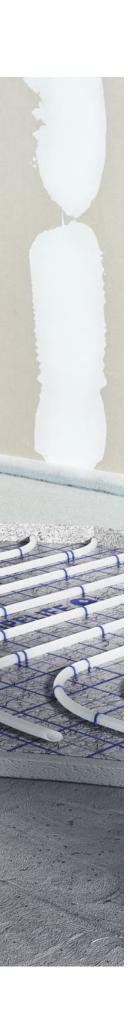
Hydronic heating and cooling solutions

HEATING AND COOLING









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Comprehensive heating and cooling solutions

Hydronic surface heating and cooling systems are a cost-effective, sustainable alternative for building and homeowners concerned with comfort and energy efficiency.

We have solutions for both new build and renovation projects, from small residences through to large-scale housing developments and industrial setups.

Save time with our design service and wide range of standard as well as prefabricated products geared towards streamlining your installation from start to finish.

Benefits at a glance

- Meet your needs and your clients' expectations regarding installation, quality, comfort, running costs and investment.
- Save up to 90% of installation time with PIPELIFE's prefabricated solutions.
- > Bolster your reputation as a service provider by counting on high-quality products produced to the highest national and international standards.
- > Enjoy error-free installation thanks to our expert advice service.
- > Increase property value with smart home compatible temperature control systems.
- > Save time and resources with our tailored design service.

Fit for all installations

- > Standard installation for individual small to medium-sized projects, such as single-family homes, shop floors, etc.
- > Prefab for large-scale surfaces, horizontal and vertical housing, or commercial developments (e.g., office buildings).
- Energy renovation projects for updating existing heating and cooling systems to energy-efficient alternatives.





Add value no matter the use case

While commonly used in residential settings, the advantages of hydronic heating and cooling also perfectly lend themselves to large industrial and commercial spaces. However, their benefits aren't just limited to indoor use and add value in outdoor settings such as sports field turf conditioning and snow and ice melting for public spaces or driveways.

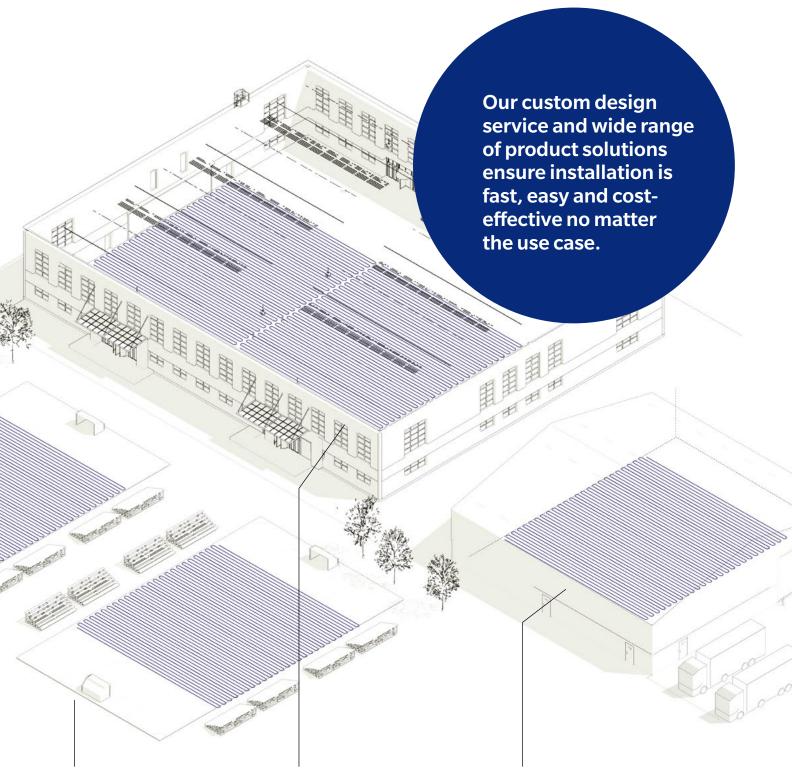
Snow & ice melting

Safeguard hospitals, schools, retirement communities and more from fall-related injuries with 24/7 protection for paths, ramps and roads. Save on snow and ice-clearing maintenance costs and protect paving from damage by machinery and salts. Hydronic solutions are also perfect for securing private driveways and are easily run from the same system required for indoor hydronic heating setups.

Residential properties

Hydronic solutions ensure ambient and aesthetically pleasing living environments throughout the year. This energy-efficient heating and cooling method is quiet, cost-effective and supports clean indoor air quality to optimize everyday comfort for homeowners.





Sports field turf conditioning

Enjoy all-season occupancy of your sports fields with a hydronic system that ensures year-round growing conditions for FIFA-quality turf.

Indoor sports halls

Maintain a comfortable environment for both players and spectators in all seasons while fully utilizing the available space for optimal sporting experiences. The design freedom afforded by hydronic heating and cooling systems is particularly beneficial for multipurpose facilities.

Industrial & commercial facilities

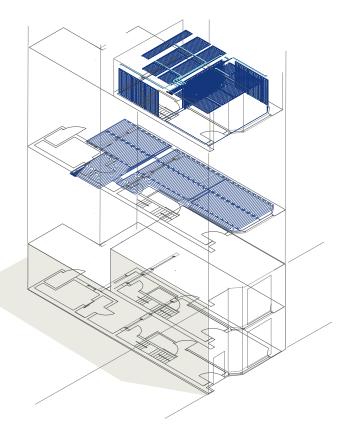
Hydronic systems evenly heat vast, high-ceilinged spaces and require less energy compared to forced air systems. With wall and underfloor applications, hydronic solutions maximize usable space and can withstand heavy loads from industrial and commercial activity.



We provide an all-encompassing, customized service to ensure your system installation is hassle-free — adding value, not stress.

With PIPELIFE, you collaborate with one supplier from conception and layout design through to installation. Whether you're starting from scratch or planning to retrofit, we'll find the optimal solution for your individual project requirements, saving you time and money every step of the way.





Design service

PIPELIFE engineers provide detailed plans for the application of our heating and cooling systems. These include heating-efficiency calculations, energy-saving estimates, and complete product and accessory specifications.

Based on the information you provide, we will develop a system layout proposal and plan how the various heating and cooling elements can be best utilized in your space. Technical specifications and schematic diagrams will also be provided to demonstrate a complete picture of your building's new heating and cooling system.

- Heat loss calculations
- Pipe layouts
- · Pipe and pump dimensioning
- Heat and cooling source dimensioning
- · Detailed installation drawings
- · Manifold balancing data

System overview

Our comprehensive range of product systems can be configured in a variety of ways to meet your specific project requirements.

	Prefab	Renovation	New build	Heating	Cooling
Underfloor heating mats	+		+	+	
Gypsum wall panels	+	+	+	+	+
Concrete core activation	+		+	+	+
Gypsum ceiling panels	+	+	+		+
Suspended ceiling cooling	+	+	+		+

Ventilation

With the introduction of cool air into a space, it is important to prevent condensation and mold. PIPELIFE ventilation pipe systems offer the perfect accompaniment to a hydronic cooling system. With an adaptable choice of ventilation piping systems,

sound-insulated distributors, floor and wall outlets, and supply and exhaust air valves, ventilation solutions ensure cooling systems maintain comfortable temperatures throughout summer without compromising your building's air quality or humidity.

Pick up the pace with prefab

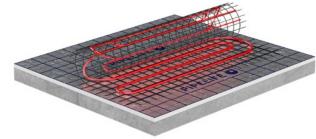
Incoming EU legislation regarding the sustainability of residential, commercial and industrial buildings has caused an increase in demand for both new and retrofit implementation of energy-saving systems.

Prefab products help you keep on top of this extra demand by saving up to 90% of typical installation time. Our combination of prefabricated panels, mats and manifolds makes it faster than ever to conduct energy renovation projects or install a new heating and cooling system from scratch.



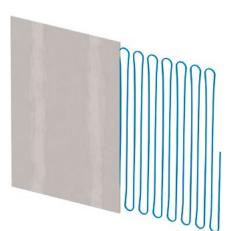






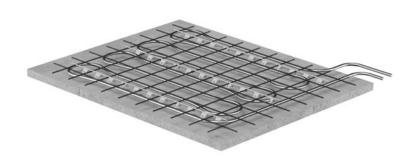
Suspended ceiling cooling

We also offer prefabricated solutions that allow for additional ceiling fixtures, such as ventilation units or electrical wires. Our suspended ceiling cooling panels come preassembled and are easily slotted between drop-ceiling substructures that hang below the main structural ceiling for fast, efficient and failsafe installation.



Underfloor heating mats

Our prefab mats are delivered in rolls and ready to use. Produced under highly controlled factory conditions, the mats ensure safe and error-free installation — simply unroll, fix to the floor and connect to the manifold. Every mat is designed and pre-assembled according to your project's exact specifications and incorporates all connections to and from the manifolds, eliminating the need for additional fittings.



Wall and ceiling panels

Prefab gypsum panels are a great way to save time and resources when installing a hydronic heating and cooling system. The panels come pre-assembled in a variety of dimensions to fit your space and are simply fixed to the wall or ceiling before being plastered over for a smooth, aesthetic finish.



Concrete core activation

During the initial construction phase, you can enjoy further efficiencies by integrating prefab hydronic systems into your building's concrete slabs. Our prefab setups are tailored to your layout design with pre-positioned and secured pipes that simply require concrete to be poured on top.

Prefab manifolds

Our prefab manifold cabinets come pressure tested and fully pre-assembled, including all components and pipe connections. Connecting the manifold to corresponding products can be easily carried out by one person and immediately put into operation.

With our manifold configurator, we offer various combinations of manifolds, cabinets and connections to ensure your system is customized to your needs.

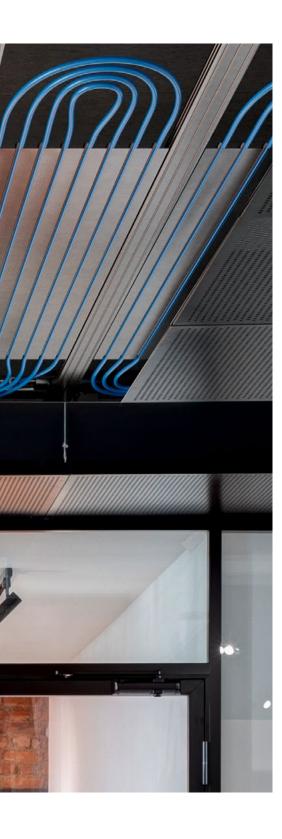


With the changing climate, building and homeowners are placing increasing value on cooling solutions for the summer months.

Our hydronic cooling solutions offer a quiet, energy-efficient alternative to traditional forced air systems.

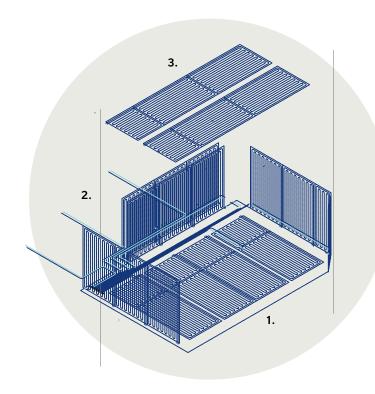
To provide year-round comfort, they have been designed to work in tandem with hydronic heating systems but can also be applied as a stand-alone solution or retrofitted as a part of an energy renovation project.





Adapted to every need

Our hydronic cooling solutions are available in three different configurations to ensure your needs are covered.



1. Concrete core activation

Speed up project delivery and increase value by integrating a cooling system during your initial construction. Embedding a hydronic system into your building's intermediate floors enables greater energy efficiency and evenly regulates temperatures throughout the entire structure.

2. Prefab wall and ceiling panels

For quick and easy installation, we offer hydronic cooling systems as prefabricated gypsum panels. These are well-suited for wall applications but offer particular efficiency advantages when installed on ceilings. Ceiling panels ensure the most even cooling throughout the entirety of a room.

3. Suspended ceiling cooling

Alternatively, our suspended ceiling cooling systems are particularly well-suited for large office spaces or industrial settings where suspended ceilings are required to house pipes and electrical installations. Our solutions are adaptable to your specific project requirements with both prefab and standard assembly applications available.







Whether your project involves a simple upgrade or a complete overhaul, our bespoke solutions can be seamlessly integrated at all stages of construction. Underfloor hydronic systems are a great option for improving the value and energy efficiency of your building.

However, in cases where time is short, or flooring must be preserved, prefab gypsum wall panels offer an excellent alternative. The panels can be used for both heating and cooling and are easily attached to the wall before simply plastering over.

Design Efficiency

With our custom design service, we ensure all heating and cooling solutions are tailor-made to fit your specific project requirements. This not only enhances the efficiency of the system but also minimizes the time and energy you invest.

We also offer gypsum panels as a prefab ceiling cooling solution for a fast, easy and energy-efficient alternative to air conditioning.

Leverage smart home technology

From basic dial systems to multizone smart devices, clients can control their room temperature with thermostats of varying degrees of sophistication.

Fully leverage custom temperature management with our comprehensive range of thermostats. Ideal for both new builds and renovation projects, PIPELIFE thermostats offer cutting-edge smart home solutions, including multizone control, virtual assistant compatibility and cloud-based machine learning for carefree comfort with maximized energy efficiency.



Standard

We offer both basic dial and LED screen thermostats for sleek and simple options that provide homeowners with standard on/off temperature control.

Advanced

Our user-friendly digital thermostats are highly accurate, programmable to custom routines, and regulate both heating and cooling systems. We also offer wireless alternatives for thermostat extensions and relocations.

Smart control

Our smart thermostats offer comprehensive and remote temperature control from our Appleand Android-compatible smartphone application. They can also be paired with smart home setups, such as Amazon Echo, Apple HomeKit and Google Home, for virtual assistant integration, and use geolocation and machine learning to provide the optimal user experience.









Create sustainable value

To help you meet the rising demand for sustainable buildings, we're developing energy-efficient solutions compatible with alternative sources of energy. Beyond this, we're striving to optimize our processes throughout the value chain and maximize the service life of our products while ensuring they can be recycled or reused at the end of their lifecycle.

Ecological choices with EPDs

Environmental Product Declarations contain standardized third-party verified data about the environmental impacts of products across their entire lifecycle. PIPELIFE has started working on the digitization of EPDs so you can easily compare the environmental impact of products from various suppliers.

Energy efficiency

Hydronic heating and cooling solutions are the energy-efficient alternative to traditional temperature management systems and are pertinent to achieving EU ambitions of a fully decarbonized building stock by 2050. Hydronic solutions can also be combined with various forms of alternative and renewable energy, including district heating and cooling as well as ground source and solar power systems. We are also making huge strides in the energy efficiency of our processes by reusing production off-heat, installing photovoltaic systems and utilizing closed cooling circuits.

Biodiversity

Our contribution to preserving nature does not stop with the reduction of our CO2 emissions or increasing our use of recycled materials. As part of the World of Wienerberger, PIPELIFE is working towards self-imposed Environmental, Social and Corporate Governance Goals. Accordingly, biodiversity measures are implemented at all our plants to encourage flora and fauna to flourish around our production sites.

Reduced waste

As well as reusing scrap wherever suitable in our production processes, our prefab designs ensure your on-site waste is kept to the absolute minimum and can be seamlessly installed without the need for extra fittings, labor or energy.

Measuring and improving efficiency

We deploy industry 4.0 technologies to measure and reduce our energy and raw material consumption, as well as their related CO2 emissions. Quality management systems and environmental measures are implemented at all PIPELIFE production sites, meeting national as well as international standards such as ISO 9001 (Quality Management System) and ISO 14001 standards (Environmental Management System).



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