

AS/NZS 1547:2012 provides basic information for the design and construction of many on-site waste-water disposal systems. This manual also includes information offered by EVERHARD, which has found to be of value. EVERTRENCH injection moulded polypropylene Arched Liners is used for "Conventional" evapotranspirationseepage (ETS) and evapotranspiration-adsorption (ETA) layouts described in the standard.

All waste-water poses a health hazard. All layouts for Wastewater disposal land application areas must be designed by competent and authorised persons, taking the following factors into account:

- / The Volume of wastewater, based on household size and appliances.
- / The rate of absorption of the surrounding soil.
- / Limits imposed by site conditions, such as slope, contours, prevailing wind and permanent shade etc.

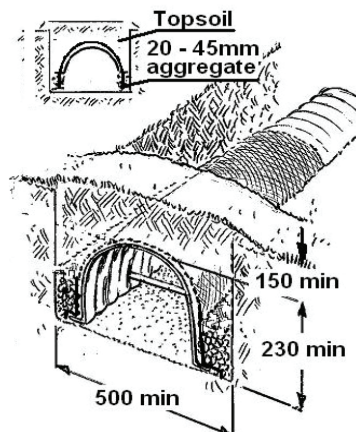
Before beginning design and construction of wastewater disposal system, check State and local authorities for requirements for your area. Conventional trenches and beds may not be permitted. Plants should be selected from approved lists for disposal areas, to minimise root intrusion problems.

METHOD 1: TRENCHES

These are generally used in sites where soil is permeable enough to allow projected amounts of wastewater to drain freely into the trench floor. Trench should be wide enough for the EVERTRENCH Liner and deep enough for the selected Liner to be not less than 150mm below the surface.

1. Excavate the trench along a level site contour, with the floor not less than 50mm deeper than the invert of the pipe from the Septic Tank or sullage distributor, with at least 150mm cover over the top of the Liner.
2. The trench floor should be level, evenly raked, and have no low spots which would allow "ponding".
3. Allow at least 75mm overlap for each length of EVERTRENCH Liner.
4. Fit Three Brace Bars into each Standard EVERTRENCH Liner, the first 220mm from the inlet end, then equally spaced along the excavation.
5. Cut the pipe entry hole in one Trench Liner End Cap, and fit the Caps to the Liner. Connect piping from the Septic Tank or Sullage Distributor.
6. Lay geotextile fabric over the full length of Trench Liner.
7. Place a 150mm layer of 20 - 45mm aggregate material along both sides of the Trench Liner, and at both ends to secure the End Caps. Rake level.
8. Cover the installation with a layer of topsoil, less permeable than the parent soil to help prevent stormwater entering the trench. Leave a slight mound for natural compaction. Turf may be laid over the trench area.

DO NOT COMPACT the trench area or expose it to traffic.



METHOD 2: BEDS

These are generally used where soil conditions do not allow the planned volume of wastewater to drain freely from normal trench systems. Evapotranspiration beds encourage treated wastewater to be taken up by plant roots over a wide area, as well as draining into the soil, offering additional safety for seepage systems. Beds consist of standard width trenches, deeper than normal, with the area above the selected Trench Liner of much greater width, and filled with material allowing easier penetration of roots and transfer of moisture. Bed designs may vary widely, depending on soil conditions.

1. Excavate a bed area between 1000mm and 4000mm wide, at least 300mm deep along a level site contour.
2. Excavate a central trench along the full length of the prepared bed, to take a selected Liner. The top of the Liner should be level with the bottom of the prepared bed, and the trench floor not less than 50mm below the pipe from the Septic Tank or sullage distributor. The floor should be level, evenly raked, with no low spots.
3. Allow at least 75mm overlap for each length of EVERTRENCH Liner.
4. Fit Three Brace Bars into each Standard EVERTRENCH Liner, the first 220mm from the inlet end, and then equally spaced along the excavation.
5. Cut the pipe entry hole in one Trench Liner End Cap, and fit the Caps to the Liner. Connect piping from the Septic Tank or Sullage Distributor.
6. Lay geotextile fabric over the full length of the Liner.
7. Place a 150mm layer of 20 - 45mm aggregate material along both sides of the Trench Liner, and at both ends to secure the End Caps, and rake level.
8. Cover the Liner and the floor of the excavated bed with 100mm of coarse sand, then with sandy loam.
9. Lay a final 150mm layer of topsoil less permeable than the parent soil, to help prevent stormwater entering the bed.
10. Leave a mound for natural compaction. Turf may be laid over the area.

DO NOT COMPACT the bed area or expose it to traffic

EVERHARD INDUSTRIES Pty Ltd recommends a non-woven, needle-punched Geotextile designed for waste-water disposal land applications.

