



# OPTIMIZED HEATING FOR YOUR OUTDOOR SPACE

**Gone are the days of having to hire winter maintenance every time it snows or freezes.** With Pipelife Hydronic Radiant Heating Systems you can take full control of the safety and usability of your outdoor areas, whilst preventing snow and ice build-up even during storms.

# 7 REASONS WHY PIPELIFE HYDRONIC RADIANT SYSTEMS ARE IDEAL FOR YOUR OUTDOOR FACILITIES



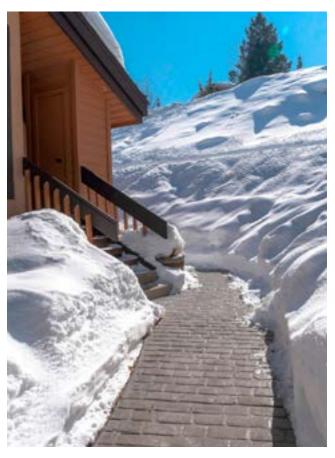
# 1. SAVE OPERATING COSTS AND ENERGY

Regardless of ground size, surface type or even when temperatures drop as low as minus 30 degrees, you can keep your premises snow and ice-free at low heating temperatures. As a result, only little energy is required for optimal efficiency, thus keeping running costs down.



# 2. INCREASE SAFETY FOR ALL

Take complete control over the safety and usability of your outdoor facilities by eliminating snow and ice build-up around areas where people walk and drive. In this way you can minimize risks of accidents and injuries from potential slipping and falling without the need for snow-shoveling or heavy-duty machinery.



With an underground hydronic radiant heating system you can keep surfaces ice and snow free, thus limiting accidents and potential falls.





#### 3. PROTECT YOUR OUTDOOR **SURFACES FROM DAMAGE**

Prolong the lifespan of your paving by limiting any damage caused by winter service vehicles and harmful chemicals such as salts and antifreeze, which can cause corrosion and damage. You can also reduce indoor maintenance costs by eliminating wear and tear from salt and water being tracked inside.



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Ensure access, functionality and usability of all areas that might otherwise be affected by snow and ice when temperatures drop below zero. With controls and sensors at your fingertips, your hydronic heating system is programmed and ready to melt before snow falls. This ensures private and public areas are snow and ice free throughout winter.



#### 5. OPT FOR ECO **ENERGY SYSTEMS**

For a more efficient setup, you can combine your hydronic system with sustainable heat sources such as collection systems, geothermal heat pumps and condensing boilers. You can also share one heating source, by combining the outdoor heating system with the indoor one.



#### 6. RELY ON OUR TRUSTED SERVICES AND SUPPORT

Communities around the world rely on our service, quality and solutions. Wherever you are based, our teams are on hand to provide local expertise throughout your projects, from inception and design, to installation and after care support.



#### 7.COUNT ON A SYSTEM TAILORED TO FIT

You have planning and design freedom with flexible pipes that can be bent into various patterns or fitted around structures and complicated floor layouts. To ensure an optimal fit, our specialists will tailor the dimensioning and design of your system according to your specific space and conditions.



#### **EXPECT A GOOD RETURN** ON YOUR INVESTMENT

Regardless of the size or floor covering, you can heat your entire outdoor facility with relatively low operating temperatures. This enables maximum use all year round, reduced operating costs, and protection from damage caused by winter service vehicles and harmful chemicals. You also have added peace of mind with a long service life.

# WHERE IS HYDRONIC UNDERFLOOR HEATING AN IDEAL SOLUTION?

# Outdoor public facilities (pre or post construction) such as:

Schools, kindergartens, retirement homes, hospitals, offices, garage entrances with ramps and slopes, outdoor car parks, heavy traffic crossroads, roundabouts, etc.

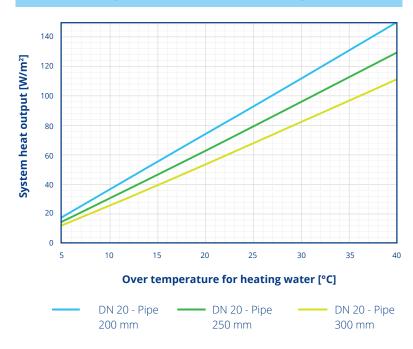
# Compatible with a range of ground covering:

Asphalt, stone, concrete, compacted gravel, pavers, screed, etc.

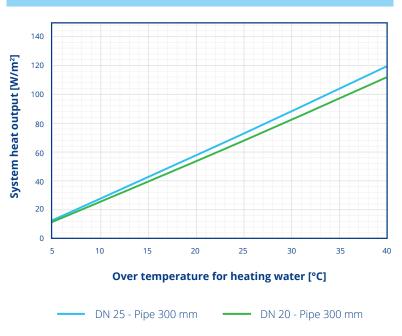


Compare how pipe spacing and pipe diameter variations with screed flooring affect the supply/return temperature of the heating fluid, and as a result, the efficiency of the hydronic radiant system.

### IMPACT OF PIPE SPACING VARIATIONS [SCREED COVERING - DN 20]



# IMPACT OF PIPE DIAMETER VARIATIONS [SCREED COVERING]



#### **PRODUCT OVERVIEW**

#### PERT-EVOH-PERT HEATING AND COOLING PIPE COILS



FT-R20L200 20x2.0 mm 200 m FT-R20L500 20x2.0 mm 500 m FT-R25L200 25x2.3 mm 200 m FT-R25L500 25x2.3 mm 500 m  $2^{nd}$  generation (PERT II) with integrated diffusion barrier made from EVOH. Produced in accordance with EN ISO 21003. Application class 4, design temperature 60 °C, design pressure 8 bar.

#### **ROUND STAINLESS STEEL MANIFOLDS**



FTV6A	11/4	6 circuits
FTV7A	11/4	7 circuits
FTV8A	11/4	8 circuits
FTV9A	11/4	9 circuits
FTV10A	11/4	10 circuits
FTV11A	11/4	11 circuits
FTV12A	11/4	12 circuits

Produced in accordance with DIN EN 1264-4.1¼" male flat sealing connection on both sides for manifold accessories and control pump station. Shut-off flow meters with very low pressure loss. Flow display 0-4 l/min or 0-6 l/min. Control and shut-off valves with M30  $\times$  1.5 adaption. 11.8 mm closing point. Connection nipple G ¾" Euro cone. Center distance between the outlets: 50 mm. Supply pipe on top, ready mounted on wall bracket, pipe clamps soundproofed according to DIN 4109.

#### **ROUND BRASS MANIFOLDS**



FTV2A	2"	2 circuits
FTV3A	11⁄4	3 circuits
FTV4A	11⁄4	4 circuits
FTV5A	11⁄4	5 circuits
FTV6A	11/4	6 circuits

Modular design with 2" male flat sealing thread on one end and 2" union nut on the opposite. Supply connections with integrated shut-off ball valve. Return connections with integrated control valve with pre-setting. Connection G 3" male thread with integrated Euro cone adapter. 80 mm distance.

#### **CUSTOM MADE MANIFOLDS**

**FTV Cust single** 

**FTV Cust double** 

4th generation PP-RCT multilayer pipe produced in accordance with EN15874-2. The middle layer is composed of carbon with special additives to provide an oxygen barrier in accordance with DIN 4726 and ISO 17455. Manifold diameters, pipe distances and inlet size connections can be custom made according to design requirements. Single or double connections are available with the possibility to customize connection angles.

#### **EURO CONE ADAPTER**



FT-KVA20/3/4

FT-KVA25/1

Euro cone adapter for connecting the pipe to the manifold. Made of brass, and nickel plated.

Connection nipple G 3/4" (DN20) and G 1" (DN25)

#### **ACCESSORIES**

#### **MOUNTING RAIL**

#### WH-FR20/2 M for 20x2 mm pipe

(can be mounted in 3 ways: with staple clips, dowels or self-adhesive tape)

#### WH-FR25/1 M for 25x2 mm pipe

(can be mounted in 2 ways: with staple clips or dowels) For quick and easy pipe laying on floor construction. Made of polypropylene.

#### **MANIFOLDS BEND SUPPORT**

#### FT-IV20 bend support 20 - 22 mm

#### FT-IV25 bend support 25 mm

Easy, reliable, and space saving turns, for protection and support of pipe between the manifold and where it enters the floor. Compatible with either vertical or horizontal pipe position. Made of impact resistant glass fibre reinforced nylon.













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