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# TERRA THERM

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HYDRONIC HEATING SYSTEM





Welcome to LEAP, a new name dedicated to providing the most advanced water systems in Australasia.

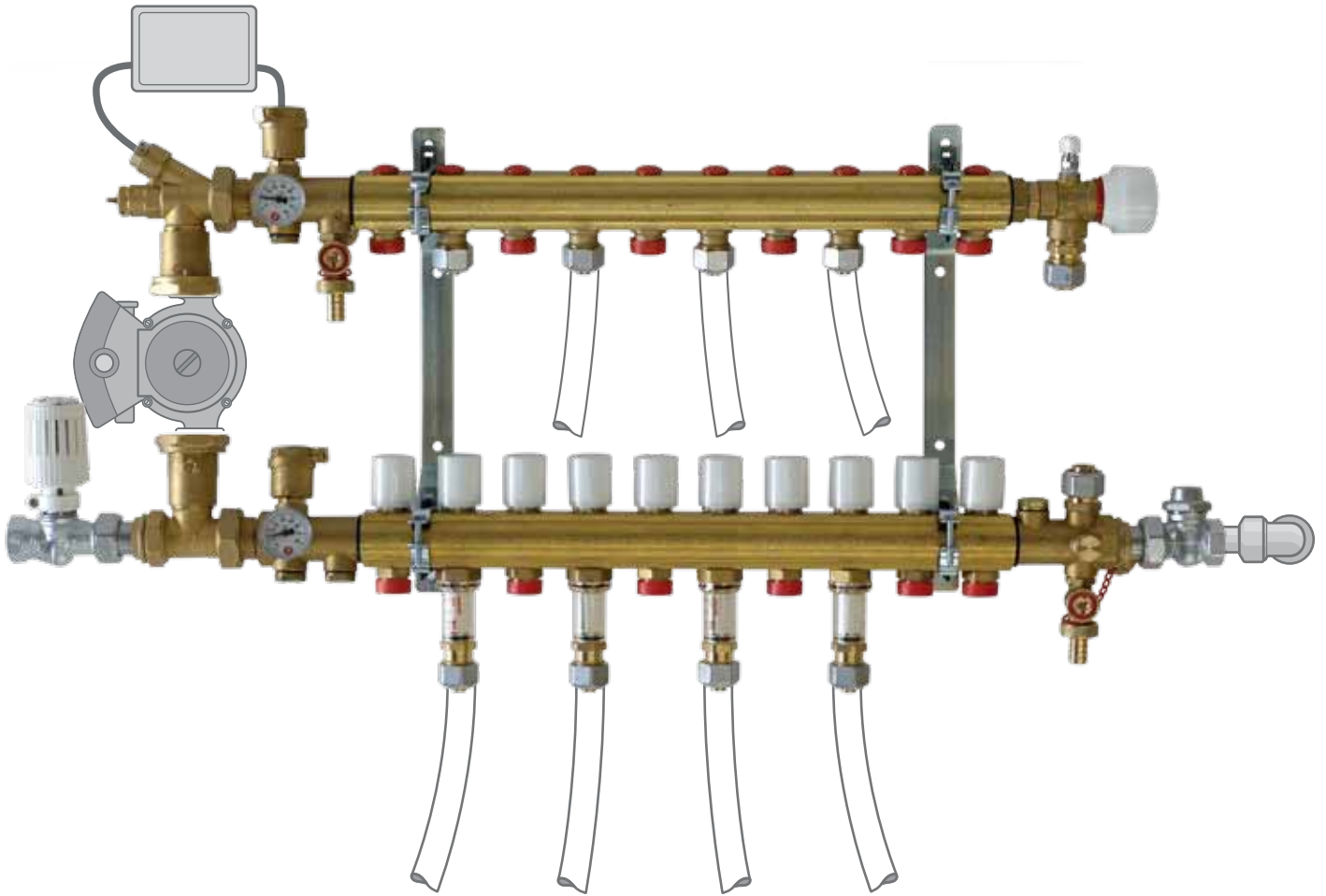
LEAP aims to improve customers' lives with innovative, sustainable, environmentally responsible water systems that deliver superior performance, without costing the earth.

We take responsibility for the environment by sourcing and developing products that are more energy and water efficient – putting less strain on natural resources.

We are proud of our ability to actively design, develop and engineer new water systems to tackle and solve old problems in new ways – we call it 'challenging the status flow'.

# TERRATHERM:

AFFORDABLE, BUILT-IN HEALTHY HEATING



**TERRATHERM is a highly effective way to radiate comfortable, healthy warmth through your home. TERRATHERM pipes heat by circulating hot water through flexible underfloor pipes. The system delivers warmth by radiant heat transfer starting at ground level. TERRATHERM is built-in and unobtrusive. Its zone-by-zone controls also let you manage your home heating more efficiently, ensuring heat goes where and when it's needed.**

Homeowners are discovering the benefits of hydronic heating – and increasingly they're turning to TERRATHERM to provide it.

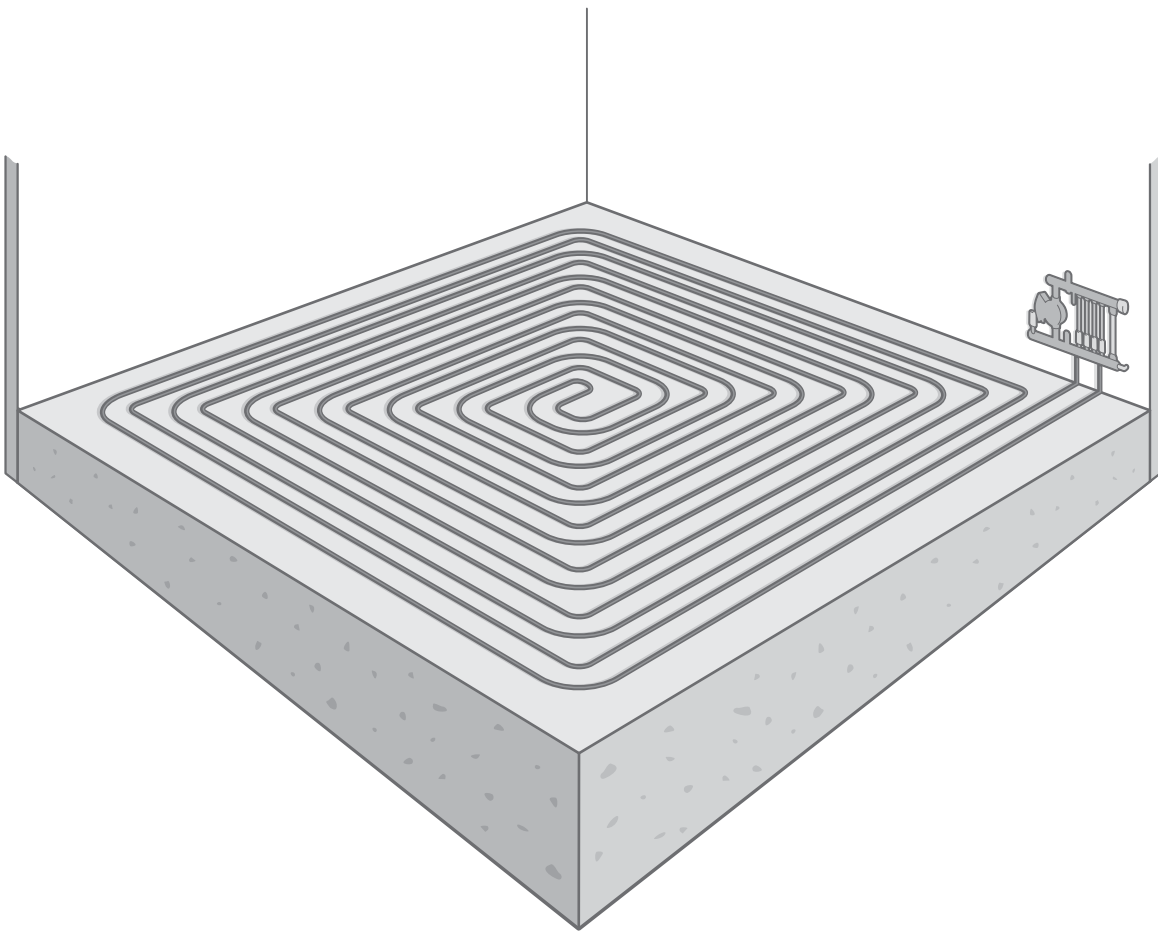
TERRATHERM works on a very simple principle, known since Roman times, of circulating hot water through flexible pipes under the floor. It distributes heat evenly around a room, creating a wonderful sense of wellbeing that surrounds you – starting from your feet where you really want to be warm.

With no high-temperature surfaces to touch, TERRATHERM is ideal if you have children in the house. It's also tidy and discreet with no unsightly heaters or vents intruding on the lines of your room and furnishings.

With energy prices rising, economy in a heating system is increasingly important. Here too TERRATHERM delivers. It's completely controllable giving you total flexibility to turn the heat off (or down) in individual rooms or areas you're not using.

# TERRATHERM AT A GLANCE

- **TOTALLY CONTROLLABLE**, room-by-room warmth
- **SAFE FOR CHILDREN** with no hot surfaces to touch
- **DISTRIBUTES HEAT EVENLY THROUGHOUT THE ROOM**, starting at the feet, where it's most needed



- **MORE ECONOMICAL** than electric heating. The room stays warm long after the system has been turned off, and you only heat the rooms you need to
- **EASILY CONNECTS TO RADIATORS** to heat other areas of the home such as upstairs floors
- **TOUGH AND DURABLE**, adds lasting value to the property. Hydronic heating systems are becoming a highly desirable addition to any home

# WHY TERRATHERM IS BETTER

## USES COMFORTABLE, EFFICIENT RADIANT HEAT

Radiant heat is one of the most efficient forms of heating around and one of the most comfortable because it doesn't dry the air out.

## QUIET, NO DRAUGHTS

Radiant energy is like the sun's warmth. It travels through space without needing draughts to push it. Unlike forced air heat, it's silent – no noise from fans or airflow through ducts.

## HEALTHY

Radiant systems like TERRATHERM also improve the quality of the air in your home. Radiant systems are known to decrease the dust mite population in homes by 50% to 80%.

## FULLY PROGRAMMABLE

TERRATHERM comes with programming options that put you in control.

## LOW MAINTENANCE

Like all really good ideas, TERRATHERM is simple. It's easy to install and requires minimal maintenance. A TERRATHERM system is made of tough, durable materials and will add lasting value to your home.

## QUICK HEATING, SLOW COOLING

TERRATHERM gets your home warm surprisingly fast. Accurate controls keep temperatures just the way you like them, and it keeps things warm long after you turn it off.

## DISTRIBUTES HEAT EVENLY

A radiant system like TERRATHERM is great for warming a room evenly. It keeps the warmth where you need it most, in the lower part of the room.

# TECHNICAL DETAILS

## PIPE LENGTHS

TERRATHERM underfloor heating pipe is available in a variety of coil lengths, enabling the installation of continuous circuits with minimal pipe wastage.

DIAMETER mm	COIL LENGTH m	AVAILABLE
16	60	3
16	80	3
16	100	3
16	150	3
16	200	3
16	500	3

## APPROVALS

TERRATHERM underfloor heating pipe is manufactured within a Quality Management System, which satisfies BS EN ISO 9001 requirements.

## GUARANTEE

TERRATHERM has a minimum design life expectancy of 50 years provided the system is installed in accordance with the manufacturer's recommendations. These recommendations include service temperatures and pressures. Peak life cycle operating temperatures/pressures are given in the adjacent table. As a result of its rigorous Quality Management Programme, Leap offer a 50 year guarantee against defects in materials or manufacturing of TERRATHERM underfloor heating pipe.

## PEAK LIFE CYCLE OPERATING TEMPERATURES/PRESSURES

Although the design temperatures and pressures encountered in underfloor heating systems are generally lower than that of conventional heating systems, the table below illustrates the peak life cycle operating temperatures and pressures of the TERRATHERM system.

	20°C	30°C	40°C	50°C	60°C	70°C	80°C	95°C	SHORT MALFUNCTION AT 114°C
SAFE PRESSURES									
Bar	12	11.5	11	10.5	9	8	7	6	3
PSI	174	167	160	152	131	116	102	87	43.5
Head of water (m)	120	115	110	105	90	80	70	60	29

**PLEASE NOTE:** This information is only a summary. Your plumber will need to contact a LEAP supplier for a copy of the Installation Manual which has other important information.

# OTHER LEAP SYSTEMS



## SOLAR WATER HEATING SYSTEM

SOLARGENIUS water heating system harnesses clean, free solar energy to heat water quickly and effectively, even on cloudy days. Solar water heating systems are commonly installed in both new and existing houses, especially when renovating, and are integrated with household electricity and gas supplies. SOLARGENIUS systems are lightweight, easy-to-install solar water heaters that can save households between 40% and 75% on hot water bills.



## HOT WATER CONTROL SYSTEM

SAFETEMP is the reliable and convenient way to ensure water temperatures at your ablutionary fixtures, bath, shower and basin are safe. Its unique design keeps tap temperatures at a safe level, using a special cartridge that detects incoming water temperatures and adjusts the blend. The failsafe mechanism shuts off supply if there's no cold water. Its unique design and construction means it's guaranteed for 5 years – currently the only safety valve guaranteed for so long.



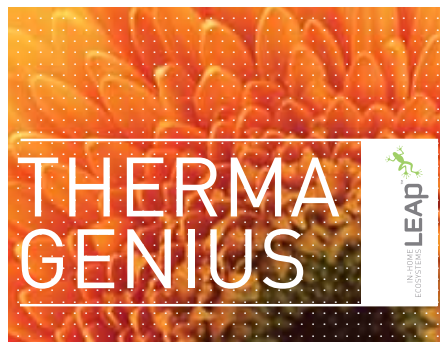
## WASTEWATER SYSTEM

FRESHFLOW combines the advanced Hepv0 self-sealing waterless waste valve with easy to install flexible HepFlex Waste piping. This innovative system replaces space-hungry S or U traps with a hygienic valve that provides an effective and reliable barrier against sewer gases escaping into a building. As well as its space-saving advantages, FRESHFLOW leaves no standing reservoir of water which can stagnate and lead to bacterial or fungal growth.



## MANIFOLD PLUMBING SYSTEM

MANIFLOW saves energy and conserves water by having a dedicated pipeline from a manifold near the hot water cylinder to each tap or fixture in the house. Hot water goes straight where it's needed without sitting round cooling in the big 'feeder' pipes needed to serve multiple outlets. Less energy and water is wasted, as hot water arrives faster at the tap. Flexible and non-metallic pipes result in a quiet and efficient plumbing system that doesn't suffer corrosion, scaling or microbial build-up.



## HEAT PUMP WATER HEATING SYSTEM

THERMAGENIUS extracts renewable energy stored in the air to heat water. THERMAGENIUS is not dependent on weather and operates throughout the year from inside or outside your home. With high efficiencies, payback on a THERMAGENIUS can be very quick. Unobtrusive, easy to install and cheap to run, these units are a great way to provide hot water for the home. The only energy used is electricity to power the pumps but delivering 3 or 4 times as much energy.



## HOME FIRE SPRINKLER SYSTEM

BLAZESTOP is an affordable sprinkler system linked to a domestic water supply, putting the reassurance of sprinkler protection within reach of private homeowners. Designed especially for the home environment, BLAZESTOP uses sprinkler heads concealed in the ceiling. Flexible, concealed piping makes retrofitting into homes easy and cost-effective. Made from durable polybutylene, it isn't affected by scaling, corrosion, or microbiological growth and doesn't transmit noise.

FOR MORE INFORMATION ABOUT TERRATHERM CALL

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