Wavin Hep$_2$O
Flexible PB Push-fit Plumbing System

wavin

orbia

Hep$_2$O

Push-fit Plumbing System

Contents

The Hep$_2$O system is available in the sizes 15, 22 and 28mm. The dimensioning is easy to recognize by the colour packaging:

◉ **15mm: blue**
◉ **22mm: purple**
◉ **28mm: orange**

Abbreviations:
BSP = British Standard Pipe Thread
DZR = Dezincification Resistant Brass

Selection of Brassware Fittings range between DZR and non-DZR families depends on local regulations applying in each market.

Hep$_2$O

Product details **Pipe**

Description	Dia (mm)	Article code	SAP code
Straight Coil Pipe – Barrier	15 x 10m	HXX10/15W	3070750
	15 x 25m	HXX25/15W	3029640
Straight Coiled Lengths in SmartPack dispensers. 5 Layer pipe with internal oxygen barrier layer	15 x 50m	HXX50/15W	3029644
	15 x 100m	HXX100/15W	3029638
	22 x 10m	HXX10/22W	3072543
	22 x 25m	HXX25/22W	3029641
	22 x 50m	HXX50/22W	3029645
	28 x 10m	HXX10/28W	3070751
	28 x 25m	HXX25/28W	3029642
	28 x 50m	HXX50/28W	3029646
Straight Barrier Pipe – Cut Lengths	15 x 3m	HXX03/15W	3029634
	15 x 6m	HXX06/15W	3030789
	22 x 3m	HXX03/22W	3029635
	22 x 6m	HXX06/22W	3030790
	28 x 3m	HXX03/28W	3029636
	28 x 6m	HXX06/28W	3030791
Pipe in Pipe System	50m	HXXC5015 BU	3011285
	50m	HXXC5015 RD	4013649
	50m	HXXC5022 BU	3011286
	50m	HXXC5022 RD	4013650
	25m	HXXC2528 BU	4013647
	25m	HXXC2528 RD	4013651

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Product details **Fittings**

Description	Dia (mm)	Article code	SAP code
Straight Connectors	15 x 15	HD1/15W	3029590
	22 x 15	HD3B/22W	3070724
	22 x 22	HD1/22W	3029591
	28 x 28	HD1/28W	3030695
Spigot-Socket Reducer	22 x 15	HD2/22W	3029603
	28 x 22	HD2/28W	3030692
Elbow 90˚	15	HD5/15W	3029616
	22	HD5/22W	3029617
	28	HD5/28W	3030673
Elbow 90˚ Single Socket	15	HD4/15W	3029612
	22	HD4/22W	3029613
Obtuse bend 135˚ Single Socket	15	HD8/15W	3030680
	22	HD8/22W	3030681
Equal Tee	15	HD10/15W	3029593
	22	HD10/22W	3029594
	28	HD10/28W	3030675
End Reduced Tee (dimensions: end x branch x end)	22 x 22 x 15	HD12/22W	3029595
	28 x 28 x 22	HD12/28W	3030674

Description	Dia (mm)	Article code	SAP code
Double End Reduced Tee (dimensions: end x branch x end)	15 x 22 x 15	HD18/22W	3030719
	22 x 28 x 22	HD18/28W	3030720
Branch Reduced Tee (dimensions: end x branch x end)	22 x 15 x 22	HD13/22W	3029597
	28 x 22 x 28	HD13/28W	3030672
	28 x 15 x 28	HD13A/28W	3030671
Branch Reduced Spigot Tee (dimensions: end x branch x end)	22 x 15 x 22	HD15/22W	3030717
Branch & One End Reduced Tee (dimensions: end x branch x end)	22 x 15 x 15	HD14/22W	3029600
	28 x 22 x 22	HD14/28W	3030670
Demountable Stop End	15	HD62/15W	3029619
	22	HD62/22W	3029620
	28	HD62/28W	3030703
Tank Connector 15mm and 22mm versions for cold water only	1/2" BSP x 15	HX20/15W	3030706
	3/4" BSP x 22	HX20/22W	3030707
	1" BSP x 28 (Brass)	HX20/28W	3041309
Straight Tap Connector	1/2" BSP x 15	HD25A/15W	3029604
	3/4" BSP x 15	HD25B/15W	3029605
	3/4" BSP x 22	HD25B/22W	3030696
Hand-Titan Tap Connectors With rubber washer	BSP 1/2" x 15	HD26A/15W	3029607
	BSP 3/4" x 15	HD26B/15W	3029608
	BSP 3/4" x 22	HD26B/22W	3029609

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Description	Dia (mm)	Article code	SAP code
Flexible Tap Connectors Hep$_2$O x BSP Nut	150 braided, 15 x 1/2" BSP	HD425A/15W	3039585
	300 braided, 15 x 1/2" BSP	HD125A/15W	3030697
	300 braided, 15 x 3/4" BSP	HD125B/15W	3030698
	300 braided, 22 x 3/4" BSP (Full Bore)	HD125C/22W	3039568
	300 braided, 22 x 3/4" BSP	HD125B/22W	3030699
	500 braided, 15 x 1/2" BSP	HD225A/15W	3030700
	500 braided, 15 x 3/4" BSP	HD225B/15W	3030701
	500 braided, 22 x 3/4" BSP (Full Bore)	HD225C/22W	3039577
	500 braided, 22 x 3/4" BSP	HD225B/22W	3030702
	1000 braided, 15 x 1/2" BSP	HD325A/15W	3039583
	1000 braided, 22 x 3/4" BSP	HD325B/22W	3039584
Flexible Tap Connectors Hep$_2$O x Hep$_2$O	300 braided, 15 x 15	HD125H/15W	3039575
	300 braided, 22 x 22	HD125H/22W	3039576
	500 braided, 15 x 15	HD225H/15W	3039580
	500 braided, 22 x 22	HD225H/22W	3039581
Flexible Tap Connectors Hep$_2$O x Elbow BSP Nut	300 braided, 15 x 1/2" BSP	HD125D/15W	3039569
Flexible Tap Connectors Hep$_2$O x Brass Service Valve x BSP Nut	300 braided, 15 x 1/2" BSP	HD125E/15W	3039570
	300 braided, 22 x 3/4" BSP	HD125E/22W	3039571
	500 braided, 15 x 1/2" BSP	HD225E/15W	3039578
	500 braided, 15 x 3/4" BSP	HD225I/15W	3039582
	500 braided, 22 x 3/4" BSP	HD225E/22W	3039579

Description	Dia (mm)	Article code	SAP code
Flexible Tap Connectors Hep$_2$O x Brass Service Valve (Handle) x BSP Nut	300 braided, 15 x 1/2" BSP	HD125EH/15W	3039473
	300 braided, 22 x 3/4" BSP	HD125EH/22W	3039572
Flexible Tap Connectors Hep$_2$O x Monobloc Mixers	300 braided, 15 x M10*	HD125F/15W	3039573
	300 braided,15 x M12*	HD125G/15W	3039574
	*sold and priced as a pair		
Bent Tap Connector	1/2" BSP x 15	HD27/15W	3029610
Adaptor – Female BSP/ Hep$_2$O Socket DZR Brass	1/2" BSP x 15	HX28/15W	3030663
	3/4" BSP x 15	HX24/15W	3030665
	3/4" BSP x 22	HX28/22W	3030666
	1" BSP x 28	HX28/28W	3030664
Adaptor – Female BSP/ Hep$_2$O Socket Non DZR Brass	3/8" BSP x 15	HE633/15W	3031478
	1/2" BSP x 15	HE28/15W	3031475
	1/2" BSP x 22	HE653/22W	3031374
	3/4" BSP x 22	HE28/22W	3031355
	1" BSP x 28	HE28/28W	3031708
Wall Flange Plate Adaptor – Female Non-DZR Brass	1/2" BSP x 15	HE800/15W	3041310

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	Description	Dia (mm)	Article code	SAP code
	Adaptor – Male BSP/Hep$_2$O Socket DZR Brass	1/2" BSP x 15	HX29/15W	3030667
		3/4" BSP x 22	HX29/22W	3030669
		1" BSP x 28	HX29/28W	3030668
	Adaptor – Male BSP/Hep$_2$O Socket Non DZR Brass	1/2" BSP x 15	HE29/15W	3031356
		1/2" BSP x 22	HE652/22W	3031373
		3/4" BSP x 22	HE29/22W	3031357
		1" BSP x 28	HE29/28W	3031358
	Adaptor – Female BSP/ Hep$_2$O Spigot DZR Brass	1/2" BSP x 15	HX30/15W	3031019
		3/4" BSP x 22	HX30/22W	3031021
		1" BSP x 28	HX30/28W	3031022
	Adaptor – Female BSP/ Hep$_2$O Spigot Non DZR Brass	1/2" BSP x 15	HE30/15W	3031486
		3/4" BSP x 22	HE30/22W	3031487
		1"BSP x 28	HE30/28W	3031749
	Adaptor – Male BSP/Hep$_2$O Spigot DZR Brass	1/2" BSP x 15	HX31/15W	3031023
		3/4" BSP x 22	HX31/22W	3031024
		1" BSP x 28	HX31/28W	3031025
	Adaptor – Male BSP/Hep$_2$O Spigot Non DZR Brass	1/2" BSP x 15	HE31/15W	3031645
		3/4" BSP x 22	HE31/22W	3031646
		1" BSP x 28	HE31/28W	3031750
	Threaded Elbow – Female Non DZR Brass	1/2" BSP x 15	HE5/15W	3031476
		1/2" BSP x 22	HE5A/22W	3031370
		3/4" BSP x 22	HE5/22W	3031369
		1" BSP x 28	HE5/28W	3031737
	Threaded Elbow – Male Non DZR Brass	1/2" BSP x 15	HE5M/15W	3031477
		1/2" BSP x 22	HE654/22W	3031375
		3/4" BSP x 22	HE5M/22W	3031371
		1" BSP x 28	HE5M/28W	3031738

Description	Dia (mm)	Article code	SAP code
Draincock Brass 15mm spigot DZR Brass	15	HX32/15 GY	4013770
Wall Plate Elbow	1/2" BSP x 15	HX6/15W	3030711
	3/4" BSP x 22	HX6/22W	3030712
Wall Screw Elbow Non DZR Brass	1/2" BSP x 15	HE6C/15W	3031581
	1/2" BSP x 22	HE6CB/22W	3031583
	3/4" BSP x 22	HE6C/22W	3031582
Universal Wall Plate Elbow Non DZR Brass	1/2" BSP x 15	HE6A/15W	3031580
Wall Plate Elbow Non DZR Brass	1/2" BSP x 15	HE6MA/15W	3031480
	1/2" BSP x 22	HE6MA/22W	3031481
Tee – Female Threaded Branch Non DZR Brass	15 x 1/2" BSP Branch	HE16/15W	3031483
	22 x 1/2" BSP Branch	HE16A/22W	3031723
	22 x 3/4" BSP Branch	HE16/22W	3031485

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Product details **Fittings**

Description	Dia (mm)	Article code	SAP code
Wall Plate Tee – Female Non-DZR Brass	15 x 1/2" BSP Branch*	HE7/15W	3031376
	15 x 1/2" BSP Branch	HE7MA/15W	3031488
	22 x 1/2" BSP Branch	HE7MA/22W	3031482
	*HE7/15W has offset branch		
Cylinder Connector Spigot DZR Brass	1" BSP x 22 spigot	HX34/22 GY	3011459
Gate Valve – Hot/Cold DZR Brass Brass fitted with Hep$_2$O ends (suitable for hot and cold water and central heating)	15 x 15	HX35/15W	3030722
	22 x 22	HX35/22W	3030723
Stopcock – Cold Water Fitted with Hep$_2$O ends (for cold water use only)	15 x 15	HX36/15W	3030693
	22 x 22	HX36/22W	3030694
Stopcock – Cold Water Hep$_2$O to MDPE/HDPE conversion 22mm Hep$_2$O to 25mm MDPE/HDPE	25 MDPE/HDPE x 22 Hep$_2$O	HX43/22W	3030710
Shut-off Valve With hot/cold indicator insert (not for use with central heating)	15	HX37/15W	3030708
Appliance Valve With hot/cold indicator insert (not for use with central heating)	15	HX38/15W	3030709

Description	Dia (mm)		Article code	SAP code
Straight Service Valve	15		HX18/15W	3030704
With hot/cold indicator insert (not for use with central heating)				
Angled Service Valve	15		HX19/15W	3030705
With hot/cold indicator insert (not for use with central heating)				
Double-Check Valve	15 x 15		HX72/15W	3030713
Lever Ball Valve	15 x 15		HE37C/15W	3031728
Non-DZR Brass (no fixing points)	22 x 22		HE37C/22W	3031729
	28 x 28		HE37C/28W	3031730
DZR Brass (with fixing points)	15 x 15		HX22/15W	3030724
	22 x 22		HX22/22W	3030725
	Suitable for hot and cold water and central heating			
Shut-off Valve – Hidden Handle	22 x 22		HE37A/22W	3031725
Non-DZR Brass				
Shut-off Valve – Tri-Handle	15 x 15		HE37B/15W	3031726
Non-DZR Brass	22 x 22		HE37B/22W	3031727
Ball Valve – Chrome Lever Handle	15 x 15		HE37D/15W	3031731
	22 x 22		HE37D/22W	3031732
Non-DZR Brass	Handle Extension Kit		HE39W	4041597

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Product details **Fittings**

Description	Dia (mm)	Article code	SAP code
Ball Valve – Hidden Handle Non-DZR Brass	15 x 15	HE37E/15W	3031734
	22 x 22	HE37E/22W	3031735
	Handle Extension Kit	HE39W	4041597
Manifolds – Closed Spigot Type Polybutylene	2 Port 22 x 15	HX88/22W	3030726
	3 Port 22 x 15	HX89/22W	3030728
Manifolds – Socket to Socket Type Polybutylene	2 Port 22 x 15	HX88B/22W	3030727
	3 Port 22 x 15	HX89B/22W	3030729
Manifolds – Plated Brass with Taps Modular system – can be used to build manifolds with any number of ports and combinations of 15mm and 22mm outlets	1-Port 3/4" BSP x 22	HX91T/22W	3030730
	2-Port 3/4" BSP x 15	HX92T/15W	3030732
	3-Port 3/4" BSP x 15	HX93T/15W	3030733
	4-Port 3/4" BSP x 15	HX94T/15W	3030731
Manifold end-caps	3/4" BSP Female	HX97 GY	4013739
	3/4" BSP Male	HX98 GY	4013740

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Product details **Accessories**

Description	Dia (mm)		Article code	SAP code
Lubricant 400 ml Aerosol Can	Joint Lubricant Spray		HX200	4026146
SmartSleeve	15		HX60/15W	3029622
	22		HX60/22W	3029623
	28		HX60/28W	3030691
Pipe Clip – Screw Type	15		HX85/15W	3030688
	22		HX85/22W	3030689
	28		HX85/28W	3030690
Pipe Clip Spacer	15		HX86/15W	3030682
	22		HX86/22W	3030683
Pipe Clip – Cable Type	15		HX65/15W	3030685
	22		HX65/22W	3030686
	28		HX65/28W	3030687
Blanking Peg For Demountable Fittings	15		HX44/15W	3030714
	22		HX44/22W	3030715
	28		HX44/28W	3030980
HepKey Plus For Demountable Fittings	15		HX79/15W	3029625
	22		HX79/22W	3029626
	28		HX79/28W	3030676
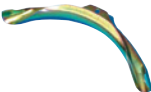
Hep$_2$O

Product details **Accessories**

Description	Dia (mm)	Article code	SAP code
HepTool For Demountable Fittings in restricted access locations	10 and 28	HX77/10W	3039598
	15 and 22	HX77/15W	3039472
Hep$_2$O Joint Testing Kit Used to pressure test Hep$_2$O installations at site. See hep$_2$O Installer Guide for details of test procedures.		HX81 GR	3032329
Terminal Back Plate	Terminal back plate	HX103 BL	4013794
Conduit Terminal	1/2" BSP x 15	HX101/15W	3031753
Cold Forming Bend Fixture Metal with passivate finish	15	HX75/15 GR	4013715
	22	HX75/22 GR	4013718
Pipe Cutters	For pipe diameter up to 28 mm max. (standard)	HD74 GR	4013791
	For pipe diameter up to 25 mm max. (procutter)	HD75 GR	4013793
	For pipe diameter up to 42 mm max. (ratchet)	HD77 GR	3035615
	For pipe diameter up to 28 mm max. (ratchet)	HD78 GR	3032191

Hep$_2$O

Making connections

### Jointing with Hep$_2$O pipe and fittings

SmartSleeve™ pipe support sleeve

Before making a joint using Hep$_2$O pipe, it is essential to insert a Hep$_2$O SmartSleeve™ pipe support sleeve into the cut pipe end. The only exception is when connecting to the open spigot end of a Hep$_2$O fitting.

The SmartSleeve™ has several purposes:

- It ensures the pipe retains its circular cross-section under all operating conditions
- It eases insertion of the pipe into the fitting
- The profiled end of the SmartSleeve™ helps you to check the pipe is fully inserted. See In4Sure™ joint recognition technology
- It maintains the rigidity of the pipe within the fitting
- Barbs on the SmartSleeve™ lock it in the pipe, which helps ensure it is not left in the fitting when demounting

All SmartSleeve™ pipe inserts are manufactured from 'food quality' 316 stainless steel and are impervious to contaminants. They are designed to be captive in the pipe but can be removed if required, using long nosed pliers. However, if damaged, the SmartSleeve™ must not be re-used.
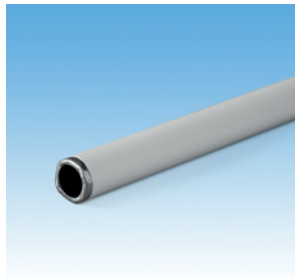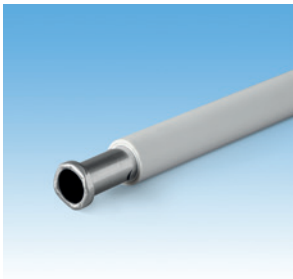
Inserting SmartSleeve™ into pipe.

Jointing procedure

Whichever type of Hep$_2$O fitting is used, the same jointing procedure should be followed.


Photo 1.

Photo 2.

Photo 3.

Photo 4.

1. Cut the pipe squarely at one of the '^' marks using recommended pipe cutters and ensure the pipe end is free from burrs
2. Insert a Hep$_2$O SmartSleeve™ pipe support sleeve into the pipe end
3. Push the pipe firmly into the fitting, then use Hep$_2$O's unique In4Sure™ joint recognition technology to 'feel' if the pipe is fully inserted
4. Tug back on the pipe to ensure the grab-ring engages correctly and prevents the pipe withdrawing

Jointing copper pipe to Hep₂O fittings

Hep₂O fittings have been designed to form reliable joints with metric copper pipe which conforms to BS EN 1057 – R520.
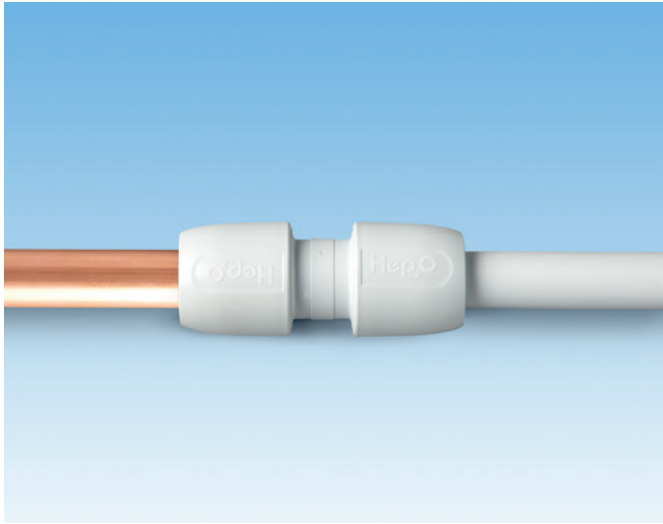

Hep2O fittings are also compatible with copper pipe.

1. Measure the pipe, allowing sufficient length for insertion into the fitting, and mark with a pencil
2. Cut the copper pipe with a wheel cutter
3. Carefully inspect the pipe ends for burrs or swarf
4. Push the pipe firmly into the fitting
5. Tug back on the pipe to ensure the grab-ring engages correctly and prevents the pipe withdrawing

Checking the joint using In4Sure™ joint recognition technology

Follow normal procedure to establish the insertion depth of the pipe into the fitting as previously described.

In4Sure™ joint recognition technology then provides a further check by allowing you to 'feel' if the pipe is fully inserted.
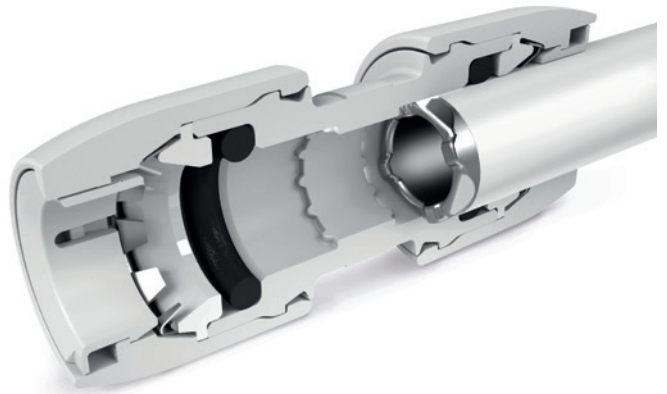
Cut-away showing In4Sure™ joint recognition technology.

To use In4Sure™ joint recognition technology:

1. Hold the centre (fixed) part of the fitting in one hand
2. After inserting the appropriate pipe sleeve, push the pipe firmly into the fitting
3. While still pushing, rotate the pipe using a screwing action.
   If the pipe is fully inserted you will feel a 'rumbling' sensation as the profiled end of the SmartSleeve™ passes over the castellated seat inside the fitting
4. Pull back to check the joint integrity

This simple procedure is designed to give you the peace of mind that comes from knowing that the joint is good. You can also make a visual check by checking the next '^' mark is level with the end of the fitting.

Note:
New pipe insert for copper providing joint recognition will be available soon.

Hep$_2$O
Making connections

Demounting joints using the Hep$_2$O HepKey™ system

The HepKey Plus™ is colour-coded: **15 blue, 22 purple** and **28mm orange.**

HepKey Plus™

To use HepKey Plus™:

1. Place the HepKey Plus™ around the pipe
2. Clip HepKey Plus™ over the fitting
3. In this position it depresses the inner release ring of the fitting
4. Withdraw the pipe from the fitting
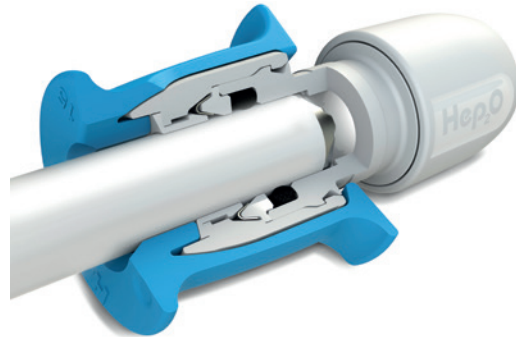

Step 1.

Step 2.

Step 3.

Step 4.

Demounting sequence using HepKey Plus™.

Cut-away drawing of HepKey Plus™.

Note:
Before re-using the fitting we recommend applying a small amount of Jointing Lubricant Spray (code HX200) to the O-ring seal inside the fitting.
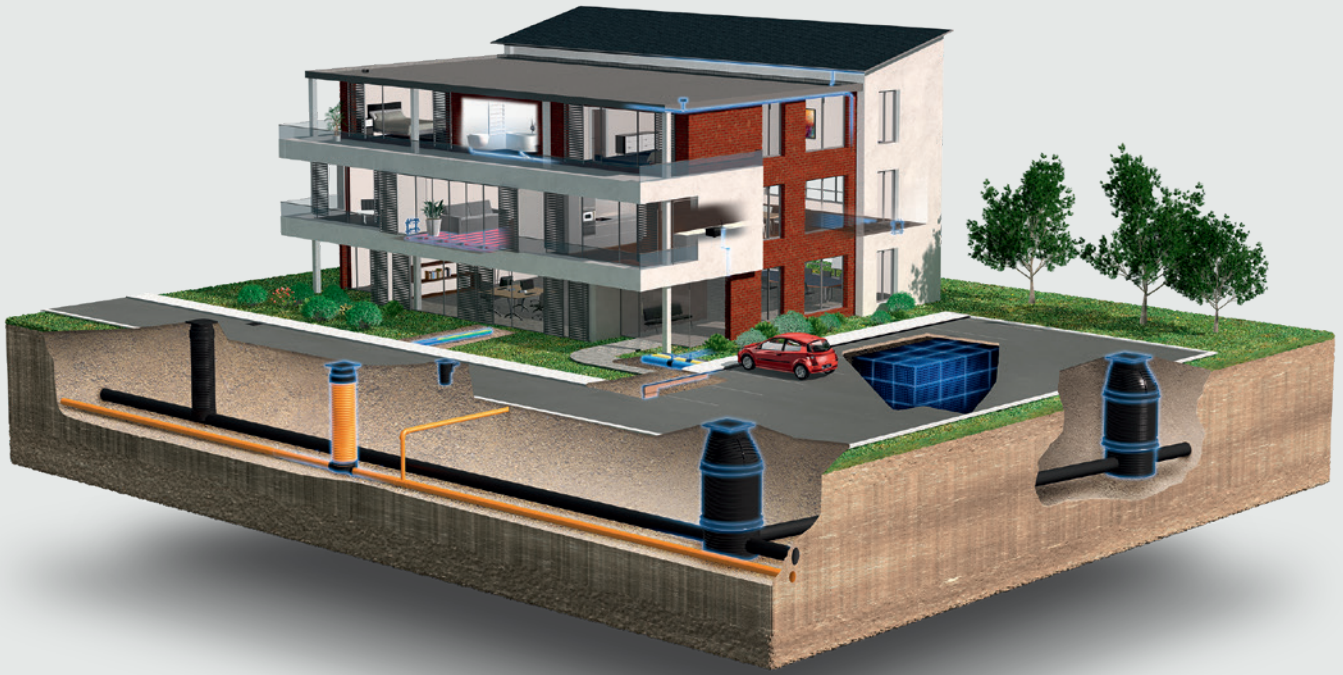
Documentation

The following documentation on the Wavin Hep2O system is also available:

- Data sheet
- Installer Guide

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Wavin Middle East | Tiffany Tower no. 2408W Cluster JLT Dubai / United Arab Emirates
Tel: +97 14 276 6968 | E-mail: wavin.me@wavin.com | https://wavin.com/en-ae