0001	Tio pipe decoiler	590 x 230 x 185mm

Pipe clips

Welded tacker staples are used to fasten floor heating pipes to insulating layer. Staples are welded to each other, forming magazines consisting of 25 or 30 pieces. Tacker staples are designed to work with the tacker gun, which simplifies installation and shortens its' time.

Length of staples, that should be used for fixing depends on the thickness of an insulation layer applied. The use of a mixture of plastics gives the clips flexibility, which prevents it from breaking during installation.



Product Code	Product Description
TIOCLI0001	40mm pipe clip - box of 300
TIOCLI0002	50mm pipe clip - box of 300
TIOCLI0003	60mm pipe clip - box of 300

Pipe conduit with slit

This corrugated conduit is used to isolate underfloor heating flow pipes between the manifold and the subsequent room being heated. It can also be used for general protection for cables for office and private applications.



Product Code	Product Description
TIOCON0001	Black pipe conduit - 25m

Styrobond 551 Adhesive for XPS Boards

A high performance, high solids solvent-based adhesive which has been especially developed for bonding polystyrene to itself, and to a wide variety of substrates including plasterboard, concrete, brickwork and metal.

Product Code	Product Description
TIOADH0001	Styrobond 551 adhesive for XPS boards



Press Fittings.

Press fittings are a popular choice in plumbing and HVAC systems due to their efficiency and ease of installation. These fittings utilise a special crimping tool to create a secure, leak-proof connection between pipes, eliminating the need for soldering, threading, or welding.



tio

Equal Straight Connector



Product Code	Product Description	Diameter
01-TPF-01-S1616	Equal Straight Connector	16 x 16mm
02-TPF-01-S2020	Equal Straight Connector	20 x 20mm
03-TPF-01-S2525	Equal Straight Connector	25 x 25mm
04-TPF-01-S3232	Equal Straight Connector	32 x 32mm



Unequal Straight Connector



Product Code	Product Description	Diameter
05-TPF-02-S2016	Unequal Straight Connector	20 x 16mm
06-TPF-02-S2516	Unequal Straight Connector	25 x 16mm
07-TPF-02-S2520	Unequal Straight Connector	25 x 20mm
08-TPF-02-S3216	Unequal Straight Connector	32 x 16mm
09-TPF-02-S3220	Unequal Straight Connector	32 x 20mm
10-TPF-02-S3225	Unequal Straight Connector	32 x 25mm



Male Straight Connector



Product Code	Product Description	Diameter
11-TPF-03-S1612M	Male Straight Connector	16mm x 1/2" M
12-TPF-03-S1634M	Male Straight Connector	16mm x 3/4" M
13-TPF-03-S2012M	Male Straight Connector	20mm x 1/2" M
14-TPF-03-S2034M	Male Straight Connector	20mm x 3/4" M
15-TPF-03-S2512M	Male Straight Connector	25mm x 1/2" M
16-TPF-03-S2534M	Male Straight Connector	25mm x 3/4" M
17-TPF-03-S2511M	Male Straight Connector	25mm x 1" M
18-TPF-03-S3234M	Male Straight Connector	32mm x 3/4" M
19-TPF-03-S3211M	Male Straight Connector	32mm x 1" M
20-TPF-03-S32114M	Male Straight Connector	32mm x 1-1/4" M



Female Straight Connector



Product Code	Product Description	Diameter
21-TPF-04-S1612F	Female Straight Connector	16mm x 1/2" F
22-TPF-04-S1634F	Female Straight Connector	16mm x 3/4" F
23-TPF-04-S2012F	Female Straight Connector	20mm x 1/2" F
24-TPF-04-S2034F	Female Straight Connector	20mm x 3/4" F
25-TPF-04-S2534F	Female Straight Connector	25mm x 3/4" F
26-TPF-04-S2511F	Female Straight Connector	25mm x 1" F
27-TPF-04-S3234F	Female Straight Connector	32mm x 3/4" F
28-TPF-04-S3211F	Female Straight Connector	32mm x 1" F



Swivel Female Connector



Product Code	Product Description	Diameter
29-TPF-05-1612F	Swivel Female Connector	16mm x 1/2" F
32-TPF-05-2012F	Swivel Female Connector	20mm x 1/2" F
30-TPF-05-2034F	Swivel Female Connector	20mm x 3/4" F
31-TPF-05-2534F	Swivel Female Connector	25mm x 3/4" F
33-TPF-05-2511F	Swivel Female Connector	25mm x 1" F



90° Equal Elbow



Product Code	Product Description	Diameter
34-TPF-06-L1616	90° Equal Elbow	16 x 16mm
35-TPF-06-L2020	90° Equal Elbow	20 x 20mm
36-TPF-06-L2525	90° Equal Elbow	25 x 25mm
37-TPF-06-L3232	90° Equal Elbow	32 x 32mm



Female Elbow



Product Code	Product Description	Diameter
38-TPF-07-L1612F	Female Elbow	16mm x 1/2" F
39-TPF-07-L1634F	Female Elbow	16mm x 3/4" F
40-TPF-07-L2012F	Female Elbow	20mm x 1/2" F
41-TPF-07-L2034F	Female Elbow	20mm x 3/4" F
42-TPF-07-L2534F	Female Elbow	25mm x 3/4" F
43-TPF-07-L2511F	Female Elbow	25mm x 1" F
44-TPF-07-L3211F	Female Elbow	32mm x 1" F



Male Elbow



Product Code	Product Description	Diameter
45-TPF-08-L1612M	Male Elbow	16mm x 1/2" M
46-TPF-08-L2012M	Male Elbow	20mm x 1/2" M
47-TPF-08-L2034M	Male Elbow	20mm x 3/4" M
48-TPF-08-L2534M	Male Elbow	25mm x 3/4" M
49-TPF-08-L3211M	Male Elbow	32mm x 1" M



Female Swivel Elbow



Product Code	Product Description	Diameter
50-TPF-09-1612F	Female Swivel Elbow	16mm x 1/2"
51-TPF-09-2034F	Female Swivel Elbow	20mm x 3/4"



Equal Tee Union



Product Code	Product Description	Diameter
52-TPF-10-T161616	Equal Tee Union	16 x 16 x 16mm
53-TPF-10-T202020	Equal Tee Union	20 x 20 x 20mm
54-TPF-10-T252525	Equal Tee Union	25 x 25 x 25mm
55-TPF-10-T323232	Equal Tee Union	32 x 32 x 32mm



Unequal Tee



Product Code	Product Description	Diameter
56-TPF-11-T162016	Unequal Tee	16 x 20 x 16mm
57-TPF-11-T201616	Unequal Tee	20 x 16 x 16mm
58-TPF-11-T201620	Unequal Tee	20 x 16 x 20mm
67-TPF-11-T202016	Unequal Tee	20 x 20 x 16mm
61-TPF-11-T251616	Unequal Tee	25 x 16 x 16mm
68-TPF-11-T251620	Unequal Tee	25 x 16 x 20mm
59-TPF-11-T251625	Unequal Tee	25 x 16 x 25mm
69-TPF-11-T252016	Unequal Tee	25 x 20 x 16mm
62-TPF-11-T252020	Unequal Tee	25 x 20 x 20mm
63-TPF-11-T252025	Unequal Tee	25 x 20 x 25mm
60-TPF-11-T252516	Unequal Tee	25 x 25 x 16mm
70-TPF-11-T252520	Unequal Tee	25 x 25 x 20mm
71-TPF-11-T321625	Unequal Tee	32 x 16 x 25mm
64-TPF-11-T321632	Unequal Tee	32 x 16 x 32mm
65-TPF-11-T322032	Unequal Tee	32 x 20 x 32mm
72-TPF-11-T322520	Unequal Tee	32 x 25 x 20mm
66-TPF-11-T322525	Unequal Tee	32 x 25 x 25mm
73-TPF-11-T322532	Unequal Tee	32 x 25 x 32mm
74-TPF-11-T323225	Unequal Tee	32 x 32 x 25mm



Female Tee Union



Product Code	Product Description	Diameter
76-TPF-12-T2012F20	Female Tee Union	20mm x 1/2" x 20mm
75-TPF-12-T2512F25	Female Tee Union	25mm x 1/2" x 25mm
77-TPF-12-T3212F32	Female Tee Union	32mm x 1/2" x 32mm



Hose Plate Female



Product Code	Product Description	Diameter
78-TPF-13-T1615	Hose Plate Female	16mm x 1/2" F



Male Elbow with Fixing Plate



Product Code	Product Description	Diameter
79-TPF-14-1612M	Male Elbow with Fixing Plate	16mm x 1/2"
80-TPF-14-1634M	Male Elbow with Fixing Plate	16mm x 3/4"
81-TPF-14-2034M	Male Elbow with Fixing Plate	20mm x 1/2"



Female Elbow with Fixing Plate



Product Code	Product Description	Diameter
82-TPF-15-1612F	Female Elbow with Fixing Plate	16mm x 1/2" F
84-TPF-15-1634F	Female Elbow with Fixing Plate	16mm x 3/4" F
83-TPF-15-2012F	Female Elbow with Fixing Plate	20mm x 1/2" F
85-TPF-15-2034F	Female Elbow with Fixing Plate	20mm x 3/4" F



End Cap



Product Code	Product Description	Diameter
86-TPF-16-16	End Cap	16mm
87-TPF-16-20	End Cap	20mm
88-TPF-16-25	End Cap	25mm
89-TPF-16-32	End Cap	32mm



Copper Adapter



Product Code	Product Description	Diameter
90-TPF-17-1615	Copper Adapter	16 x 15mm Cu
91-TPF-17-2015	Copper Adapter	20 x 15mm Cu
92-TPF-17-2022	Copper Adapter	20 x 22mm Cu
93-TPF-17-2522	Copper Adapter	25 x 22mm Cu
94-TPF-17-2528	Copper Adapter	25 x 28mm Cu
95-TPF-17-3228	Copper Adapter	32 x 28mm Cu



Radiator Elbow



Product Code	Product Description	Diameter
96-TPF-18-L1615300	Radiator Elbow	16 x 15 x 300mm
97-TPF-18B-L1615150	Radiator Elbow	16 x 15 x 150mm



Female Tap Connector



Product Code	Product Description	Diameter
98-TPF-19-1612F	Female Tap Connector	16mm x 1/2" F
99-TPF-19-1634F	Female Tap Connector	16mm x 3/4" F



Straight Compression Connector



Product Code	Product Description	Diameter
100-TPF-20-1615	Straight Compression Connector	16 x 15mm
101-TPF-20-2015	Straight Compression Connector	20 x 15mm
102-TPF-20-2022	Straight Compression Connector	20 x 22mm
103-TPF-20-2522	Straight Compression Connector	25 x 22mm
104-TPF-20-2528	Straight Compression Connector	25 x 28mm
105-TPF-20-3228	Straight Compression Connector	32 x 28mm





OEM.

By leveraging our expertise and specialised knowledge of OEMs, you can enhance your product offerings while reducing production costs and time. Ultimately, we can help drive innovation and efficiency in product development, ensuring that the final offerings meet both consumer needs and industry standards.

Original Equipment Manufacture



Automated and Intelligent Manufacturing

Tio's OEM expertise is built on a foundation of extensive industry experience and a commitment to quality.

We collaborate closely with our partners to understand their unique requirements, enabling us to deliver tailored solutions that enhance product performance and drive innovation.



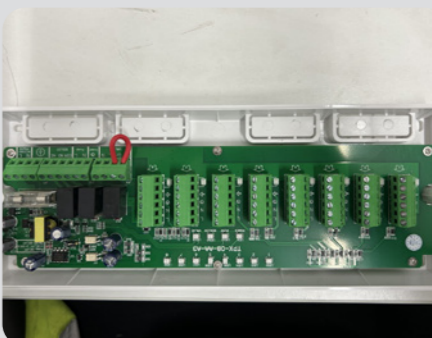
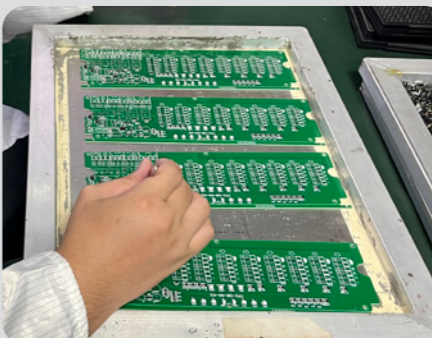
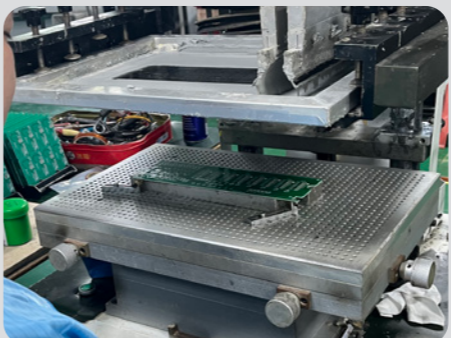
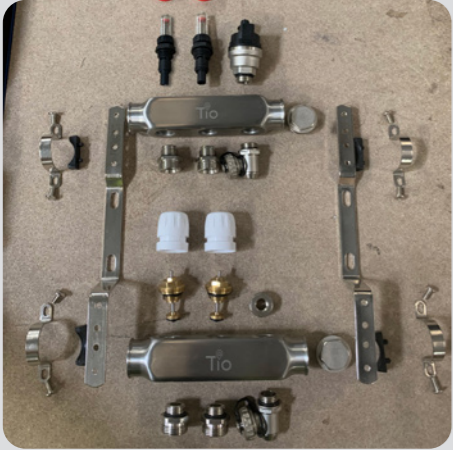
Elevate the potential of your products with our exceptional OEM services. As a trusted partner in innovation, we specialise in delivering high-quality components tailored to your unique specifications.

We provide customised, high-quality components designed to meet your exact specifications, enabling you to create exceptional products that resonate with your customers.

With cutting-edge technology and a commitment to excellence, our experienced team ensures precision and efficiency at every step.

By partnering with us, you'll not only enhance your product quality but also gain the flexibility to adapt to evolving consumer needs.

Boost your competitive edge and take your business to new heights with our OEM service.



Our skilled engineering team employs the latest technologies and best practices to ensure seamless integration and reliability. With a proven track record of successful projects across various sectors, we pride ourselves on being a trusted partner, dedicated to exceeding expectations and fostering long term relationships.

Radiant Heating.

INHEAT is one of the most dynamically developing players in the surface heating and cooling industry. Thanks to their commitment to innovation and quality, they offers sophisticated solutions that meet the latest market expectations and the strictest quality standards simultaneously.

Radiant Heating and Cooling

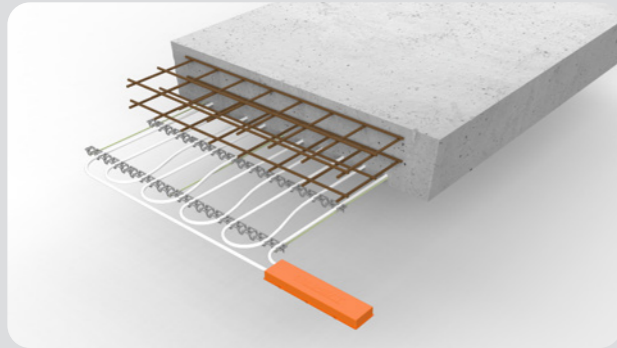
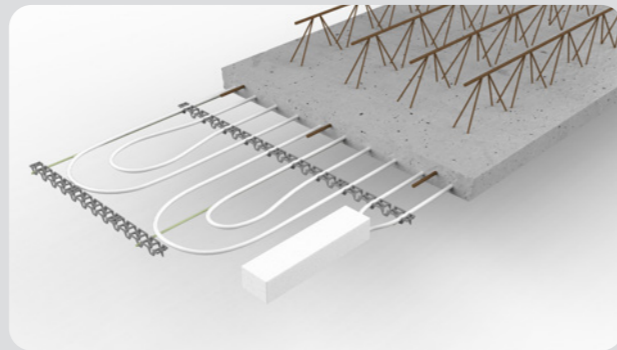
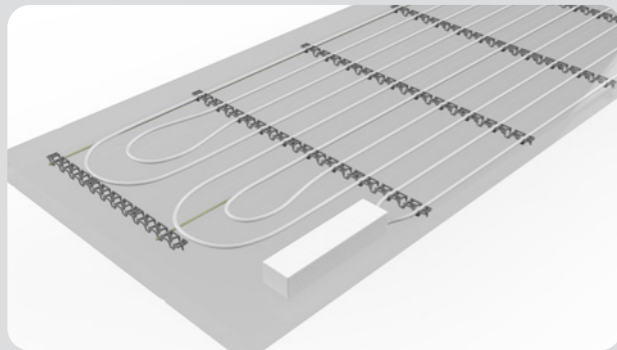
Radiant heating and cooling is a method of indoor climate control that relies on the transfer of thermal energy through radiation. Unlike traditional forced-air systems that rely on convection to circulate heated or cooled air, radiant systems directly heat or cool objects and occupants in a space through the emission or absorption of electromagnetic waves.

In radiant heating, a heat source, hot water pipes, or hydronic tubes embedded in floors, walls, or ceilings, emits infrared radiation that warms the surfaces it comes into contact with.

These surfaces, in turn, radiate heat to the surrounding environment, providing consistent and even warmth throughout the space.

Conversely, in radiant cooling, the system absorbs heat from indoor surfaces, providing a cooling effect. Cold water pipes installed in ceilings, or walls absorb heat from the room, lowering the temperature of the surfaces and creating a comfortable indoor environment.

Radiant heating systems offer several advantages, including reduced energy consumption, improved comfort due to more uniform temperatures, and reduced air circulation, which can decrease the spread of allergens and dust.



Concrete Slab System

Comprised of tailor-made panels which are installed directly to the pre-assembled concrete slabs.

The process of prefabricating these concrete slab systems streamlines the building phase immensely.

Offers an efficient and cost-effective solution for underfloor heating and cooling. With a low initial investment, it delivers a high heating and cooling capacity of up to 80 W/m², ensuring superior performance.

The systems quick reaction time and room-specific regulation allows for tailored comfort throughout your space.

Installation is quick and combines affordability, efficiency, and reliability; making it an ideal choice for both residential and commercial projects.



Suspended Ceiling System

The ceiling panels can be covered with many different types of plasterboard.

Wide range of acoustic plasterboard available on the market, including the specially developed graphite.

Dedicated plasterboards have high heat conductivity whilst preserving all the other beneficial properties.

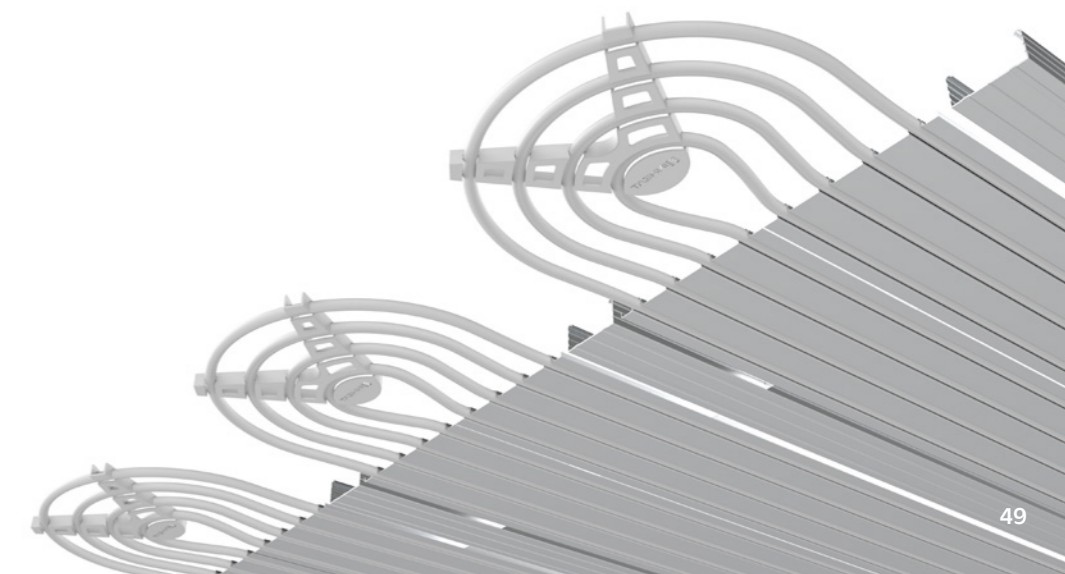
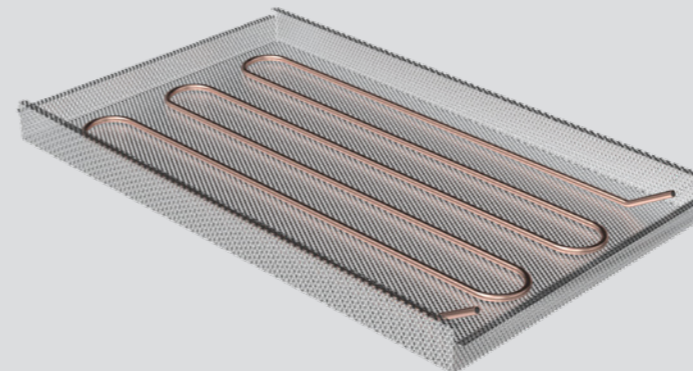


Metal Ceiling System

Modern buildings require energy solutions that are in-line with our current technological understanding. Whether it is for residential purposes, offices, educational institutes or hospitals, it is our duty to provide the most efficient yet effective solutions.

Combining luxurious surface aesthetic with versatile tailor-made bespoke design.

This system has extra high cooling capacity. Furthermore, workers benefit for a quick and easy installation with the option of uninstalling should it be required.



Next day delivery.

Order before **3PM** for next day delivery.

FREE for orders **£1250** and above
£25 for orders between **£500 - £1250**
£30 for orders below **£500**

- A bulk order surcharge of £35 will apply to orders exclusively containing pipe, edge, conduit or large floor systems.
- All prices are exclusive of VAT.
- Orders must be received by 3pm to receive a next day service.
- Our default service is next day delivery.
- Large orders will be palletised, if you do not have a facility to unload a pallet, please notify us in your order.

Mainland UK, Channel Islands, Scottish Highlands, Northern Ireland, Dublin and Eire - POA

Collection is available free of charge from our South Oxfordshire warehouse.
Please call **01235 242710** to arrange collection.



Terms & Conditions.

Application and Application entire agreement

These terms and conditions will apply to the purchase of the goods detailed in our quotation (Goods) by the buyer (you or Customer) from Tio Climate Solutions Ltd a company registered in England and Wales under number 12822160 whose registered office is at Unit 1, Stanton Harcourt Industrial Estate, Stanton Harcourt, OX29 5UX. These terms and conditions will be deemed to have been accepted by you when you accept them or the quotation or from the date of any delivery of the goods (whichever happens earlier) and will constitute the entire agreement between us and you. These terms and conditions and the quotation (together, the Contract) apply to the purchase and sale of any Goods between us and you, to the exclusion of any other terms that you try to impose or incorporate, or which are implied by trade, custom, practice or course of dealing.

Interpretation

A "business day" means any day other than a Saturday, Sunday or bank holiday in England and Wales. The headings in these terms and conditions are for convenience only and will not affect their interpretation. Words imparting the singular number include the plural and vice-versa.

Goods

The description of the Goods is set out in our sales documentation, unless expressly changed in our quotation. In accepting the quotation, you acknowledge that you have not relied upon any statement, promise or other representations about the Goods by us. Descriptions of the Goods set out in our sales documentation are intended as a guide only. We can make any changes to the specification of the Goods which are required to conform to any applicable safety or other statutory or regulatory requirements.

Price

The price (Price) of the Goods is set out in our quotation current at the date of your order or such other price as we may agree in writing. If the cost of the Goods to us increases due to any factor beyond our control including, but not limited to, material costs, labour costs, alteration of exchange rates or duties, or changes to delivery rates, we can increase the price before delivery. Any increase in the Price under the clause above will only take place after we have told you about it. You may be entitled to discounts. Any and all discounts will be at our discretion. The price is exclusive of fees for packaging and transportation/delivery. The price is exclusive of any applicable VAT and other taxes or levies which, are imposed or charged by any competent authority.

Cancellation and alteration

Details of the Goods as described in the clause above (Goods) and set out in our sales documentation are subject to alteration without notice and are not a contractual offer to sell the Goods which is capable of acceptance. The quotation (including any non-standard price negotiated in accordance with the clause on Price (above)) is valid for 7 days only from the date shown in it unless expressly withdrawn by us at an earlier time. Either of us can cancel the order for any reason before your acceptance (or rejection) of the quotation.

Payment

We will invoice you for the Price either: on or at any time after delivery of the Goods; or where the Goods are to be collected by you or where you wrongfully do not take delivery of the Goods, at any time after we have notified you that the Goods are ready for collection, or we have tried to deliver them. You must pay the Price within 30 days of the date of our invoice or otherwise according to any credit terms agreed between us. You must make payment even if delivery has not taken place and or that the title in the Goods has not passed to you. If you do not pay within the period set out above, we will suspend any further deliveries to you and without limiting any of our other rights or remedies for statutory interest, charge you interest at the rate of 5% per annum above the base rate of the Bank of England from time to time on the amount outstanding until you pay in full. Time for payment will be of the essence of the Contract between us and you. All payments must be made in British Pounds unless otherwise agreed in writing between us. Both parties must pay all amounts due under these Terms and Conditions in full without any deduction or withholding except as required by law and neither party is entitled to assert any credit, set-off or counterclaim against the other to justify withholding payment of any such amount in whole or in part.

Termination

We can terminate the sale of Goods under the Contract where: you commit a material breach of your obligations under these Terms and Conditions. You are or become or, in our reasonable opinion, are about to become the subject of a bankruptcy order or take advantage of any other statutory provision for the relief of insolvent debtors; you enter into a voluntary arrangement under Part 1 of the Insolvency Act 1986, or any other scheme or arrangement is made with your creditors; or you convene any meeting of your creditors, enter into voluntary or compulsory liquidation, have a receiver, manager, administrator or administrative receiver appointed in respect of your assets or undertakings or any part thereof, any documents are filed with the court for the appointment of an administrator, a notice of intention to appoint an administrator is given by you or any of your directors or by a qualifying floating charge holder (as defined in para. 14 of Schedule B1 of the Insolvency Act 1986), a resolution is passed or petition presented to any court for the winding up of your affairs or the granting of an administration order, or any proceedings are commenced relating to your insolvency or possible insolvency.

Delivery

We will arrange for the delivery of the Goods to the address specified in the quotation, or your order or to another location we agree in writing. If you do not specify a delivery address or if we both agree, you must collect the Goods from our premises. Subject to the specific terms of any special delivery service, delivery can take place at any time of the day and must be accepted at any time between 8 am to 8 pm. If you do not take delivery of the Goods we may, at our discretion and without prejudice to any other rights: store or arrange for the storage of the Goods and will charge you for all associated costs and expenses including, but not limited to, transportation, storage and insurance; and/or make arrangements for the redelivery of the Goods and will charge you for the costs of such redelivery; and/or after 10 business days, resell or otherwise dispose of part or all of the Goods and charge you for any shortfall below the price of the Goods. If redelivery is not possible as set out above, you must collect the Goods from our premises and will be notified of this. We can charge you for all associated costs including, but not limited to, storage and insurance. Any dates quoted for delivery are approximate only, and the time of delivery is not of the essence. We will not be liable for any delay in delivery of the Goods that is caused by a circumstance beyond our control or your failure to provide us with adequate delivery instructions or any other instructions that are relevant to the supply of the Goods. We can deliver the Goods in instalments, which will be invoiced and paid for separately. Each instalment is a separate contract. Any delay in delivery or defect in an instalment will not entitle you to cancel any other instalment.

Terms & Conditions.

Inspection and acceptance of Goods

You must inspect the Goods on delivery or collection. If you identify any damages or shortages, you must inform us in writing within 2 days of delivery, providing details. Other than by agreement, we will only accept returned Goods if we are satisfied that those Goods are defective and if required, have carried out an inspection. Subject to your compliance with this clause and/or our agreement, you may return the Goods and we will, as appropriate, repair, replace, or refund the Goods or part of them. We will be under no liability or further obligation in relation to the Goods if: if you fail to provide notice as set above; and/or you make any further use of such Goods after giving notice under the clause above relating to damages and shortages; and/or the defect arises because you did not follow our oral or written instructions about the storage, commissioning, installation, use and maintenance of the Goods; and/or the defect arises from normal wear and tear of the Goods; and/or the defect arises from misuse or alteration of the Goods, negligence, wilful damage or any other act by you, your employees or agents or any third parties. You bear the risk and cost of returning the Goods. Acceptance of the Goods will be deemed to be upon inspection of them by you and in any event within 1 day after delivery.

Risk and title

The risk in the Goods will pass to you on completion of delivery. Title to the Goods will not pass to you until we have received payment in full (in cash or cleared funds) for: (a) the Goods and/or (b) any other goods or services that we have supplied to you in respect of which payment has become due. Until title to the Goods has passed to you, you must (a) hold the Goods on a fiduciary basis as our bailee; and/or (b) store the goods separately and not remove, deface or obscure any identifying mark or packaging on or relating to the Goods; and/or (c) keep the Goods in satisfactory condition and keep them insured against all risks for their full price from the date of delivery. As long as the Goods have not been resold, or irreversibly incorporated into another product, and without limiting any other right or remedy we may have, we can at any time ask you to deliver up the Goods and, if you fail to do so promptly, we can enter any of your premises or of any third party where the Goods are stored to recover them.

Limitation of liability

Our liability under the Contract, in breach of statutory duty, and tort, misrepresentation or otherwise will be limited to this section. Subject to the clauses above on Inspection and Acceptance and Risk and Title, all warranties, conditions or other terms implied by statute or common law (save for those implied by Section 12 of the Sale of Goods Act 1979) are excluded to the fullest extent permitted by law. If we do not deliver the Goods, our liability is limited, subject to the clause below, to the costs and expenses incurred by you in obtaining replacement goods of similar description and quality in the cheapest market available, less the price of the Goods. Our total liability will not, in any circumstances, exceed the total amount of the Price payable by you. We will not be liable (whether caused by our employees, agents or otherwise) in connection with the Goods, for: any indirect, special or consequential loss, damage, costs, or expenses; and/or any loss of profits; loss of anticipated profits; loss of business; loss of data; loss of reputation or goodwill; business interruption; or, other third party claims; and/or any failure to perform any of our obligations if such delay or failure is due to any cause beyond our reasonable control; and/or any losses caused directly or indirectly by any failure or breach by you in relation to your obligations; and/or any loss relating to the choice of the Goods and how they will meet your purpose or the use by you of the Goods supplied. The exclusions of liability contained within this clause will not exclude or limit our liability for death or personal injury caused by our negligence; or for any matter for which it would be illegal for us to exclude or limit our liability; and for fraud or fraudulent misrepresentation.

Communications

All notices under these Terms and Conditions must be in writing and signed by, or on behalf of, the party giving notice (or a duly authorised officer of that party). Notices will be deemed to have been duly given: when delivered, if delivered by courier or other messengers (including registered mail) during the normal business hours of the recipient when sent, if transmitted by fax or email and a successful transmission report or return receipt is generated; on the fifth business day following mailing, if mailed by national ordinary mail; or on the tenth business day following mailing, if mailed by airmail. All notices under these Terms and Conditions must be addressed to the most recent address, email address or fax number notified to the other party.

Data protection

When providing the Goods to the Buyer, the Seller may gain access to and/or acquire the ability to transfer, store or process personal data of employees of the Buyer. The parties agree that where such processing of personal data takes place, the Buyer shall be the 'data controller' and the Seller shall be the 'data processor' as defined in the General Data Protection Regulation (GDPR) as may be amended, extended and/or re-enacted from time to time. For the avoidance of doubt, 'Personal Data', 'Processing', 'Data Controller', 'Data Processor' and 'Data Subject' shall have the same meaning as in the GDPR. The Seller shall only Process Personal Data to the extent reasonably required to enable it to provide the Goods as mentioned in these terms and conditions or as requested by and agreed with the Buyer, shall not retain any Personal Data longer than necessary for the Processing and refrain from Processing any Personal Data for its own or any third party's purposes. The Seller shall not disclose Personal Data to any third parties other than employees, directors, agents, subcontractors or advisors on a strict "need-to-know" basis and only under the same (or more extensive) conditions as set out in these terms and conditions or to the extent required by applicable legislation and/or regulations. The Seller shall implement and maintain technical and organisational security measures as required to protect Personal Data Processed by the Seller on behalf of the Buyer. Further information about the Seller's approach to data protection is specified in its Data Protection Policy, which can be found on the company website or a manual copy can be requested in person.

For any enquiries or complaints regarding data privacy, you can e-mail: office@tioclimatesolutions.co.uk.

Circumstances beyond the control of either party

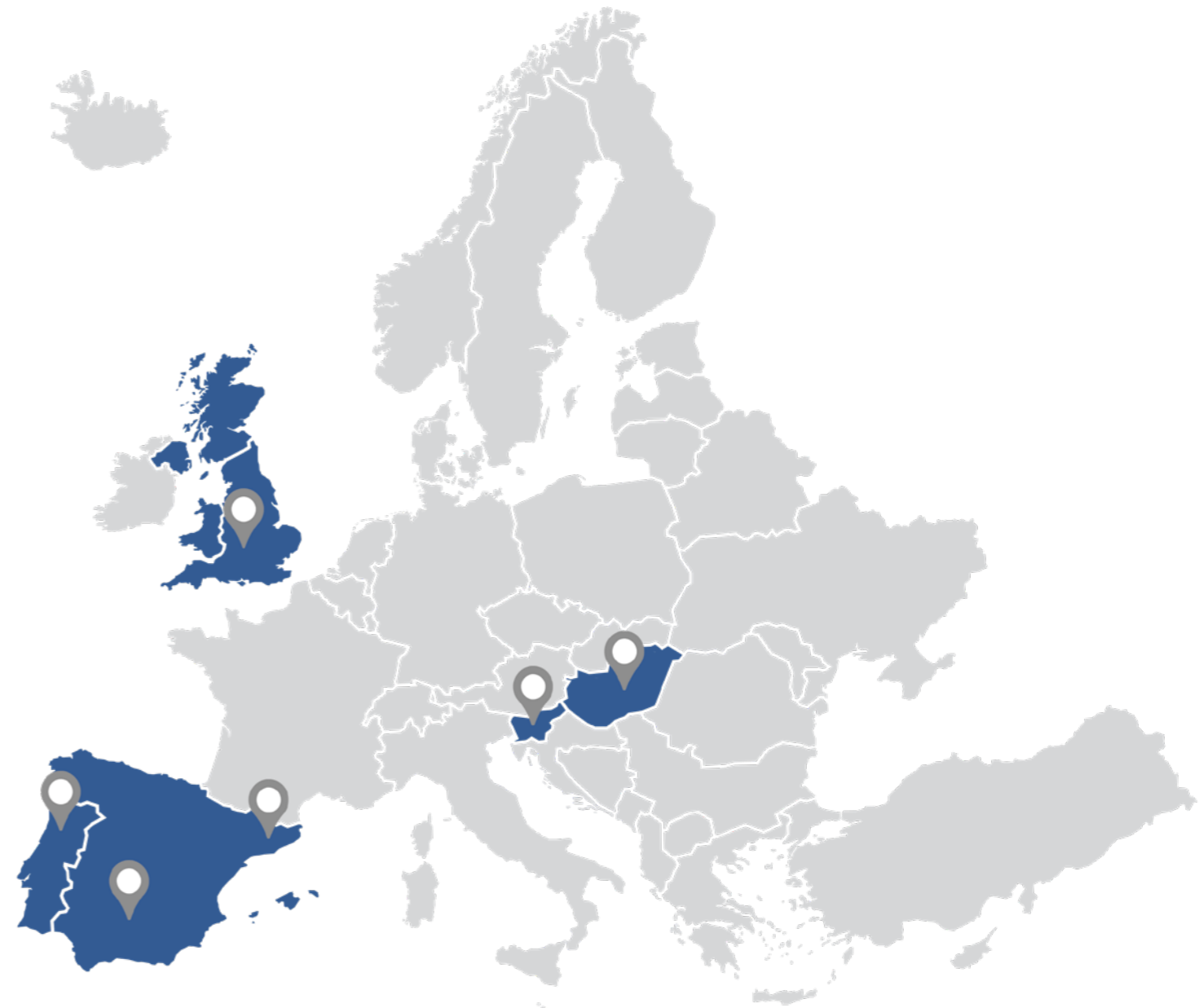
Neither party shall be liable for any failure or delay in performing their obligations where such failure or delay results from any cause that is beyond the reasonable control of that party. Such causes include, but are not limited to: industrial action, civil unrest, fire, flood, storms, earthquakes, acts of terrorism, acts of war, governmental action or any other event that is beyond the control of the party in question. No Waiver by us of any breach of these Terms and Conditions by you shall be considered as a waiver of any subsequent breach of the same or any other provision.

Severance

If one or more of these Terms and Conditions is found to be unlawful, invalid or otherwise unenforceable, that/those provisions shall be deemed severed from the remainder of these Terms and Conditions (which will remain valid and enforceable).

Law and jurisdiction

This Agreement shall be governed by and interpreted according to the law of England and Wales and all disputes arising under the Agreement (including non-contractual disputes or claims) shall be subject to the exclusive jurisdiction of the English and Welsh courts.



Partnered with
PIPEX
THINK FLEXIBLE

Products for the
Built Environment



www.tioclimatesolutions.co.uk