Floor Waste Gullies in Urinal Compartments and Other Wet Areas

AIM
The aim of this technical solution is to clarify the requirements for the provision of floor waste gullies in urinal compartments and other wet areas (see Figures 1, 2 and 3).

PLUMBING REGULATIONS 2008
The Plumbing Code of Australia (PCA) is adopted by and forms part of the Plumbing Regulations 2008. Part C1 of the PCA specifies the objectives and performance requirements related to the installation of sanitary plumbing systems. AS/NZS 3500.2: Plumbing and drainage Part 2: Sanitary plumbing and drainage is a “deemed to satisfy” document listed in Part C1 of the PCA and contains sections on “Gullies, Fixtures and Appliances”.

WHEN IS FLOOR WASTE GULLY REQUIRED IN A URINAL COMPARTMENT AND / OR OTHER WET AREAS?
- Urinals
  When one or more wall hung urinals are installed, a floor waste gully must also be installed in the same room and the floor must be graded toward the floor waste gully.

  Floor (or slab) type urinals, whether provided with a step or not, do not require a floor waste gully unless the National Construction Code (NCC), or specification for the building requires that a floor waste be provided.

- Other Wet Areas
  It may be necessary to install a floor waste gully in other wet areas, if required by the NCC or specification for the building.

CONNECTION AND PRIMING OF FLOOR WASTE GULLIES
The floor waste gully must terminate to sewer and have provision for maintaining the water seal. This may be achieved either by a waste fixture discharge, a charge pipe from a tap set or flush pipe, or the bleed off from a pressure and temperature relief valve or mechanical trap priming device. Alternatively a lockshield or shrouded hose tap installed in the same room with a graded floor to the floor waste gully, may also be used to maintain the water seal.

Note:
Plumbing Regulations 2008 specifies as follows: “Requirement of hose tap in men’s public toilets. A hose tap must be provided in men’s public toilets adjacent to the urinals”.

INSTALLATION REQUIREMENTS FOR URINALS
The requirements for slab type and wall hung urinals are outlined in AS/NZS 3500.2 and must comply with the manufacturer’s installation instructions. The specifications for the impervious floor which is drained either to the urinal or a floor waste is outlined in the NCC.
UNTRAPPED FLOOR DRAINS

In the event of overflow untrapped floor drains may be used instead of floor waste gullies for the purpose of draining waste water spillage from a floor. The drains must be installed in accordance with AS/NZS 3500.2. Untrapped floor drains must not be connected to any stack or discharge pipe that connects directly to the sanitary plumbing & drainage system and must not be installed in any room that contains a urinal.

FIGURE 1 - CONNECTION OF TUNDISH

Alternative method: A lockshield shrouded hose tap discharged to the wet area floor.

Charge pipe from (i) tap set (ii) hot water relief valve

Floor waste gully riser

Untrapped waste DN 25 max. length 8.5 m

Air gap 25 min.

Tundish
FIGURE 2 - CONNECTION OF CHARGE PIPE

- Flush pipe to fixture (i.e. urinal or pan)
- Nipple tapped into flush pipe for connection of charge pipe
  DN 6
- Removable grate
- Floor level
- Entry at 45°
- Charge pipe
- Nipple tapped into riser for connection of charge pipe
- Floor waste gully riser

FIGURE 3 - TRAP PRIMER ARRANGEMENT

- Stop tap and filter
- Mechanical trap priming device
- Charge pipe
- Floor level
- Floor waste gully riser
- 300 min.