

Floor waste gully outlet sizing

Plumbing Advisory Note

Revised March 2026

Floor Waste Gully (FWG) outlets must be sized correctly to the fixture unit load.

The installation of FWGs must be in compliance with AS/NZS 3500.2:2021.

Table 4.6.7.9 sets out the minimum size of a FWG outlet relevant to the fixture units discharging into the gully trap.

Table 4.6.7.9 - Floor waste gully outlet size

Maximum number of fixture units discharging into gully trap	Minimum nominal size of outlet
3	50 mm
10 (including discharge from not more than one bath)	65 mm
15	80 mm

FWGs with 100 mm outlets

Floor waste gullies with 100 mm outlets are not specified in Table 4.6.7.9. They must only be used in trade-waste and commercial applications that warrant larger FWG outlets due to high volume discharges and increased access requirements.

Trade waste and commercial/industrial installations

Floor waste gullies with 100 mm outlets should only be installed where required in the following installation types:

1. Trade waste

FWG discharging to a grease arrestor may be installed with a 100 mm (PVC) or 110 mm (HDPE) outlet size, to allow greater access for mechanical/hydro jet cleaning of the pipework as

Legislative requirements

The *National Construction Code Series Volume Three - The Plumbing Code of Australia (PCA)*, Part C specifies the requirements for design, construction, installations, replacement, repair, alteration and maintenance of any part of a sanitary plumbing system.

This advisory note was published per the requirement of the PCA 2022 and the referenced standards.

the build up of grease in this type of system is problematic.

2. Commercial/industrial

- where a FWG is accepting the discharges from a Plant room, and the total fixture unit load requires a 100 mm outlet size.
- correctional facilities (request an OTR determination).
- where required for high volume discharges.

Hospitals and nursing homes may specify 100 mm risers to FWGs.

When 100 mm FWG risers are specified for a particular installation, to comply with AS/NZS 3500.2:202, the following applies:

- 100 x 65 mm FWGs should be installed if discharging direct to the sanitary drain
- 100 x 50 mm FWGs may be used in a shower if discharging to a FWG with a minimum 65 mm outlet in the same room

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Note: AS/NZS 3500.2.2021 Appendix B does not allow a FWG with a 50 mm outlet to discharge directly to a sanitary drain where inground drainage principals apply.

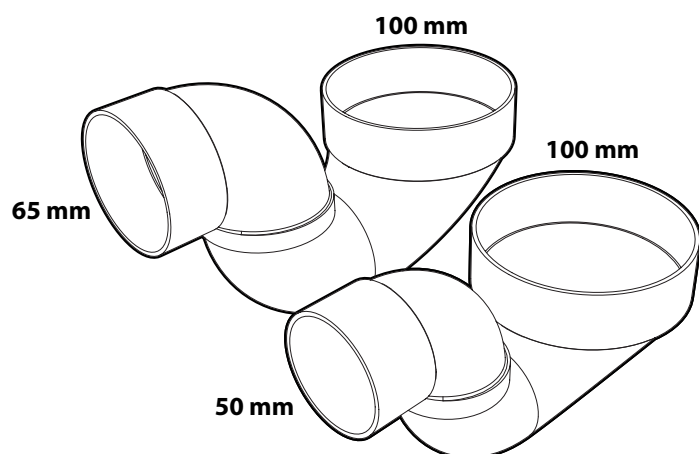


Figure 1 - 100 x 65 mm and 100 x 50 mm FWG/shower outlets

FWGs risers

FWG risers must be installed with an accessible removable grate and have a riser of not less than 80 mm diameter to the finished surface level (100 mm diameter risers are permitted). Risers must not be offset.

The height of the riser from the top of the water seal shall be a maximum of 600 mm in length.

The minimum height of the floor waste gully riser shall conform with AS/NZS 3500.2.2021 Table 4.6.7.7.

For floor waste gullies with submerged inlets, the minimum height shall be 100 mm.

Table 4.6.7.7 - Minimum height of floor waste gully risers

Waste fixtures connected to gully riser	Size of gully riser	Minimum height (water seal to floor level)	
		88 °entry	45 °entry
All waste fixtures including maximum one bath	DN 80	200 mm	150 mm
	DN 100	150 mm	100 mm

Charging floor waste gullies

AS/NZS 3500.2.2021 clause 4.6.8 lists the following requirements:

When a floor waste gully (FWG) is located in a position where it cannot receive a waste water discharge (e.g. no fixture connected), its water seal must be maintained by one of the

following methods:

1. *Charge pipe from a flushing device:*
 - *connected at the heel or base of the flush pipe with union.*
 - *enters the FWG at a 45° angle, at least 50 mm above the water seal.*
 - *must be silver brazed or joined by union to the riser.*
2. *Charge pipe from tap set or water heater relief valve:*
 - *must drain over a tundish to maintain air gap.*
3. *Charge pipe from a mechanical or electronic trap priming device:*
 - *must be installed in the same room or compartment as the FWG.*
4. *Hose tap in the same room:*
 - *If the floor is graded to FWG, water from the hose tap can maintain the seal.*

4.6.8.2 Installation of charge pipes

- charge pipes must be between DN 6 to DN 15 in size.
- maximum length for charge pipes from the flushing device, tap sets or water heater relief valves is 10 m.
- the connection must not restrict the bore of the FWG riser or impede maintenance access.

These provisions ensure that the water seal in the FWG is preserved, preventing foul air from entering the building through dry traps.

Contact the Office of the Technical Regulator for more information

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