



SELF-SEALING HYGIENIC  
WASTE VALVES

**THE MOST INNOVATIVE ADVANCE IN  
PLUMBING SINCE THE WATER-SEAL TRAP**

HepVo available at [www.Hep2o.com.au](http://www.Hep2o.com.au)  
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# The smart alternative to traditional traps.

Designed and developed by Hepworth Plumbing Products (UK), Hep<sub>v</sub>O is a self-sealing, hygienic, one-way valve designed to close off the waste connection below any fixture and prevent the escape of sewer gases to the building.

Unlike traditional traps, the Hep<sub>v</sub>O valve does not rely on a water seal to stop odour entering the building. Hep<sub>v</sub>O contains an elastomeric membrane enclosed within an outer casing, which opens to allow water to pass through then closes once the flow is complete, forming a tight seal.

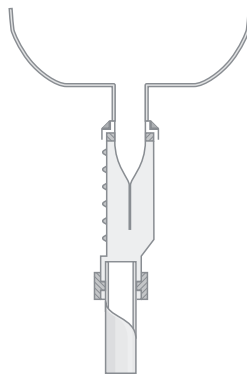
## Hep<sub>v</sub>O IS THE MOST HYGIENIC CHOICE

Water held by traditional traps can become stagnant, resulting in the build-up of waste residue causing bacterial or fungal growth that could escape into the building. Because the Hep<sub>v</sub>O valve is not reliant on a water seal, Hep<sub>v</sub>O does not promote such build-up.

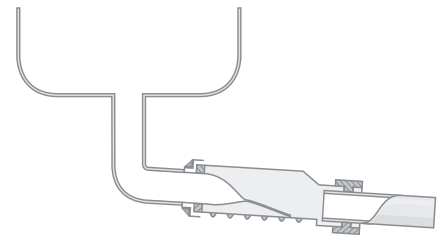
Hep<sub>v</sub>O also eliminates negative pressure within the waste system by allowing fresh air into the waste system until a state of equilibrium with atmosphere is reached.

## OPERATION OF THE Hep<sub>v</sub>O

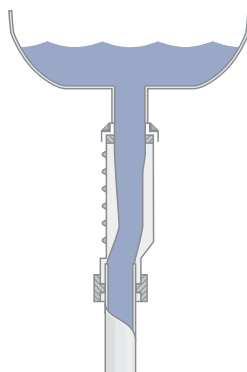
Vertical Closed



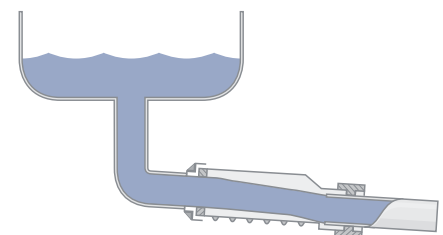
Horizontal Closed



Vertical Open



Horizontal Open

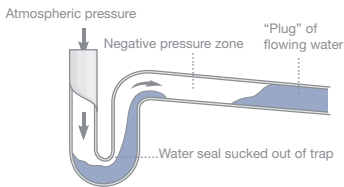


# Why choose HepvO?

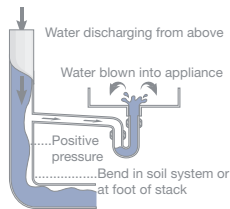
## HepvO IS NOT SUBJECT TO THE WEAKNESS OF WATER SEAL LOSS

HepvO's unique construction will prevent the entry of sewer gases into your building under any of these common conditions:

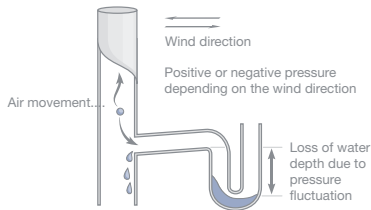
### 1. Self Siphonage



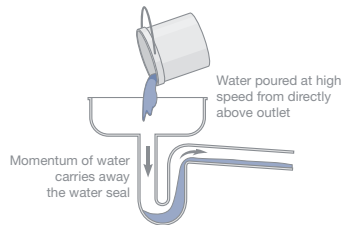
### 2. Compression



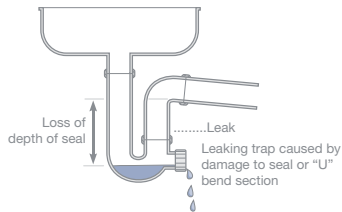
### 3. Wind Effect



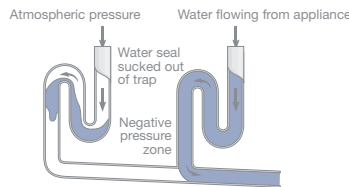
### 4. Momentum



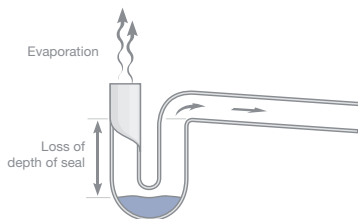
### 5. Leakage



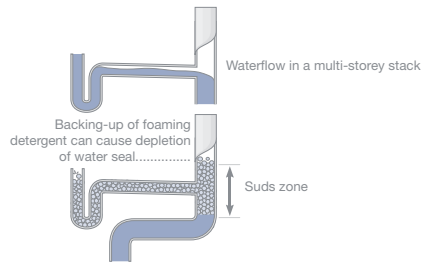
### 6. Induced Siphonage



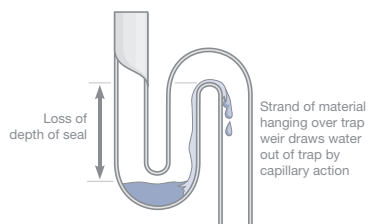
### 7. Evaporation



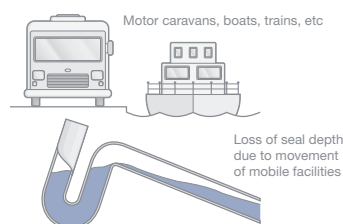
### 8. Foaming



### 9. Capillary Action

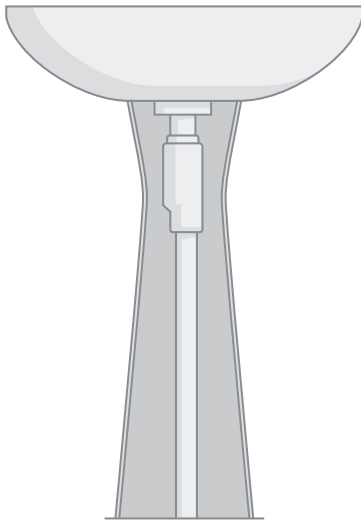


### 10. Movement

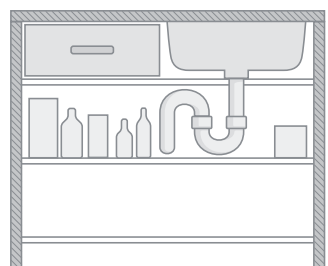


## Hep<sub>v</sub>O SAVES SPACE

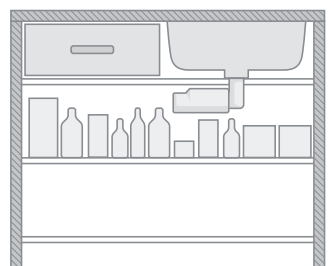
In traditional systems, installation may often involve cutting under the floors of baths and showers to accommodate the bend of the trap. With Hep<sub>v</sub>O, the waste pipe can be installed in a straight line, or be turned at a 90-degree angle from the fixture outlet. Installation of and access for pedestal basins are significantly easier, and space under basins can be maximised, giving you more shelf and storage capacity.



Pedestal basin with Hep<sub>v</sub>O



Cupboard with water seal trap



Cupboard with Hep<sub>v</sub>O

Hep<sub>v</sub>O is a hygienic, self-sealing, one-way valve designed to close off the waste connection below any fixture to prevent the entrance of sewer gases into a building.

Hep<sub>v</sub>O contains an elastomeric membrane enclosed within an outer casing, which opens to allow water to pass through then closes once the flow is complete, forming a tight seal. Unlike traditional traps, the Hep<sub>v</sub>O valve does not rely on a water seal to stop odour entering your building.

## Hep<sub>v</sub>O IS THE MOST HYGIENIC, GERM-FREE CHOICE.

Water held by traditional traps can become stagnant, resulting in the build-up of waste residue causing bacterial or fungal growth that could escape into your building. Because the Hep<sub>v</sub>O valve is not reliant on a water seal, you won't have to worry about such build up in your traps.

Hep<sub>v</sub>O also eliminates negative pressure within the waste system by allowing fresh air into the waste system until a state of equilibrium with atmosphere is reached.

## Hep<sub>v</sub>O PROMOTES HYGIENE

### NO NOISE. NO SMELLS.

Hep<sub>v</sub>O operates silently and does not make noises associated with traditional traps.

Hep<sub>v</sub>O promotes hygiene, particularly where a fixture is infrequently used. Hep<sub>v</sub>O does not contain water like normal traps, which can become stagnant with waste residue, causing bacterial growth and emitting unpleasant smells.

## Hep<sub>v</sub>O OFFERS GREATER DESIGN FLEXIBILITY

Although the National Plumbing Code AS/NZS 3500 is mostly prescriptive, it also allows for performance options in the design of a soil, waste and vent (SWV) system.

In the past, the possible loss of the water seal in standard traps was a common factor in the conservative design of SWV systems. However, the unique performance of Hep<sub>v</sub>O now allows designers to move away from the restrictions of traditional designs and enjoy greater flexibility when designing SWV systems.

Hep<sub>v</sub>O is only restricted by the flow requirement of the discharge from the fixture, appliance or special unit to which it is attached. A minimum flow of 50 litres per minute is attainable with Hep<sub>v</sub>O in a horizontal position attached to a flat-bottomed receptacle. Based on water flow rates prescribed in AS/NZS 3500 this would suggest that any waste fixture may be permitted to discharge via Hep<sub>v</sub>O. This allows a designer to incorporate any configuration of sinks, troughs and floor waste gullies in a design of an SWV system. (Refer to technical specifications on page 4 for more detailed information and dimensions.)

Note: It is recommended that local authorities be consulted prior to installations of designs that vary from AS/NZS 3500.2 Acceptable Solutions.

**STANDARDS AND APPROVALS**

Hep<sub>v</sub>O complies with WaterMark Licence WMK20062, manufactured to MP52 Spec 047 – Self-Sealing Trap as issued by SAI Global Assurance Services.

Hep<sub>v</sub>O has been rigorously tested for most conditions that could be encountered when connected to typical fixtures.

In 2000, Hep<sub>v</sub>O was awarded ‘The Most Innovative Product Award’ at DesignBuild, Melbourne.

The National Plumbing Code AS/NZS 3500 Part 2 Section 6.3 Trapping of Fixtures and Appliances refers to and permits the use of self-sealing mechanical devices.

**CERTIFICATIONS AND APPROVALS**

Type	Reference	Country
WaterMark	WMK20062	Aus & NZ
WIMLAS	042/97	UK
BS 5572	Complies	UK

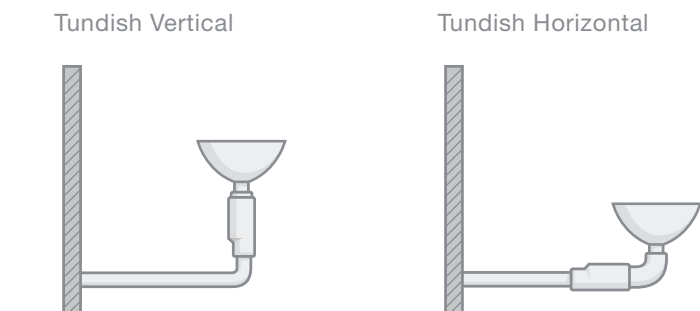
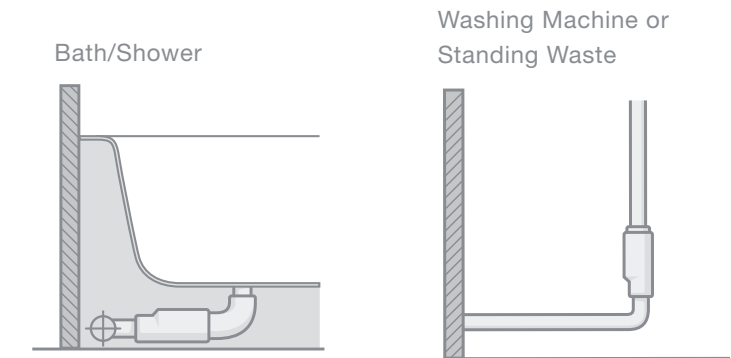
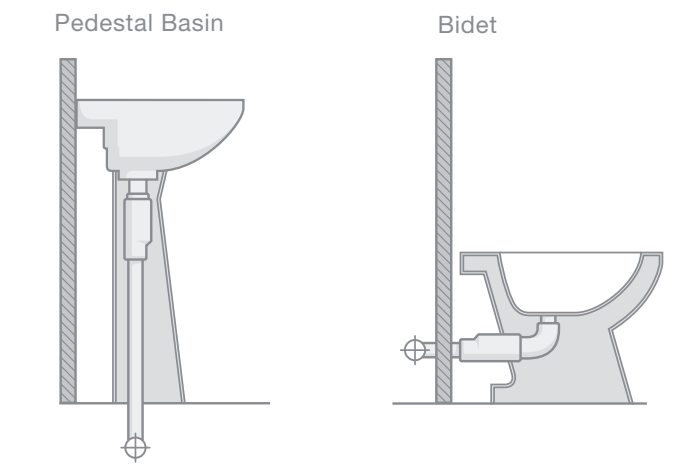
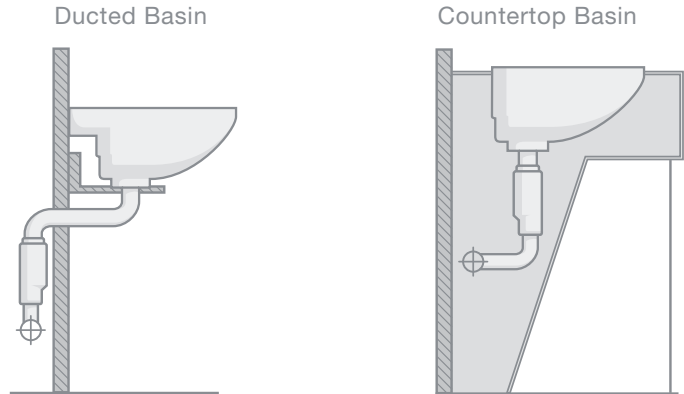
**APPLICATIONS**

Hep<sub>v</sub>O can be used on the outlet of a fixture or appliance as an alternative to a standard trap (refer AS/NZS 3500). The installation will depend on the site conditions and local authority requirements.

Hep<sub>v</sub>O provides a permanent seal when connected downstream of a tundish, accepting condensate lines from air conditioning or other intermittent discharge systems and does not require a trap primer.

**MOUNTING OPTIONS**

Hep<sub>v</sub>O may be installed at any angle between vertical and horizontal. Discharge pipes should have sufficient grade to convey the design flow but should not be flatter than 2.5% or 1 in 40.



## THE HepvO PRODUCT SELECTOR

HepvO can be installed vertically or horizontally, and is available in 32mm and 40mm diameters.

### HepvO waste valve



Hygienic Self Sealing Waste Valve

32mm BV1A

40mm CV1A

### HepvO and running adaptor

32mm BV3

40mm CV3

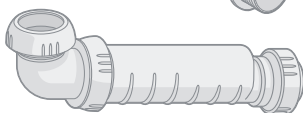


Use with the HepvO waste valve when installing in a pipe run

### HepvO with knuckle bend

32mm BV11

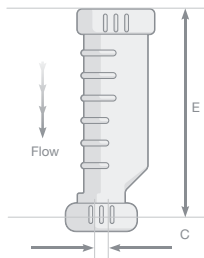
40mm CV11



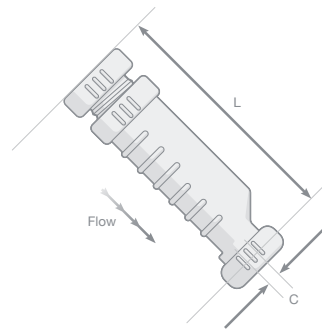
Use with the HepvO valve for horizontal applications

## DIMENSIONS

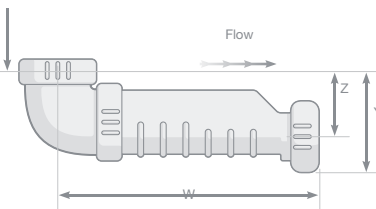
Fixed vertically or horizontally to fixture outlet.



Fixed on a discharge using a running adaptor.



Fixed horizontally using knuckle bend.



## DIMENSIONS

Size	C	E	L	W	Z	Y
32mm	8	173	215	215	35	68
40mm	6	173	215	215	35	68

### Notes:

- 1 These dimensions are taken from the face of the seal at the base of the female thread in the nut.
- 2 Dimensions are nominal and may vary slightly due to compression of rubber seals.
- 3 It is recommended that HepvO be accessible in all installations.

## END CONNECTIONS

Universal Threaded BS 32 or 40mm.

Universal Compression Outlet 32 or 40mm.

## MATERIAL SPECIFICATIONS

Body Material	Polypropylene
Sealing Mechanism	Various
Sealing Rings	EPDM
Washer	Nylon

## FLOW CAPACITY

(Based on 50mm head of flat-based receptacle)

### Horizontal

BV1A – 40 l/m

CV1A – 50 l/m

### Vertical

BV1A – 60 l/m

CV1A – 70 l/m

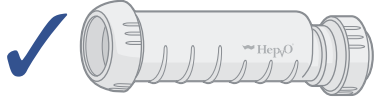
## TEMPERATURE CONSIDERATIONS

Maximum operating temperature 75°C.

Based on HepvO having been tested for over 10,000 cycles.

## INSTALLATION

### RIGHT WAY UP



### WRONG WAY UP



When installed horizontally, Hep<sub>v</sub>O must be installed with the ribs to the bottom.

#### Hep<sub>v</sub>O inlet

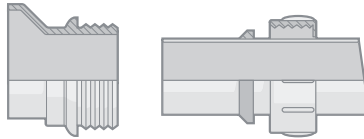
The inlet is provided with a loose nut and seal ring designed to connect to the threaded outlets of fixtures.

The inlet of Hep<sub>v</sub>O may also be adapted to pipe using a running adaptor, BV3 or CV3.

#### Hep<sub>v</sub>O outlet

The outlet is provided with a universal connection comprising seal ring, washer and compression nut.

## INSTALLATION AND FIXING OUTLET



1. Cut the pipe to length, using a suitable pipe cutter, allowing for the full compression socket depth.
2. Remove any swarf from the end of the pipe.
3. Mark the socket depth on the pipe and check the pipe section to be jointed is free of any surface damage that may affect the joint seal.
4. Unscrew the compression nut and slide the compression nut, washer and seal ring onto the pipe.
5. Insert the pipe fully into the socket.
6. Slide the seal ring, washer and compression nut up against the face of the socket and tighten the nut (check that the nut is not cross-threaded, hand tight should be adequate to form a proper seal).

**DO NOT USE JOINTING COMPOUND OR SEALANT ON THE Hep<sub>v</sub>O INLET OR OUTLET CONNECTIONS. AVOID USING THE OUTLET TO FLUSH AWAY BUILDING MATERIALS.**

## TESTING

Test the system in accordance with AS/NZS 3500 National Plumbing Code.

## MAINTENANCE

Hep<sub>v</sub>O is resistant to standard caustic-based drain cleaners.

Drain-cleaning solutions containing high concentrations of sulphuric acid must not be used.

When rodding or flushing with a sulphuric acid solution, the valve must be removed before the operation.

### HEPWORTH PLUMBING PRODUCTS (UK)



**Hepworth**  
PLUMBING PRODUCTS

Hep<sub>v</sub>O was designed and developed by Hepworth Plumbing Products, a world leader in plastic plumbing products.

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