

Product and Technical Guide

# Wavin Oxygen Barriered PE-RT Pipe

The Most Flexible Heating System



The term PE-RT pipe is short for heat-resistant PE pipe.  
(PE Raised Temperature)

Wavin uses new generation Type 2 PE-RT with raised pressure strength as a raw material in its manufacturing.

The raw PE-RT ensures long-term hydrostatic strength at high temperatures without any of the crosslinking observed in Pex pipes.

As it does not contain any chemical additive resulting in crosslinking, it is suitable for use with potable water and does not pose any threat to human health.

Packaged in a coil Wavin PE-RT pipes have a very flexible structure and can be installed relatively easily.

Thanks to their special formulated layer, Wavin Oxy PE-RT pipes protect metal components installed in the system such as pumps, valves and radiators against corrosion by preventing the permeability of oxygen at a level close to 100%. Thus, the life of the system components is extended, while repair and maintenance costs are minimized.

- 1** Surface layer: Special **EVOH** layer  
preventing the passage of oxygen
- 2** Internal layer: PE-RT layer resistant to  
high temperature and pressure

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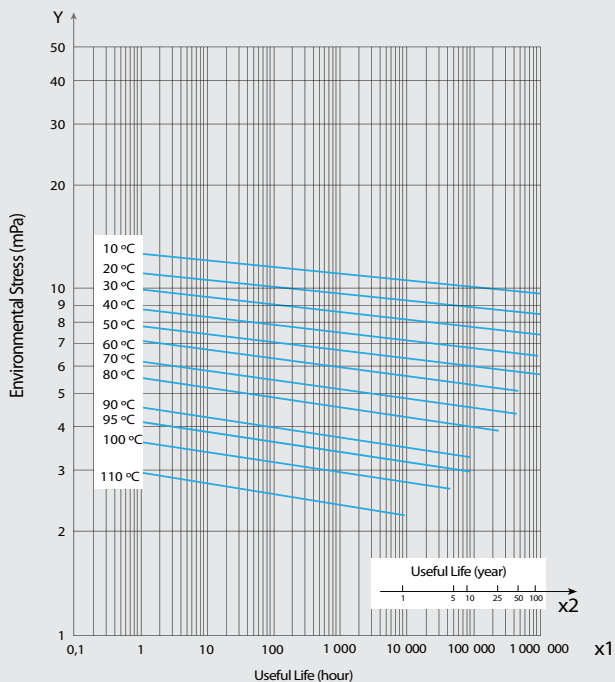




## Advantages of Wavin PE-RT Pipe:

- **EASY INSTALLATION** requiring less fittings thanks to its flexible structure.
- High temperature & pressure strength.
- Environmentally-friendly recyclable raw material.
- Superior resistance to chemicals.
- Easy installation in cold weather without need for heating.
- No scaling or corrosion on pipe's inner surface.
- No inner diameter contraction observed in pipe.
- Suitable for use with drinking water.
- Coiled pipe is easy to handle and install.

## Mechanical strength graph for Type II PE-RT Pipes



## Table of Pressure Strengths

Safety Factor = 1.5		
Year	Temperature	16*2mm PE-RT Pipe Pressure (bar)
1	20	18,6
5	20	18,2
10	20	18,1
25	20	17,9
50	20	17,8
1	30	16,9
5	30	16,6
10	30	16,5
25	30	16,3
50	30	16,1
1	40	15,3
5	40	15,0
10	40	14,8
25	40	14,6
50	40	14,5
1	50	13,6
5	50	13,3
10	50	13,2
25	50	13,0
50	50	12,9

Safety Factor = 1.5		
Year	Temperature	16*2mm PE-RT Pipe Pressure (bar)
1	60	12,0
5	60	11,7
10	60	11,5
25	60	11,4
50	60	11,2
1	70	10,3
5	70	10,1
10	70	9,9
25	70	9,8
50	70	9,6
1	80	8,8
5	80	8,5
10	80	8,4
25	80	8,2
1	95	6,5
5	95	6,3
10	95	6,2

**Thermal Expansion Coefficient:**  
(20°C to 70°C): 1.4 - 2 x 10<sup>-4</sup> (1/K)

**Thermal Conductivity Coefficient:**  
0.42 - 0.48 W/mk

## Pipe Wall Thickness and Package Quantity

Outer Diameter (mm) PE-RT Wall Thickness (mm)	Packaging Quantities
16*2	<b>Covered:</b> 100 m <b>Uncovered:</b> 160 m

*\*If you require different wall thicknesses, please contact us.*

## Areas of Application

- Hot & Cold Water Installation
- Central Heating
- Underfloor Heating Applications
- Cooling Applications
- Industrial Applications

PE-RT pipes are used in all types of closed areas (residents, hotels, hospitals, etc.), half-open areas (pools, agricultural land) and for industrial applications. They are appropriate for use in covered radiator heating, also known as mobile systems.



Wavin is part of Orbia, a community of companies working together to tackle some of the world's most complex challenges. We are bound by a common purpose: To Advance Life Around the World.



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