

DISPOSAL DESIGN AUSTRALIAN NEW ZEALAND STANDARDS 1547

Conventional On-Site Sewage Management (OSSM) systems only provide primary treatment of wastewater. Because of this, surface disposal is not permitted. Wastewater must be applied below ground using approved **land application methods such as trenches or absorption beds.**

What Affects the Design?

The size and layout of your land application area depend on site conditions, including:

- **Soil type** (e.g. sandy, clay)
- **Slope of the land**
- **Climate factors** (evaporation and plant transpiration)
- **Household use** (number of bedrooms, number of occupants, water use habits)
- **Design loading rate (DLR)** – the amount of wastewater your soil can safely absorb each day

What is the Design Loading Rate (DLR)?

- The DLR is set based on the **soil's limiting factors** (e.g. drainage, texture, structure).
- It also considers the **amount of wastewater** the property generates.
- To work out the correct DLR, a **soil assessment** must be completed by a qualified person.

ON-SITE SEWAGE MANAGEMENT SYSTEM

Basic Sizing Formula

To calculate the length of trenches or beds required:

$$L = Q \div (DLR \times W)$$

Where:

- **L** = Total trench/bed length (metres)
- **Q** = Design daily flow rate (litres/day)
- **DLR** = Design loading rate (mm/day)
- **W** = Total width (metres)

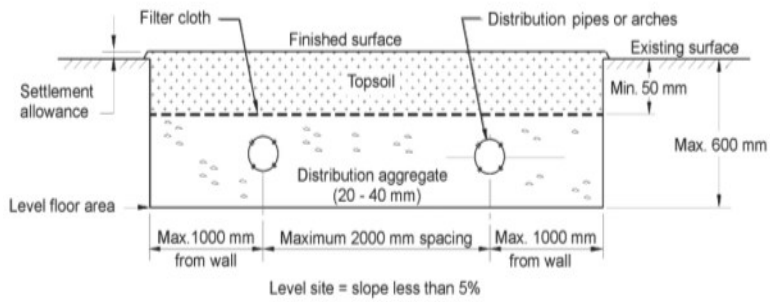
Example diagrams from **AS 1547:2012** are included in this fact sheet to guide your design and to assist you submit relevant information for applications.

Standards and Requirements

- All OSSM designs and installations must comply with **Australian Standard AS 1547:2012.**
- Always refer to AS 1547:2012 for detailed guidance and alternative system designs.
- Following these requirements helps ensure your system protects public health and the environment.



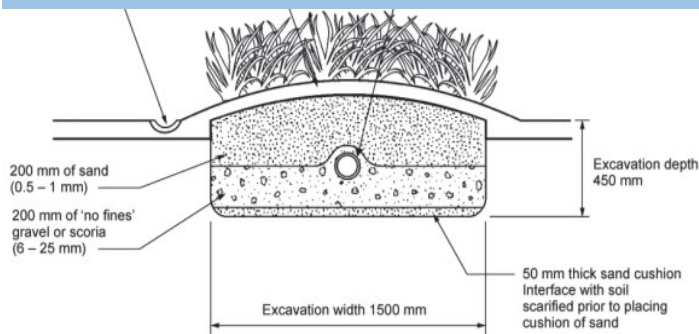
CONVENTIONAL BED



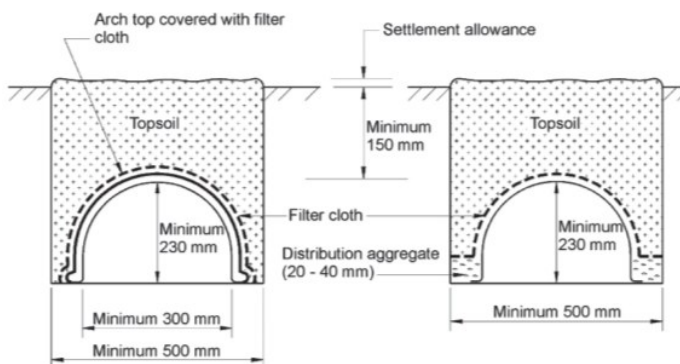
ON-SITE SEWAGE MANAGEMENT SYSTEM

Disposal Design AS1547

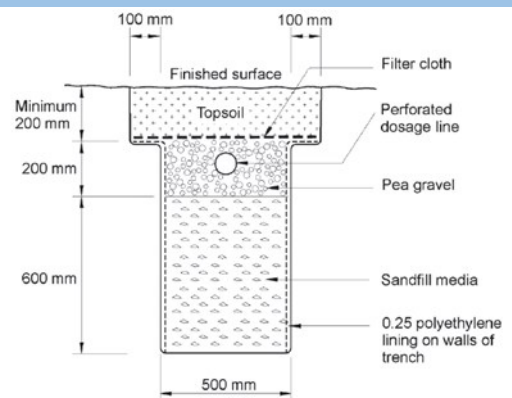
EVAPORATION ABSORPTION BED



SELF-SUPPORTING ARCH TRENCH



DISCHARGE CONTROL TRENCH



CONVENTIONAL PIPED TRENCH

