Hep$_v$O Fitting Instructions

BV1/21 (32mm) tundish adaptor kit

Hep$_v$O is a self-sealing waste valve which prevents foul sewer air from entering a building and is suitable for use as an alternative to a traditional water trap. As it doesn't rely on trapped water to create a seal, Hep$_v$O cannot lose its seal due to evaporation, movement, leaking or siphonage.

Connects to 1¼" BSP thread on tundish adaptor.

Membrane prevents foul sewer air from entering the building.

In-line design, ideal for installation in confined areas.

Compression outlet designed to fit 32mm Polypropylene pipe to BS EN 1451.

UK Patent Numbers.2320310 - 2352496 - 2352497
UK Design Reg. No. 2061474
European Patent No. 0941433
ATS 5200-047:2005

Installation instructions

This Hep$_v$O and tundish kit should be installed in accordance with the instructions given below. Unvented hot water systems must be installed by certified and qualified installers.

1. Connect and correctly tighten the tundish adaptor spigot into the compression fitting outlet of the tundish (supplied by the manufacturer of the unvented hot water storage system).
2. Hand-tighten the screw thread connection of the t undish adaptor to the captive inlet nut of the Hep$_v$O.
3. Connect and hand-tighten the Hep$_v$O outlet connection to the waste pipe.

Hep$_v$O can be used for unvented domestic hot water discharge applications into soil stacks, in conjunction with the tundish adaptor.

Unvented Domestic Hot Water Storage System Application

Hep$_v$O valves can be fitted to the discharge of unvented hot water storage systems (see figure 1), allowing them to be connected to sanitary pipework, provided they are fitted with a temperature and pressure relief valve. Storage systems up to 410 litres (500 litres nominal) capacity can be accommodated. Greater capacities will require an individual assessment.

The configuration for the plumbing is detailed in figure 1 for D1 diameters up to DN22 and with the use of a tundish adaptor (included in kit).

This application is not recommended for combi boilers or sealed system boilers due to the possibility that the discharges from the pressure relief valve (as opposed to the UHWSS combined temperature and pressure relief valves) could well be over 100º C.

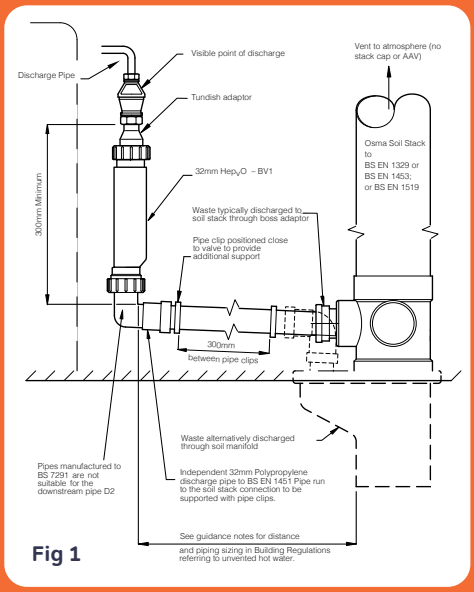

Fig 1

An Orbia business.

TECHNICAL ADVICE
Email: technical.design@wavin.co.uk or call 0800 0380088

Additional guidance notes and recommendations

These guidance notes should be read in conjunction with Building Regulation Approved Document G3 and WRc Technical Note TN10321.

The Osma Hep$_v$O product guide and the WRc technical notes are available from **www.wavin.co.uk**

These additional notes are written by Wavin to provide further guidance and recommendations to specifiers and installers.

The upper limits of temperature and flow rate into PVCu soil stacks cannot be determined by simple reference to any existing British or European Standard. The most relevant standard is BS EN 1055 which only gives an indication of limitation of performance. PVCu soil pipes and fittings, manufactured to BS EN 1329 and BS EN 1453 are required to withstand discharges of hot water up to 95° C for up to 62 seconds in accordance with elevated temperature cycling performance requirement of BS EN 1055.

Discharge pipework materials should be designed, specified and installed, taking into account the likely water temperature, volume or duration of the discharge, as specified by the manufacturer of the domestic unvented hot water system.

Where the discharge water temperature into plastics pipework is outside these parameters (see table below), it is recommended that a suitable alternative pipework material is specified.

When specifying plastic pipework for discharge purposes, certified and standard-marked polypropylene waste pipe and PVC soil pipe should conform to the thermal performance requirements of the British and European Standards as stated in Table 1 below.

If plastic pipework is to be used, the discharge pipe between the self-sealing valve and the soil stack should be piped in polypropylene to BS EN 1451.

The soil stack should be in PVCu to BS EN 1329 or BS EN 1453 or HDPE to BS EN 1519 or Wavin AS+.

The discharge from the tundish must run independently to the stack, without linking to any sanitary appliance, although up to six discharge pipes may be connected via a single branch pipe. In all cases, the discharge should be safe and visible.

Table 1: Requirements of British and European Standards

Standard	Discharge (litres)	Discharge water temperature (°C)	Discharge time
BS EN 1329	30 ± 0.5	93 ± 2	60 ± 2 seconds
BS EN 1451	30 ± 0.5	93 ± 2	60 ± 2 seconds
BS EN 1453	30 ± 0.5	93 ± 2	60 ± 2 seconds