

POSITION PAPER

Grates on floor waste gullies

This Position Paper summarises the IPIQ's response to current issue in Queensland for the information of Local Government Authorities and the plumbing industry. This paper has been produced to encourage consistency across the state of Queensland in plumbing related issues.

Definition

Grate- A sanitary or stormwater fitting consisting of a frame holding a grating

Floor grate – a grate fitted to a sanitary or stormwater fitting positioned within a graded floor

Riser (sanitary) - A vertical extension of the inlet leg of a trap, to floor or ground level. **A straight length of pipe fitted to a trap to extend it.** It may allow connections of pipes. Risers may be plain double inlet or single inlet. A plain riser usually extends to floor level and is fitted with a grate, so as to serve as a floor waste outlet.

Waste pipe- a pipe that conveys the discharge from a waste fixture.

The Context

Identifying the complying method of connection of pipework to grates and channels.

The Facts

AS 3500.2 Clause 4.6.7.6 deals with floor waste gullies and states floor waste gullies shall be installed with an accessible removable grate and have a riser of not less than DN 80 to finished surface level

AS 3500.2 Clause 13.17.1 an individual shower shall be fitted with a minimum DN 80 grate or Channel Grate and shall be **connected** by

- (a) An untrapped waste pipe not smaller than DN 40 to floor waste gully.
- (b) A trap and wastepipe not smaller than DN 40.

AS3500.2 Clause 11.3.6 Fixture grates

Excluding water closet pans, slop hoppers, bedpan washers, bedpan sterilizers, tundishes, soil dump points and sanitary napkin disposal units, the outlet of each fixture shall be provided with a grate.

Where the trap is not accessible, the grate shall be removable.

AS 3740 Clause 3.14 deals with how water proof membrane should be connected to drainage

3.14.1 Termination to a drainage flange

For membrane drainage connections in other floors, any one of the following shall apply:

- (a) A drainage flange shall be installed with the water proofing membrane terminated at/in the drainage flange to provide a water proof connection
 - 1. Notes for typical membrane termination see figure 3.8 (this figure was used to design the first diagram.)
 - 2. Drainage flanges may be set into a floor or fixed to the top surface of the floor substrate or tile bed.
- (b) Where a prefabricated shower tray is used, provision shall be made to drain the tile bed and provide a waterproof connection.

The issues

Connections to grates and pipes are required by code requirements and the practices are not being adhered to this result in grates on being located over the pipework or attached and the porous cement bed holds water and mould and may produce ordure.

There are sometimes access issues to allow clearing of blockages in pipework and traps.

The connection and installation of the grates is a plumbers responsibility by the act.

IPIQ's position

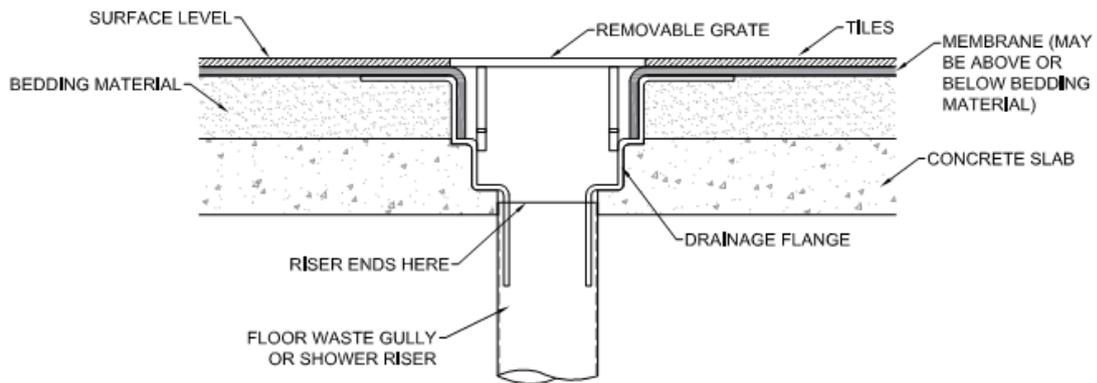
The connection must be made directly to the pipework and connected to grates or complying puddle flanges

Water proofing may be attached to the riser pipe of flanges on the puddle flanges that have water mark approval.

See attached drawings as examples

Prepared by

Date

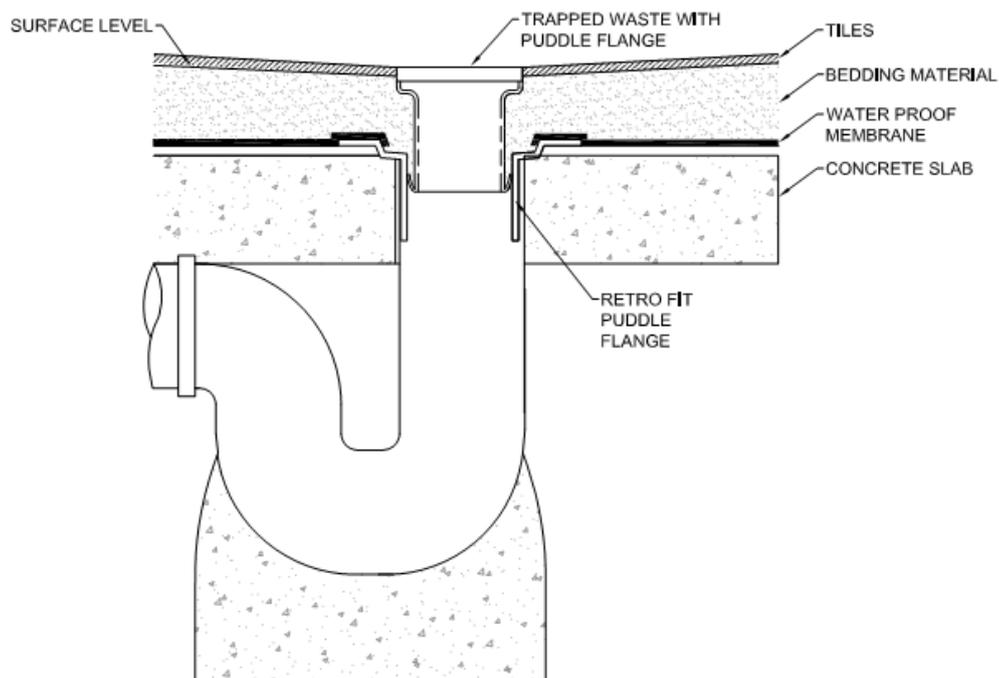


WATER PROOFING MEMBRANE TO AS3740

AS3740 CLAUSE 3.14.1

MEMBRANE TO DRAINAGE CONNECTION - TERMINATION TO A DRAINAGE FLANGE FOR MEMBRANE DRAINAGE CONNECTIONS IN OTHER FLOORS, ANY ONE OF THE FOLLOWING SHALL APPLY:

- (a) A DRAINAGE FLANGE SHALL BE INSTALLED WITH THE WATERPROOFING MEMBRANE TERMINATED AT/IN THE DRAINAGE FLANGE TO PROVIDE A WATERPROOF CONNECTION.



WATER PROOFING MEMBRANE TO AS3740

AS3500.2 CLAUSE 4.6.7.6

FLOOR WASTE GULLIES SHALL BE INSTALLED WITH AN ACCESSIBLE REMOVABLE GRATE AND HAVE A RISER OF NOT LESS THAN DN80 TO FINISHED SURFACE LEVEL

AS3500.2 CLAUSE 11.17.1

AN INDIVIDUAL SHOWER SHALL BE FITTED WITH A MINIMUM DN80 GRATE AND SHALL BE CONNECTED BY:

- (a) AN UNTRAPPED WASTE PIPE
- (b) A TRAPPED WASTE PIPE