

MOBILE NOTE 59

Raised and elevated latrines

Introduction

If ground has rock or groundwater close to the surface, it may not be possible to dig a hole deep enough even for a twin-pit latrine. In such cases pits can be raised above the ground. This short note illustrates ways of doing this.







Issues to consider

If it is possible to dig 1.5m below the ground then the lining above ground can be sealed so that all percolation takes place below ground-level.

If most of the pit has to be constructed above ground-level then it is better to surround the pit lining with soil.

Part of the lining can then be left porous so that liquids can percolate into the mound and then into the top soil.

There is no maximum height for a raised latrine but users may become uncomfortable if the top of the superstructure is more than about 1.5m above the roofs of surrounding buildings.

Access by steps also means that they will be unsuitable for many disabled users, so consider a ramp with a handrail and a turning space for wheelchair access at the latrine level.

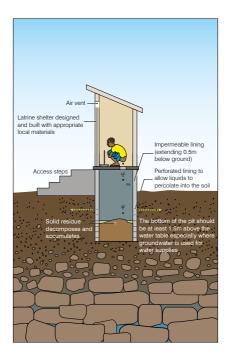


Figure 1. A raised latrine with the pit partially below ground level

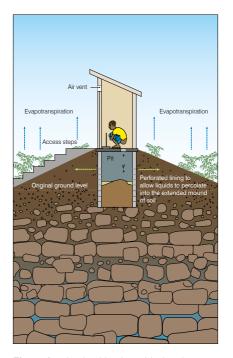


Figure 2. A raised latrine with the pit mainly above ground

Elevated latrines

Where families live in houses built on stilts, it is often necessary to construct the latrine superstructure at the same level as the floor of the living area.

This is especially true if the area below the house floods

It is still possible to build a pit latrine provided there is a period during the year when the ground below the house is dry and the water table is low enough to allow the excavation of a hole.

There are two options:

 The pit can be connected to the superstructure by a solid, watertight cylinder which will carry the weight of the superstructure and act as storage space for waste material (see Figure 3).



Figure 3. An elevated latrine

 If water is used for anal cleansing and it is possible to dig a deep pit, then the latrine floor can be fitted with a water-seal pan connected to the pit with a long pipe (see below).

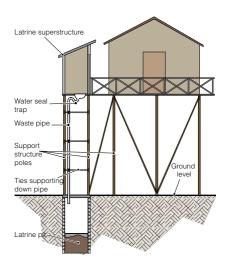


Figure 4. An elevated latrine section

About this note

Author: Bob Reed

Illustrators: Rod Shaw / Ken Chatterton

Designed and produced by WEDC

© WEDC, Loughborough University, 2017

Water, Engineering and Development Centre (WEDC) School of Civil and Building Engineering Loughborough University Leicestershire LE11 3TU UK

Phone: + 44 (0) 1509 222885 **Email:** wedc@lhoro.ac.uk

Email: wedc@lboro.ac.uk

Website: wedc.lboro.ac.uk

Twitter: wedcuk
YouTube: wedclboro



BACK TO TOP

Note: Click on the home icon wherever it appears to return to the list of subjects.