

# Warmup PE-RT pipe

## Lightweight and flexible

PE-RT is lightweight and extremely flexible, bends easily into place for fast installation

## Multi-purpose

Primarily used for hydronic underfloor heating but can be used for hot and cold water sanitary/distribution systems and various heating systems

## Oxygen diffusion barrier

5 layer construction, contains EVOH layer protecting system components from corrosion

## Excellent thermal properties

Thermal conductivity: 0.45 W/m·K  
Thermal expansion coefficient: 0.18 mm/m·K



## Overview

Warmup PE-RT (Polyethylene of Raised Temperature Resistance) pipe is extremely flexible with excellent long-term stress resistant properties combined with long-term strength at elevated temperatures. The pipe guarantees leak free performance with a smooth internal structure for improved flow, reduced pressure loss and deposit formation.

Warmup PE-RT pipe is ideal for underfloor heating systems as well as being suitable for hot and cold water sanitary and distribution systems and various heating systems for domestic, commercial & industrial applications.

Warmup PE-RT pipe incorporates an EVOH oxygen diffusion barrier layer sandwiched within the wall of the pipe, protecting the EVOH layer from physical damage. The EVOH layer which complies with DIN 4726 renders the pipe virtually impervious to oxygen and other gases. PE-RT pipes retain flexibility at freezing temperatures and therefore do not break in sub-zero conditions.

Pipes are produced and tested according under an ISO 9001 quality management system to four standards, namely DIN 16833, DIN 4726, ISO 22391 and ISO 10508.

# Technical specifications



## Pipe layers

|   |   |
|---|---|
| 1 | Polyethylene inner pipe layer (PE-RT)                             |
| 2 | Adhesive layer bonding the inner pipe layer to the oxygen barrier |
| 3 | Ethylene vinyl alcohol copolymer (EVOH) oxygen barrier layer      |
| 4 | Adhesive layer bonding the outer pipe layer to the oxygen barrier |
| 5 | Polyethylene outer pipe layer (PE-RT)                             |

## Pipe dimensions

| Code                 | Outer diameter | Wall thickness | Lengths                                  |
|----------------------|----------------|----------------|--|
| UK-WUK-HY-PERT-12x** | 12 mm          | 2 mm           | 50, 60, 70 m                             |
| UK-WUK-HY-PERT-16x** | 16 mm          | 2 mm           | 25 m, 50 - 120 m<br>(in 10 m increments) |

\*\* Pipe length in meters

## Technical data

|  |  |
|--|--|
| Thermal expansion coefficient: 0.18 mm/m·K             | Maximum operating temperature: 80°C            |
| 12 mm pipe minimum bending radius, unsupported: 60 mm  | Maximum operating pressure: As per table below |
| 16 mm pipe minimum bending radius, unsupported: 112 mm | Thermal conductivity: 0.45 W/m·K               |

## Maximum operating pressure (MOP)

| Application classes                                 | Temperature | Design stress MPa | MOP (Bar) | Warranty |
|---|-------------|-------------------|-----------|----------|
| Class 1 Hot sanitary water                          | 60°C        | 3.29              | 13.1      | 49       |
| Class 2 Hot sanitary water                          | 70°C        | 2.68              | 10.7      | 49       |
| Class 4 Radiant floor and radiators low temperature | 60°C        | 3.25              | 13.0      | 49*      |
| Class 5 Radiators high temperature                  | 80°C        | 2.38              | 9.50      | 25       |
| - Cold water  | 20°C        | 6.68              | 26.7      | -        |

\* When installed as per Warmup hUFH installation manuals with a operating pressure of no more than 8 bar a Lifetime warranty is provided

# Contact

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