comap

that's excellence.

Biofloor 9100

modular manifold for underfloor heating and cooling systems



Modular Multi-position

Long service life

High performance

aalberts hydronic flow control



manifold

a key component

Biofloor 9100

A manifold is a key component in an underfloor heating and cooling system. It plays a vital role in efficiently distributing heat throughout the heated floor and enables precise temperature. Comfort, energy savings and fast installation can be compromised if the manifold doesn't fit with building's requirements.

The Biofloor 9100 manifold is part of the newest generation of manifolds. It offers high performance levels for heating as well as cooling, prevents corrosion thanks to its excellent insulation properties, and fits all configurations thanks to a high level of modularity.



the installer's review

"A manifold should be easy for our technicians to install and versatile enough to serve multiple functions. Additionally, reliability is crucial since these products face rigorous testing during site installation, and frequent interventions and maintenance visits are often impractical."



top class performance for heating as well as cooling

The Biofloor 9100 manifold is made of PA6.6 with 30% of glass fiber, a material used in the automobile industry, which gives to the manifold new performance capabilities:

- Better heat resistance
- Protection against moisture
- No corrosion in case of condensation
- Ideal solution for cooling application*

Max. 6 cooling circuits per manifold is generally recommended

Material and thermal insulation

	W/m.k
PA6.6 with 30% glass fiber	0,2
PA6.6	1
Stainless steel	16
Carbon steel	50

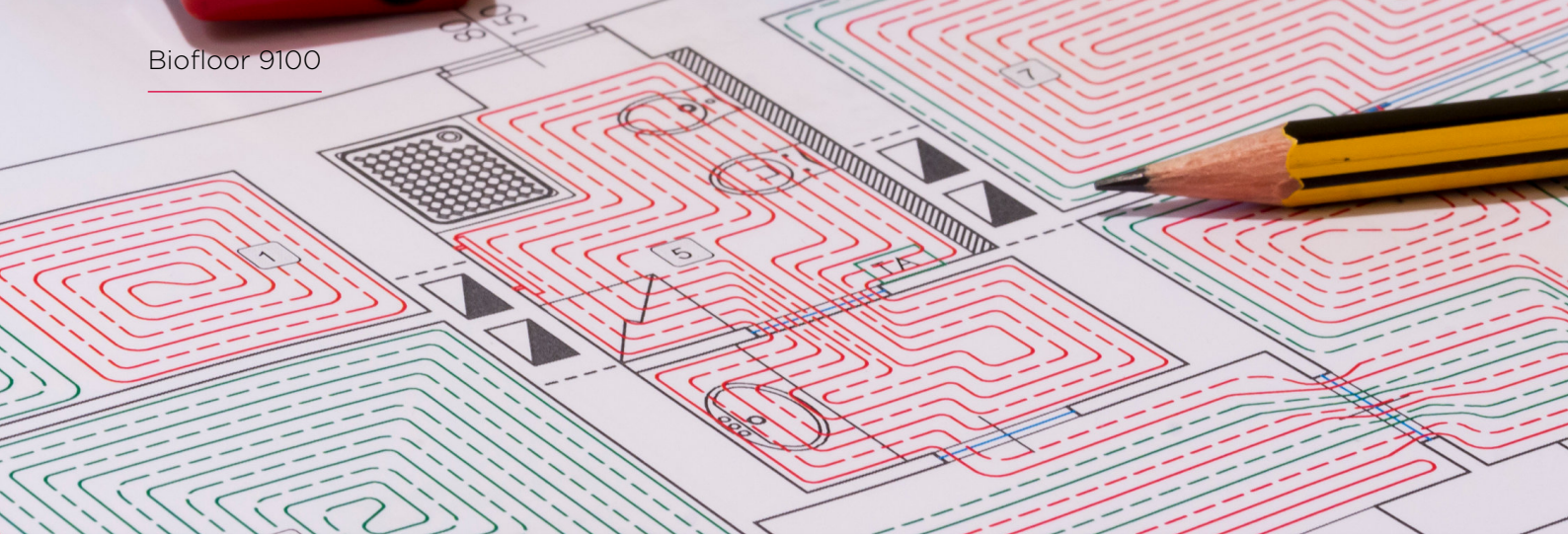
An insulation material has a W/m.K < 4.

The higher level of insulation on the manifold, the less affected the manifold's performance will be by the temperature of the room.

Shifting to greener cooling

Cooling is becoming more and more of a requirement for underfloor heating system. This means all components need to be suitable for both systems.

Specially designed for cooling application*, the Biofloor 9100 manifold protects from corrosion and the system can lower the temperature by 3°C without risk of damaging the installation. In addition, no heat is stored in the building offering comfortable temperature during summer.



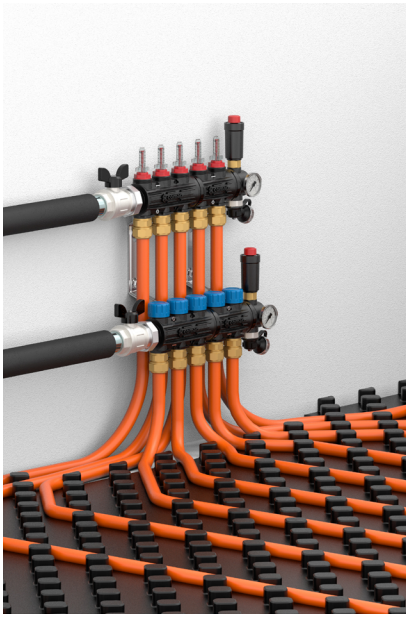
Biofloor 9100 manifold

multi-position manifold to fit all configurations

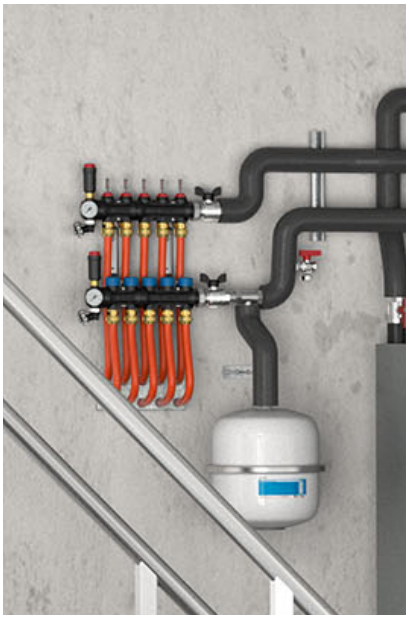
The Biofloor 9100 manifold is a versatile solution for various situations due to its light and compact design. Made up of interconnected, removable modules, it offers maximum flexibility and saves time on-site.

The Biofloor 9100 manifold can be installed regardless of the direction from which the supply pipes approach. It is reversible left and right (without the need to disassemble the manifold), as well as up and down.

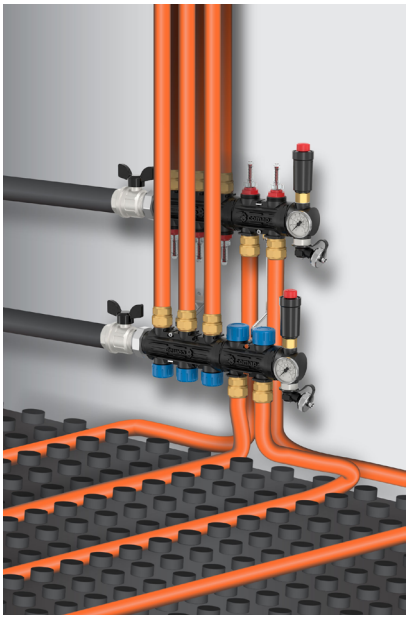
left



right



up & down



Reversible without demounting

water tightness preserved

extension kits

maximum flexibility **limited stock**

Extension kits are designed for quick adaptation, enabling easy adjustment of the number of circuits. They come fully assembled, including flow meters and thermostatic inserts. Extension kits can be used to:

- Add circuits to an existing manifold
- Expand a manifold to accommodate more than 10 circuits
- Create a manifold:
  - » From a 2-circuit manifold
  - » From scratch for a customized version*

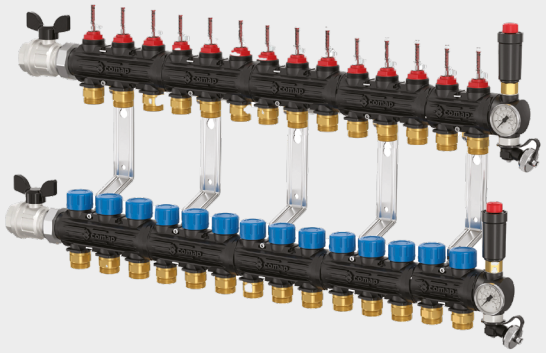
Our ball valves are different in size, measuring 1"1/4" instead of 1". This means the flow remains consistent even after 8 circuits, unlike standard ball valves available on the market.

Adding some circuits



5 sec. Just one simple fixing clip to remove !

Extending to 14 circuits*



3 items in stock to assemble various manifolds.



Manifold
2 circuits

Extension kit
3 circuits

Extension kit
2 circuits

*See instruction manual

features and benefits

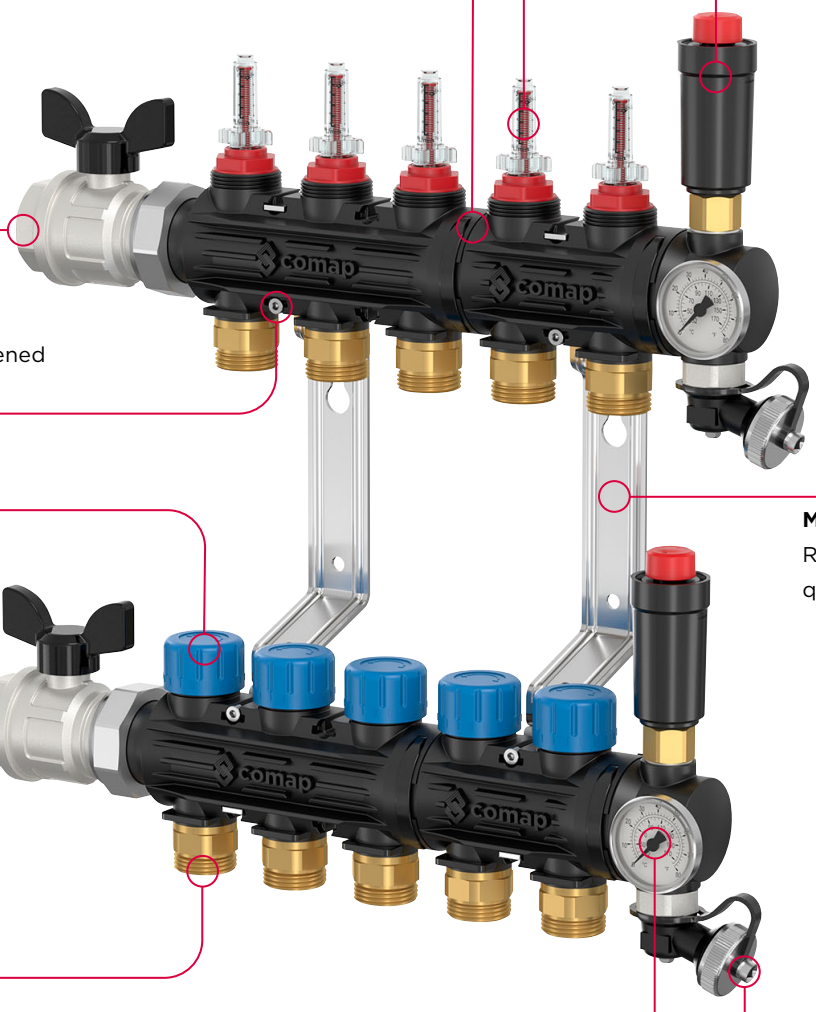
The Biofloor 9100 manifold features our latest generation components. It comes fully assembled on its bracket and is factory-tested, ensures quick installation, high performance, and long service life.

Flowmeter 0-2.5l/min or 0-5l/min
accurate and easy to adjust

Radial compression sealing
= no leaks

Flovent
Sustainable hybrid air vent

Ball valves
1"1/4Mx1"F
= No reduced flow after 7 circuits



Long screw
manifold well maintened to his support

Thermostatic mechanism
M30x1,5 with protective cap included



Metallic support
Resistant and quick to install

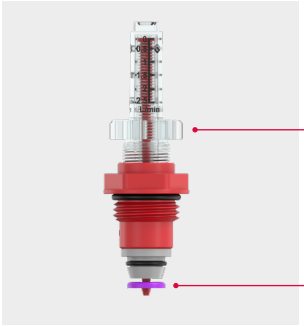
Connexion ¾ Euroconus
metallic composition

Thermometer placed on the tee to give an accurate temperature reading

Draining valve
with metallic nut

latest components

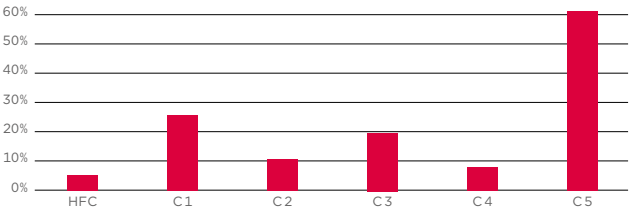
New generation's top meter



Grip and adjust the top meter easily by hand thanks to the cross shaped design

New measurement disk : to ensure a high quality of accuracy

Average flow deviation % (Flow meter 1 to 5l/min)



Accuracy = no further energy (in the form of hot water) is needed to reach the temperature.

Flovent air vent





Sustainable hybrid air vent equipped with our well-known shut-off valve:

- Easy to install
- Reliable and fast
- Cap with leak prevention
- Substantial gap between water and closing so a reduced chance of contamination

performance and quality control

Every step of the product's design and production has been carried out with unmatched precision and expertise, ensuring a superior quality product.



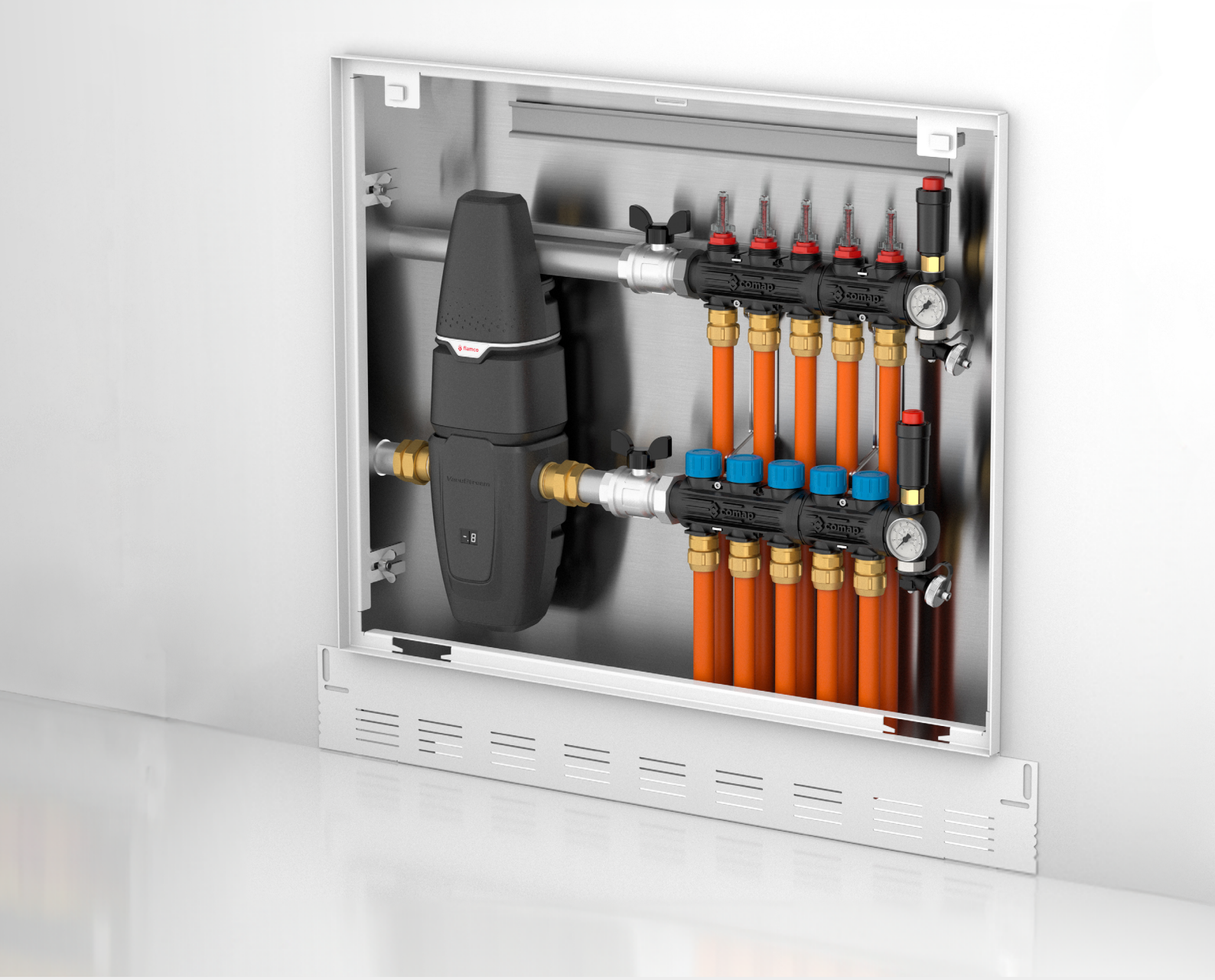
Designed for efficiency

The Biofloor 9100 manifold maintains a consistent Kv value across all circuits, ensuring uniform flow distribution. Each loop receives an even flow and undergoes rigorous 100% leak testing.



2.500 hours of testing !

The Biofloor 9100 manifold is manufactured at our Abbeville facility and has been validated thanks to our test bench through 2.500 hours of testing!



Biofloor 9100

at a glance

- Suitable for high performance in both heating and cooling system
- Reversible left and right without demounting
- Extension kits available for added flexibility and minimal stock requirements
- Equipped with our newest generation of components
- Proven through 2,500 hours of rigorous testing
- 5 years warranty*

item codes

Biofloor 9100 manifold with flow meter 0-2,5l/min		
	C321312001	2 circuits
	C321313001	3 circuits
	C321314001	4 circuits
	C321315001	5 circuits
	C321316001	6 circuits
	C321317001	7 circuits
	C321318001	8 circuits
	C321319001	9 circuits
	C321320001	10 circuits
	C321321001	11 circuits
	C321322001	12 circuits
Extension kits		
	C322009001	Extension kit double 0-5l/min
	C322010001	Extension kit triple 0-5l/min
	C322011001	Extension kit double 0-2,5l/min
	C322012001	Extension kit triple 0-2,5l/min

technical data

- Material : PA6.6 with 30% of glass fiber
- Available from 2 to 10-12 circuits (depending of the version)
- 6 bar at 65°C
- Connection ¾ euroconus
- Supplied assembled to the bracket
- Compliant with standards EN1264 and DIN4725
- Included :
  - Flow meter 0-2,5l/min or 0-5l/min for each circuit
  - Thermostatic mechanism M30x1,5 with protection cap
  - 2x ball valves 1"1/4"M x F1"
  - 2x thermometer
  - 2x Flovent (automatic air vent)
  - 2x draining valve
  - 2x metallic fixing bracket with screws and dowels.

scan for manual

**see terms and conditions on website*



manifold range overview

Discover the range designed for professionals to fit with different needs.



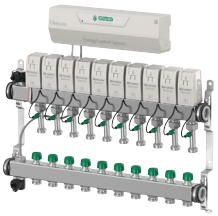
monobloc manifold

- Light
- Strong, Corrosion resistance
- Long lifetime



Biofloor 9100 modular manifold

- Easy to use : modules can be added on the construction site if necessary
- Excellent thermic insulation: suitable for both heating and cooling
- Corrosion-free



Secos - Smart manifold

- Permanent hydronic balancing without calculation
- BMS connection : sensors provide data for a Building Management System
- Pre-wired : controller and actuators already installed

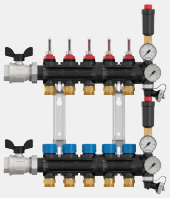
system components

To maximize underfloor heating benefits, selecting the appropriate components is key.
From the fixing system, to 5 layers pipes, the right distribution manifold and the use of smart control technologies, Comap ensures efficient underfloor heating of buildings.



fixing systems

- various solutions depending on building type and needs



manifolds

- monobloc in stainless steel, modular in synthetic and smart with Secos manifold



pipes

- 5 layers pipes specially designed for underfloor heating application: Biopert, Biopex and Multiskin

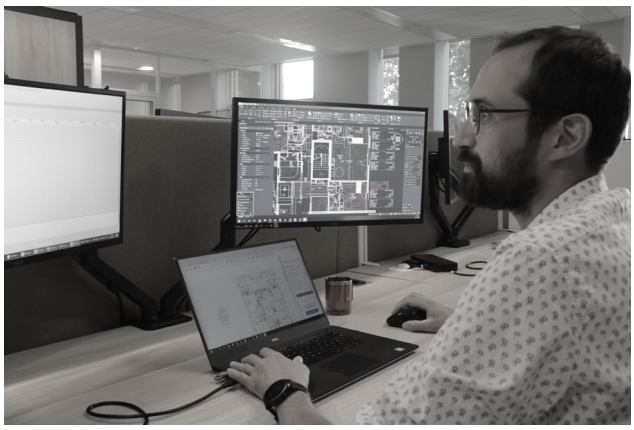


control systems

- wired and wireless options
- local or remotely
- analogue or digital thermostats also available

a dedicated support at each step of your project

Comap design office can support projects by helping to define the system and optimum sizing of each underfloor heating installation. For each project, the design office can provide a complete plan and technical details ensuring maximum comfort and energy efficiency for your building.



conception **execution** **maintenance**

- advice
- design
- calculation
- facilitation
- planning
- quotation
- pricing
- onsite deliveries
- monitoring
- control
- optimization

reference cases

Have a look at our clients that achieved tangible impact with our surface heating and cooling solutions, acting for a smart and responsible future.

individual housing





Family house in Trebon (CZ)

building type: renovation farmhouse to single family house. 150m^{22} wall heating + 100m^2 floor heating
applied products: Rail system, BioPert pipe, stainless steel manifold

collective housing





Lee Towers in Rotterdam (NL)

building type: collective housing, transformation office to residential building, 17.500 m2
applied products: Tacker system, BioPex pipe, synthetic manifold

commercial buildings





St. Niklaas Church in Westkapelle (BE)

building type: commercial building, renovation, 853 m2
applied products: Grid system, BioPex pipe, stainless steel manifold

contact us !

Our team constantly innovates solutions that your customers need today for a better tomorrow. Our highest quality products will help make buildings energy efficient, sustainable and comfortable.
From connection systems to intelligent emitter control, we support you at every stage of the building life cycle, whether it is building modeling, prefabrication or post-installation service assistance.

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