

WAVIN PPR
Fusion welding system

Fusion welding system for plumbing and heating

Wavin PPR is a hot and cold water supply system suitable for sanitary and potable water applications and heating systems. The pipes and injection moulded fittings are made of Polypropylene Random (PPR) type 3, also with new high performance pipes in PP-RCT (PP type 4). They are joined by fusion welding, ensuring a homogeneous, all plastic system.

Wavin offers various PPR brands including Wavin Ekoplastik, Wavin BOR^{plus} and Wavin Pilsa. These systems vary in product range details and colour, but all carry the same features and

benefits. Wavin PPR offers complete ranges of pipes and fittings in the dimensions 16, 20, 25, 32, 40, 50, 63, 75, 90, 110 and 125 mm. Pipes are available in PN10, PN16 and PN20 pressure classes. All fittings are manufactured in the highest PN20 pressure range.

New generation PP-RCT pipes have higher temperature/pressure capability and higher capacity for the same outside diameter. These are available in monolayer and multi-layer versions (Aluminium or Basalt Fiber containing middle layer) for minimum thermal expansion.

wavin



Quality requirements

Wavin PPR system components are produced in compliance with requirements of the EN 15874 standard. The company meets the quality requirements according to ISO 9001.

Various certificates of conformity with the European norm EN 15874 and other local standards are available.

Product specifications

Raw material	Type 3 Polypropylene (PPR) or Type 4 Polypropylene (PP-RCT)
Joining method	Fusion welding
Density g/cm³	0.9
Yield point in tension (MPa)	25 - 26
Elongation at max. yield point in tension (%)	10 - 15
E-bend modulus (N / mm²)	850 - 900
Thermal expansion coefficient (mm/m K)	Regular pipes: 0.12 Stabipipe, Basalt Fiber and Basalt Clima multi-layer pipes: 0.05
Thermal conductivity coefficient (W/m K)	0.24

Applications

Wavin PPR systems are designed for applications, such as:

- ④ Water systems (hot and cold drinking water)
- ④ Heating systems
- ④ Compressed air systems (airconditioning)
- ④ Hydraulic works in residential, industrial and public projects
- ④ Agriculture and horticulture (watering systems for greenhouses and gardens).
- ④ Chiller systems (Basalt Clima Pipes)

Wavin PPR can be used both in assembly of new installations or for repairs of existing systems.

System benefits

- ④ **Complete plastic system**
Jointed by fusion welding, ensuring a homogeneous, all plastic system.
- ④ **Suitable for carrying drinking water**
In full compliance with international standards.
- ④ **Resistant to corrosion, abrasion and chemical attack**
Giving long service life even under adverse operating conditions.
- ④ **Reduced thermal losses**
Low thermal conductivity coefficient.
- ④ **Low noise level**
The material's elasticity and high insulation capacity mean a considerable sound reduction in the installation, including water hammer effects.
- ④ **Easy to handle, easy to install**
The low weight of the system makes it ideal for traditional installations, modular installations and prefab walls.
- ④ **Smooth internal surface**
Limestone or other deposits cannot form and head loss is reduced to a minimum.
- ④ **Higher Performance**
New Generation PP-RCT pipes give higher temperature-pressure capability in combination with lower wall thickness for increased system capacity.
- ④ **Reduced Expansion**
Multi-layer PP-RCT pipes with Aluminium or Basalt Fiber containing middle layer for optimum design and performance on hot water installations.



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.

- ④ www.wavin.ae for Middle East & North Africa
- ④ www.wavin.asia for Asia Pacific

© 2020 Wavin Wavin reserves the right to make alterations without prior notice. Due to continuous product development, changes in technical specifications may change. Installation must comply with the installation instructions.

