

## SEPTIC TANK TOILET. COST AU\$650.

Clean water and good sanitation are the cornerstones of a healthy community.

*The septic tanks that we install are classic 'bio-digesters' that rely on bacteria to break down human sewage wastes. The septic tanks will run smoothly for many years when they are installed correctly and not overloaded. When the family has more than 6 people we use a second digestion tank. The toilet is designed to be also used as a wash room with a focus on hygiene and minimal maintenance.*

Initially we discussed the family's situation and then 'site' where the toilet should be installed. The site to be at least 15 metres from any water bore or well.

The tanks are dug in manually. The pipes are positioned, and the concrete foundations for the structure are put in place. Seven rows of bricks are laid on the foundations to provide a 'wet area' base so that it can also be used as a wash room. The concrete floor is poured and the brickwork rendered. The design includes a grab rail in front of the squat toilet as a major aid for the elderly and for land mine survivors who have lost a leg.

The walls and roof are made of colorbond style steel sheets. The toilet door is a pre-made steel framed structure to ensure longevity. Laminated posters on the toilet wall reinforce 'hand washing and personal hygiene' as well as the 'Dangers of Burning Plastics'.

### Toilet Installation



The digestive tank allows anaerobic bacteria to convert the sewage into gas and water leaving a small percentage of solids that settle as sediment. The gas escapes through the vent pipe and the water flows into the soak-away tank where aerobic bacteria clean the water of any pathogens.

Before the handover of a toilet to a family, we emphasise the importance of hygiene, demonstrating hand washing in particular.

**Maintenance:** *The Septic Tank Toilet system is basically maintenance free providing it is not overloaded. This is countered by adding a third stage for larger families. The handover process not only teaches 'hand washing technique' but also how to care for the system.*

**Sustainability:** *As there is no grey water involved, the system in the village should last for at least 15 years before there is any need to consider 'pumping out the sediment'.*