

# wavin Hep<sub>2</sub>O

## Push-Fit Plumbing System

### System description

Hep<sub>2</sub>O is the professional polybutylene (PB) push-fit plumbing system for hot and cold water and central heating. It offers a fully comprehensive range of white fittings and unique features designed to reduce installation time and improve operating performance:

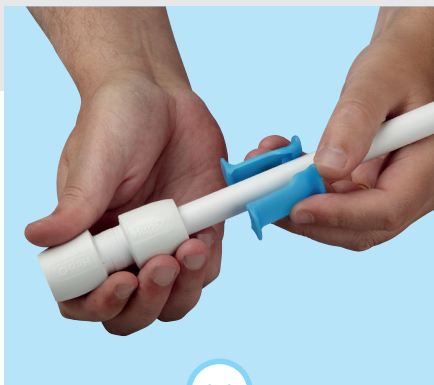
- ⌚ In4Sure™ joint recognition
- ⌚ Secure demounting with the HepKey™ system
- ⌚ SmartSleeve™ for easy pipe insertion.

### System benefits

- ⌚ **In4Sure™ joint recognition**  
In4Sure™ tells you when the pipe is inserted. Just insert the pipe into the fitting then rotate it. If it's fully inserted you will feel a 'rumbling' sensation, caused by the profiled end of the pipe support sleeve making contact with the castellated seat inside the fitting.
- ⌚ **SmartSleeve**  
The clever design of the SmartSleeve pipe support sleeve reduces the force required to push the pipe into the fitting.



- ⌚ **Streamlined, white fitting**  
The white colour combined with a slim, streamlined and altogether more stylish design, means Hep<sub>2</sub>O fittings are well accepted for 'on view' or 'on show' applications.
- ⌚ **Colour coded packaging**  
Colour coded for easy identification.



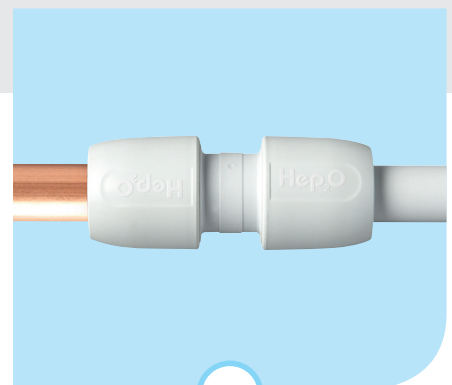
### HepKey demounting system

The HepKey makes demounting quick, easy and tamper-proof, so joints only come apart when you want them to.



### Highly flexible, white PB pipe

Easily cabled into position and fewer fittings required. With the straight coil technology the pipe stays straight when uncoiled.



### Compatible with copper pipe

All fittings are compatible with copper, Tigris K1 and other plumbing systems – ideal for renovation.

**Documentation** The following documentation on the Hep<sub>2</sub>O system is available:  
Hep<sub>2</sub>O Product List (1st March 2020) - Hep<sub>2</sub>O Installer Guide (2020).

# Push-Fit Plumbing System

## Applications

Hep<sub>2</sub>O is suitable for most domestic and commercial plumbing applications: hot and cold water services and heating. In addition to new construction, the extreme flexibility of the Hep<sub>2</sub>O pipe means it is the ideal solution for renovation, system extensions and situations where space is restricted. This means Hep<sub>2</sub>O is widely used on mobile homes, portable homes and boats, as well as in traditional residential and commercial plumbing installations. The compatibility of Hep<sub>2</sub>O fittings with copper ensures a simple, fast and reliable method of jointing to traditional materials on site. Hep<sub>2</sub>O pipe is also the ideal material for use in conduit 'pipe-in-pipe' installations where the combination of pipe flexibility and straight coil technology gives significant advantages for ease of handling compared to other pipe materials.



## Range

The Hep<sub>2</sub>O range comes with a wide variety of pipes, (demountable) fittings and manifolds in 10, 15, 22 and 28mm (non-standard sizes on request). Hep<sub>2</sub>O pipes are available as standard and barrier pipe (incorporating an oxygen barrier to inhibit oxygen permeation). All Hep<sub>2</sub>O fittings are designed to also connect directly to copper pipework.

Category	Product	Dimensions (mm)
Pipes	<ul style="list-style-type: none"><li>Coils</li><li>Straight lengths</li><li>Conduit pipe</li><li>Barrier pipe</li></ul>	10,15,22,28
Fittings*	<ul style="list-style-type: none"><li>Elbows</li><li>Tees</li><li>Straight connectors</li><li>Spigot reducers</li><li>Tap connectors</li><li>Demountable stop end</li></ul>	10,15,22,28
Auxiliary fittings	<ul style="list-style-type: none"><li>Brass adaptors (available in DZR and non-DZR brass grades)</li><li>Valves</li><li>Tap connectors</li></ul>	
Manifolds	<ul style="list-style-type: none"><li>2-Port</li><li>3-Port</li><li>4-Port</li><li>Modular Multi-Port</li></ul>	
Accessories	<ul style="list-style-type: none"><li>Hep<sub>2</sub>O joint test kit</li><li>Central heating &amp; water services calculator</li><li>Pipe support sleeves</li><li>Cold forming bends</li><li>Pipe clips and cutters</li></ul>	

\*All fittings are pre-lubricated - no additional lubrication required.

## Quality requirements

Hep<sub>2</sub>O carries a British Standard Kitemark against BS7291 parts 1 & 2 Class S. Hep<sub>2</sub>O meets the requirements of EN15876 and is certified by numerous European test laboratories including DVGW, KIWA and AENOR. The system also has approvals in many non-European markets including Australia, New Zealand, South Africa and China.

## Product specifications

### Raw material pipes

Polybutylene (PB).

The middle layer in barrier pipes are made of EVOH.

### Raw material fittings

Fitting body made of polybutylene. The 'O' ring is made of EPDM. Transition fittings available in either DZR or non-DZR Brass grades.

### Wall thickness

Nominal DM	Wall thickness (mm)
10	1.65
15	1.85
20	2.05
28	2.75

### Density kg/m<sup>3</sup>

920

### Jointing method

Push fit.

### Hot water resistance

95° C short term loading, (max. 6 bar)

### Maximum permanent

operating pressure 12 bar at 20° C

### Linear expansion PB

0.00013/m/K

### Thermal conduction PB

0.22 W/mK

### Pipe roughness

<0,007 mm

# Push-Fit Plumbing System



### How it works

With Hep<sub>2</sub>O, making a secure joint is easy - but the technology inside has taken years of research and testing to perfection. Here's a closer look at how it works.

### Hep2O fitting

The white sleek fitting not only looks more attractive, it's super-tough.

### O-ring

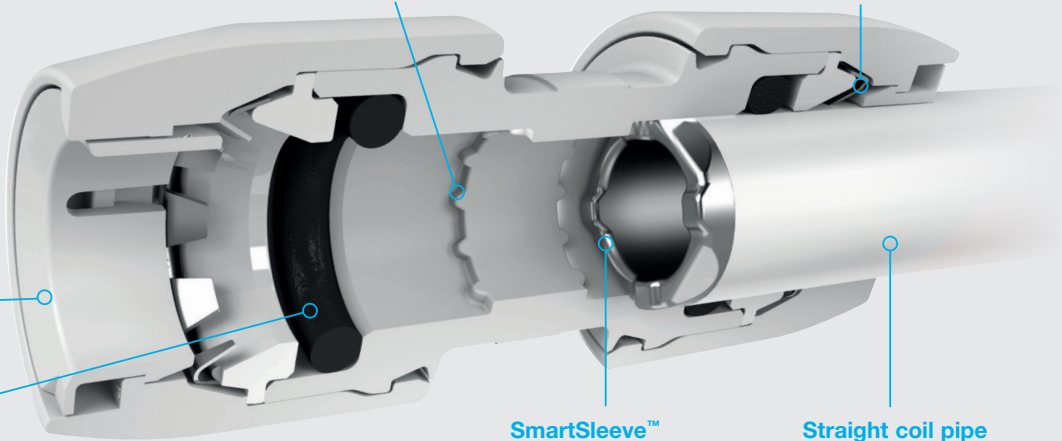
The o-ring offers a reliable seal in both hot and cold water systems.

### Internal castellations

In4Sure™ joint recognition technology lies right at the heart of the Hep<sub>2</sub>O fitting. The moulded internal castellations form the seat in which the profiled end of the SmartSleeve™ sits. Simply twist the pipe and feel for the rumble to know it's fully inserted.

### Grab-ring

Made from high quality 316 stainless steel, the grab-ring is amazingly strong. Able to grip plastic and copper pipe alike, the carefully angled teeth have been aligned for easy fitting and maximum grip.



### SmartSleeve™

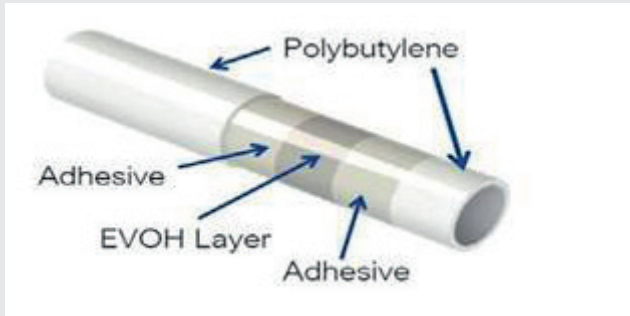
As well as forming part of the In4Sure™ joint recognition feature, the profiled end of the stainless steel SmartSleeve™ reduces the force required to make a secure connection. It also stays in the pipe when demounted.

### Straight coil pipe

Our polybutylene (PB) pipe comes off the coil straight and it's flexibility means it's easy to bend and cable through joists.

### Barrier Pipe

- Barrier pipe is available in 10, 15, 22 and 28mm
- The wrapping has coloured stripes with the Hep<sub>2</sub>O logo
- Can be used for hot and cold water, and central heating
- EVOH is ethyl vinyl alcohol copolymer.  
Stops the ingress of gasses including oxygen
- Barrier pipe is the most common used by installers



### Peak life cycle operating temperatures/pressures

	20°C	30°C	40°C	50°C	60°C	70°C	80°C	95°C	114°C
Safe pressures:									
Bar	12	11.5	11	10.5	9	8	7	6	3
psi	174	167	160	152	131	116	102	87	43.5
Head of water (m)	120	115	110	105	90	80	70	60	30



## Proven Expertise

### Industry Sectors

For over 40 years, Hep<sub>2</sub>O has been at the forefront of push-fit plumbing technology. Our industry-leading products are engineered with unique performance and installation innovations that make them perfect for the demands of today's UK construction industry.

- New housing developments
- Renovation, maintenance and improvements
- Installed by many housing associations and local authorities on both new build and maintenance schemes
- Mobile homes, recreational vehicles and holiday properties
- Domestic and commercial modular and offsite manufacturers
- High rise construction
- Hotels and leisure
- Bathroom pods
- Boat building

### Brand Reputation

- As market leader, Hep<sub>2</sub>O is specified by 70% of major housing developers
- Hep<sub>2</sub>O is stocked in over 3,000 branches nationwide
- In addition to high-rise and commercial buildings, Hep<sub>2</sub>O is installed in over 100,000 new homes every year
- Hep<sub>2</sub>O has been endorsed by 90% of UK plumbers who have either tried or use Hep<sub>2</sub>O as their preferred brand
- Hep<sub>2</sub>O enjoys over 97% brand recognition amongst UK installers
- Approved and specified by British Gas - installed by over 6,000 BG engineers



### Key Product Features and Benefits

#### Joint recognition

- In4Sure™ tells you when the pipe is secure
- Just insert, twist and feel the rumble
- Unique feature – developed with installers

#### Joint security

- Fittings cannot be accidentally demounted or tampered with
- Eliminates the risk of components being lost when fittings are unscrewed and the risk of dirt or grit entering the fitting, which is a leading cause of joint failure
- HepKey can be used by installers to demount the fitting if required

### Homeowner Benefits

- No maintenance - Smooth internal bore, so no accumulation of scale
- No replacement - Pipes will not pit or corrode
- Safer - No hot pipes. Hep<sub>2</sub>O pipes are cooler to touch
- No paint – Hep<sub>2</sub>O is available in white and is unobtrusive
- No mechanical noise, which means the system is much quieter





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## Standards and Warranties

### Hep<sub>2</sub>O Flexible Push-fit Plumbing

#### Hep<sub>2</sub>O Guarantee

Due to a rigorous quality control and testing programme, Hep<sub>2</sub>O carries a 50 year guarantee against defect in materials or manufacturing of all its pipe and fittings.



#### Terms & Conditions

As outlined in the Hep<sub>2</sub>O installation guide, the only stipulation is that good, professional installation practice is followed. This includes working with the peak life cycle operating temperatures and pressures detailed on page 9 of the installer guide. The 50 year period begins from the date of purchase.

#### How to Claim

If you experience an issue with a Hep<sub>2</sub>O pipe or fitting, please contact Wavin Technical Services Tel: 0844 856 5165\*  
Email: [technical.design@wavin.com](mailto:technical.design@wavin.com)

#### Product and System Warranties

Hep<sub>2</sub>O is also approved by WRAS (certificate 1312005) - deemed safe for use in the supply of drinking water. Hep<sub>2</sub>O is Kitemarked to Class S of BS 7291, parts 1 and 2 and is manufactured within a Quality Management System which satisfies BS EN ISO 9002.

\*Note, this number will incur a service charge

### Hep<sub>2</sub>O Underfloor Heating

#### Hep<sub>2</sub>O Guarantee

Provided that the installation has adhered to our published advice, Hep<sub>2</sub>O and other Wavin products used within Hep<sub>2</sub>O underfloor heating systems are covered as follows:

- ▶ Hep<sub>2</sub>O barrier pipe when used in UFH applications: 100 year guarantee; BSI Kitemark
- ▶ Composite manifold: 25 year BBA certification; 1 year warranty for its electrical components
- ▶ Hep<sub>2</sub>O push-fit fittings: 50 year guarantee; BSI Kitemark
- ▶ Controls: 2 year warranty
- ▶ Other Hep<sub>2</sub>O underfloor heating items; 1 year warranty



#### Quality and Environmental management

All Hep<sub>2</sub>O products are manufactured under exacting Quality and Environmental management systems:

- ▶ BS EN ISO 9001:2008
- ▶ EN ISO 14001:2004 Certificate No. 1473



### Worldwide Accreditations



## Push-Fit Plumbing System Data Sheet

