



HepvO[®]

SELF-SEALING HYGIENIC
WASTE VALVES

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



Exel ADVANCED
PLUMBING
SYSTEMS
TM



The smart alternative to traditional traps.

Designed and developed by Hepworth Plumbing Products (UK), Hep_vO 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_vO valve does not rely on a water seal to stop odour entering the building. Hep_vO 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.

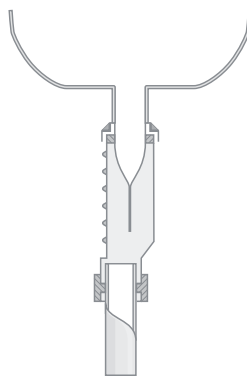
Hep_vO IS THE MOST HYGIENIC CHOICE

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_vO valve is not reliant on a water seal, Hep_vO does not promote such build-up.

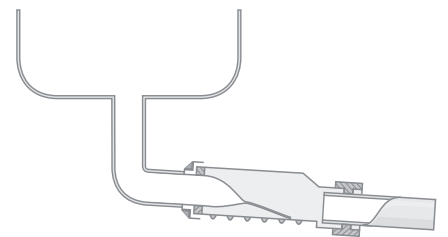
Hep_vO also eliminates negative pressure within the waste system by allowing fresh air into the waste system until a state of equilibrium with atmosphere is reached.

OPERATION OF THE Hep_vO

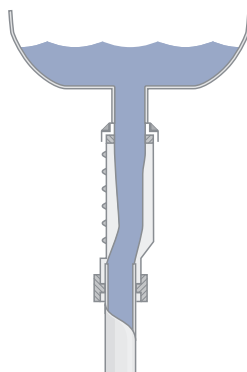
Vertical Closed



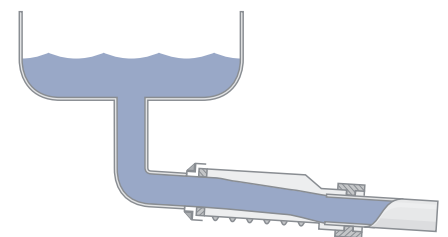
Horizontal Closed



Vertical Open



Horizontal Open

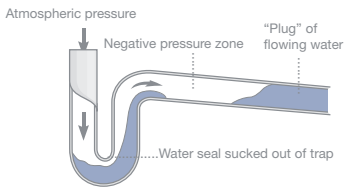


Why choose HepvO?

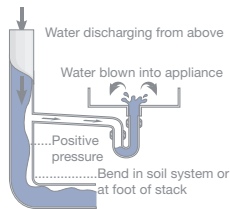
HepvO IS NOT SUBJECT TO THE WEAKNESS OF WATER SEAL LOSS

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

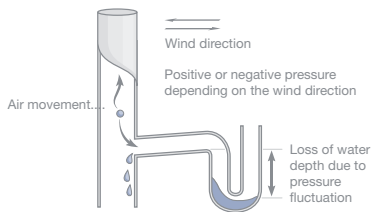
1. Self Siphonage



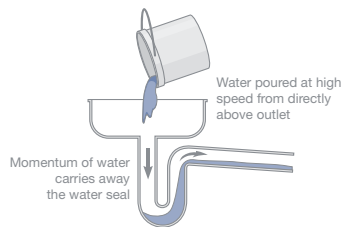
2. Compression



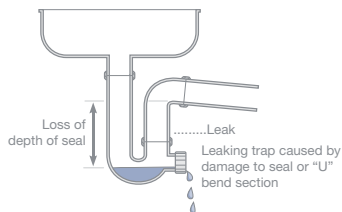
3. Wind Effect



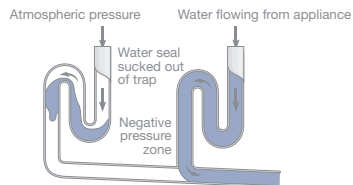
4. Momentum



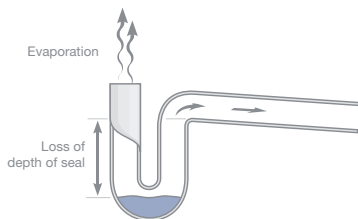
5. Leakage



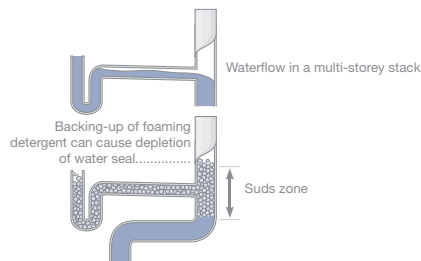
6. Induced Siphonage



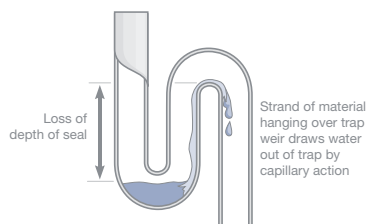
7. Evaporation



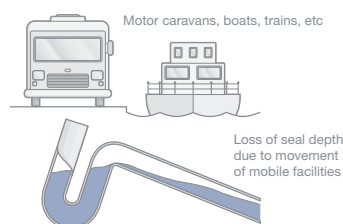
8. Foaming



9. Capillary Action

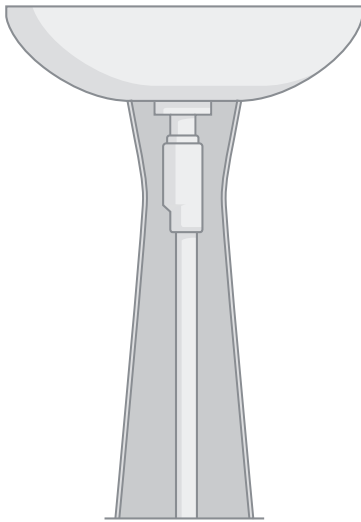


10. Movement

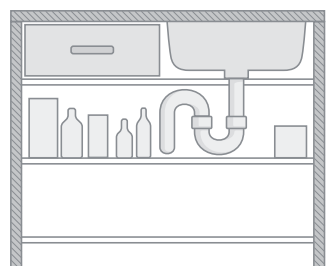


Hep_vO SAVES SPACE

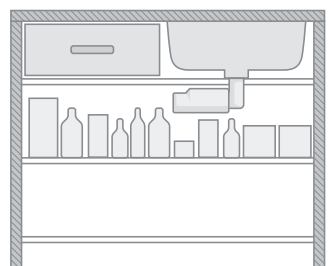
In traditional systems, installation may often involve cutting under the floors of baths and showers to accommodate the bend of the trap. With Hep_vO, the waste pipe can be installed in a straight line, or be turned at a 90-degree angle from the fixture outlet. Installation of and access for pedestal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



Pedestal basin with Hep_vO



Cupboard with water seal trap



Cupboard with Hep_vO

Hep_vO 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_vO 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_vO valve does not rely on a water seal to stop odour entering your building.

Hep_vO 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_vO valve is not reliant on a water seal, you won't have to worry about such build up in your traps.

Hep_vO 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_vO PROMOTES HYGIENE

NO NOISE. NO SMELLS.

Hep_vO operates silently and does not make noises associated with traditional traps.

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

Hep_vO 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_vO now allows designers to move away from the restrictions of traditional designs and enjoy greater flexibility when designing SWV systems.

Hep_vO 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_vO 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_vO. 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_vO complies with WaterMark Licence WMK20062, manufactured to MP52 Spec 047 – Self-Sealing Trap as issued by SAI Global Assurance Services.

Hep_vO has been rigorously tested for most conditions that could be encountered when connected to typical fixtures.

In 2000, Hep_vO 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_vO 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_vO 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_vO 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 Hep_vO PRODUCT SELECTOR

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

Hep_vO waste valve



Hygienic Self Sealing Waste Valve

32mm BV1A

40mm CV1A

Hep_vO and running adaptor

32mm BV3

40mm CV3

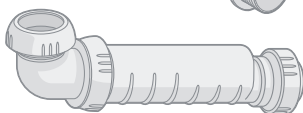


Use with the Hep_vO waste valve when installing in a pipe run

Hep_vO with knuckle bend

32mm BV11

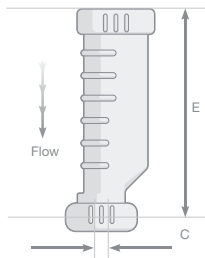
40mm CV11



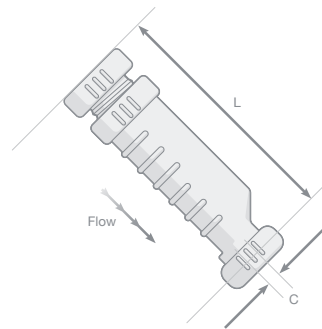
Use with the Hep_vO valve for horizontal applications

DIMENSIONS

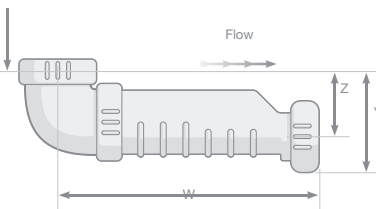
Fixed vertically or horizontally to fixture outlet.



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 Hep_vO 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

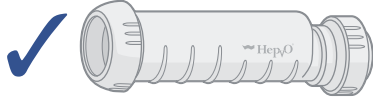
TEMPERATURE CONSIDERATIONS

Maximum operating temperature 75°C.

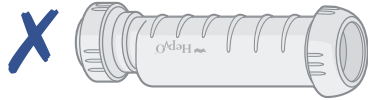
Based on Hep_vO having been tested for over 10,000 cycles.

INSTALLATION

RIGHT WAY UP



WRONG WAY UP



When installed horizontally, Hep_vO must be installed with the ribs to the bottom.

Hep_vO inlet

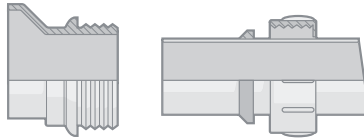
The inlet is provided with a loose nut and seal ring designed to connect to the threaded outlets of fixtures.

The inlet of Hep_vO may also be adapted to pipe using a running adaptor, BV3 or CV3.

Hep_vO 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_vO 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_vO 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_vO was designed and developed by Hepworth Plumbing Products, a world leader in plastic plumbing products.

FOR MORE INFORMATION ABOUT HepvO:

NATIONAL FREEPHONE: 1800 173 000

NATIONAL FREEFAX: 1800 630 905

FREE TECHNICAL HELPLINE: 1800 666 952



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www.exelgroup.com.au

MANUFACTURED BY:

