Boundary Traps

**AIM**
The aim of this technical solution is to clarify the requirements for boundary traps and to ensure that boundary traps are suitable for the passage of Closed Circuit Television (CCTV) cameras and drain cleaning equipment.

**PLUMBING REGULATIONS 2008**
The *Plumbing Code of Australia* (PCA) is adopted by and forms part of the *Plumbing Regulations 2008*. Part C2 of the PCA specifies the objectives and performance requirements related to the installation of sanitary drainage systems. *AS/NZS 3500.2: Plumbing and drainage Part 2: Sanitary plumbing and drainage* is a “deemed to satisfy” document listed in Part C2 of the PCA and contains a section on “Inspection Shafts and Boundary Traps”.

**GENERAL REQUIREMENTS**
Boundary traps constructed of any approved material must be suitable for the passage of CCTV cameras and drain cleaning equipment through the trap & outlet bend sections. Boundary traps are generally available in kit form at plumbing merchants.

The PVC-U disconnector trap is not suitable for use as a boundary trap because the “dip” section of the “U” shaped trap has a very short radius and severely restricts CCTV cameras and drain clearing equipment passing through the trap.

Older style PVC-U boundary traps with an outlet inspection opening are also not suitable because cameras and equipment can catch on the inspection opening port of the outlet bend, even with the internal bore profile installed (see Figure 1).

**A SUITABLE BOUNDARY TRAP**
Two DN100 by 88° bends can be jointed with solvent cement providing a suitably wide “U” section with a sweeping radius around the trap “dip”. An inspection opening must not be installed at the outlet bend. Note that the sweeping radius must also continue around the outlet bend. Boundary traps purchased as a kit from plumbing merchants have an outlet bend with a larger centre line radius than a standard DN90° bend. The outlet bend is solvent welded to the “U” section by the drainer after determining the alignment of the boundary trap outlet with the authority sewer connection point.

**INSTALLATION REQUIREMENTS**
The installation requirements outlined in *AS/NZS 3500.2* apply. Boundary traps (other than cast iron) must sit on a concrete pad not less than 100mm thick that extends upwards to the inlet socket of the trap (see Figure 2). In instances where the authority sewer connection point does not terminate with an inspection opening fitting, a full size inspection opening fitting must be installed on the graded section of the property sewerage drain.
FIGURE 1 - EXAMPLE OF BOUNDARY TRAPS

FIGURE 2 - EXAMPLE OF BOUNDARY TRAP AND SHAFT