



Hep₂O

Push-Fit Plumbing System

System description

Hep₂O 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.

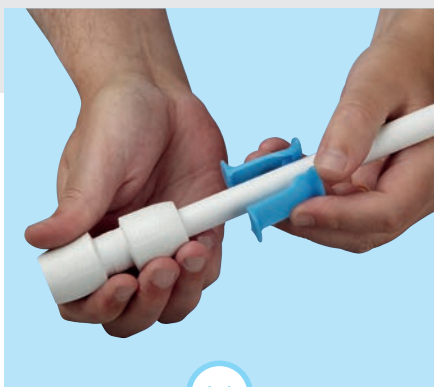
System benefits

- ⦿ **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 Hep₂O fittings are well accepted for 'on view' or 'on show' applications.

- ⦿ **Colour coded packaging**
Colour coded for easy identification.



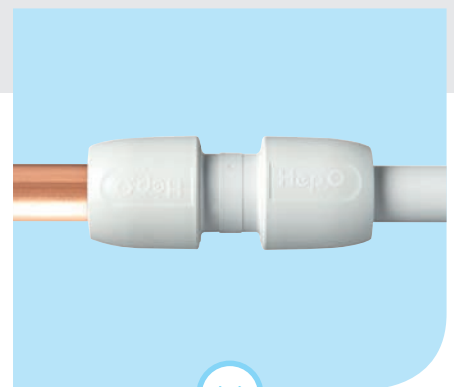
HepKey demounting system

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 Hep₂O system is available:
Hep₂O Product List (1st March 2020) - Hep₂O Installer Guide (2020).

Applications

Hep₂O 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 Hep₂O pipe means it is the ideal solution for renovation, system extensions and situations where space is restricted. This means Hep₂O is widely used on mobile homes, portable homes and boats, as well as in traditional residential and commercial plumbing installations. The compatibility of Hep₂O fittings with copper ensures a simple, fast and reliable method of joining to traditional materials on site. Hep₂O 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 Hep₂O range comes with a wide variety of pipes, (demountable) fittings and manifolds in 10, 15, 22 and 28mm (non-standard sizes on request). Hep₂O pipes are available as standard and barrier pipe (incorporating an oxygen barrier to inhibit oxygen permeation). All Hep₂O fittings are designed to also connect directly to copper pipework.

Category	Product	Dimensions (mm)
Pipes	<ul style="list-style-type: none"> ⊕ Coils ⊕ Straight lengths ⊕ Conduit pipe ⊕ Barrier pipe 	10,15,22,28
Fittings*	<ul style="list-style-type: none"> ⊕ Elbows ⊕ Tees ⊕ Straight connectors ⊕ Spigot reducers ⊕ Tap connectors ⊕ Demountable stop end 	10,15,22,28
Auxiliary fittings	<ul style="list-style-type: none"> ⊕ Brass adaptors (available in DZR and non-DZR brass grades) ⊕ Valves ⊕ Tap connectors 	
Manifolds	<ul style="list-style-type: none"> ⊕ 2-Port ⊕ 3-Port ⊕ 4-Port ⊕ Modular Multi-Port 	
Accessories	<ul style="list-style-type: none"> ⊕ Hep₂O joint test kit Central heating & water services calculator ⊕ Pipe support sleeves ⊕ Cold forming bends ⊕ Pipe clips and cutters 	

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

Quality requirements

Hep₂O carries a British Standard Kitemark against BS7291 parts 1 & 2 Class S. Hep₂O 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/m³

920

Joining 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

Hep₂O

How it works

With Hep₂O, 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

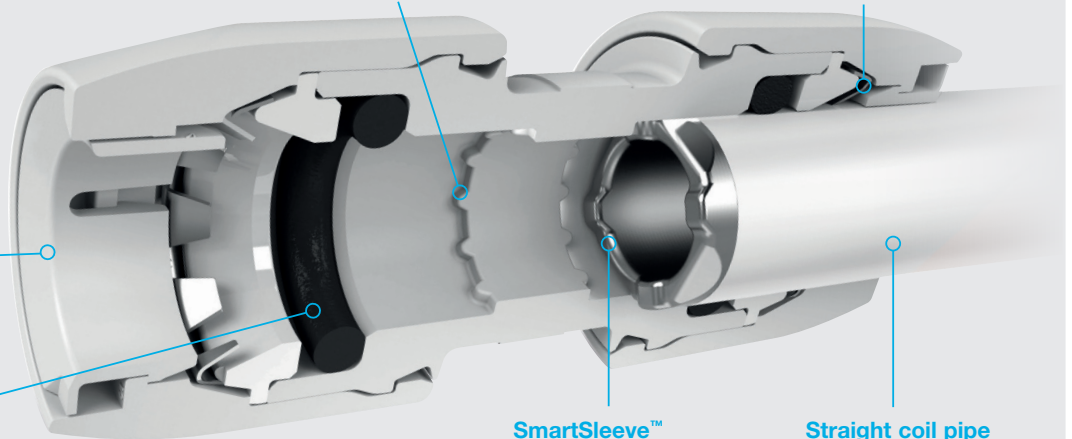
The o-ring offers a reliable seal in both hot and cold water systems.

Internal castellations

In4Sure™ joint recognition technology lies right at the heart of the Hep₂O 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™

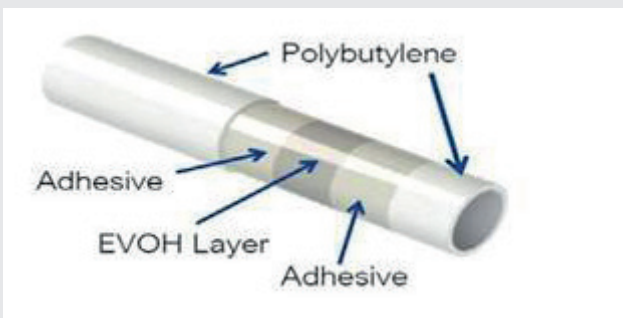
As well as forming part of the In4Sure™ joint recognition feature, the profiled end of the stainless steel SmartSleeve™ reduces the force required to make a secure connection. It also stays in the pipe when demounted.

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 Hep₂O 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, Hep₂O 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, Hep₂O is specified by 70% of major housing developers
- ⦿ Hep₂O is stocked in over 3,000 branches nationwide
- ⦿ In addition to high-rise and commercial buildings, Hep₂O is installed in over 100,000 new homes every year
- ⦿ Hep₂O has been endorsed by 90% of UK plumbers who have either tried or use Hep₂O as their preferred brand
- ⦿ Hep₂O 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. Hep₂O pipes are cooler to touch
- ⦿ No paint – Hep₂O is available in white and is unobtrusive
- ⦿ No mechanical noise, which means the system is much quieter



Hep₂O

Standards and Warranties

Hep₂O Flexible Push-fit Plumbing

Hep₂O Guarantee

Due to a rigorous quality control and testing programme, Hep₂O carries a 50 year guarantee against defect in materials or manufacturing of all its pipe and fittings.



Terms & Conditions

As outlined in the Hep₂O 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 Hep₂O pipe or fitting, please contact Wavin Technical Services Tel: 0844 856 5165*
Email: technical.design@wavin.com

Product and System Warranties

Hep₂O is also approved by WRAS (certification 1312005) - deemed safe for use in the supply of drinking water. Hep₂O 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

Hep₂O Underfloor Heating

Hep₂O Guarantee

Provided that the installation has adhered to our published advice, Hep₂O and other Wavin products used within Hep₂O underfloor heating systems are covered as follows:

- ▶ Hep₂O 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
- ▶ Hep₂O push-fit fittings: 50 year guarantee; BSI Kitemark
- ▶ Controls: 2 year warranty
- ▶ Other Hep₂O underfloor heating items; 1 year warranty



Quality and Environmental management

All Hep₂O products are manufactured under exacting Quality and Environmental management systems:

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



Worldwide Accreditations



Hep₂O

Push-Fit Plumbing System Data Sheet



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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