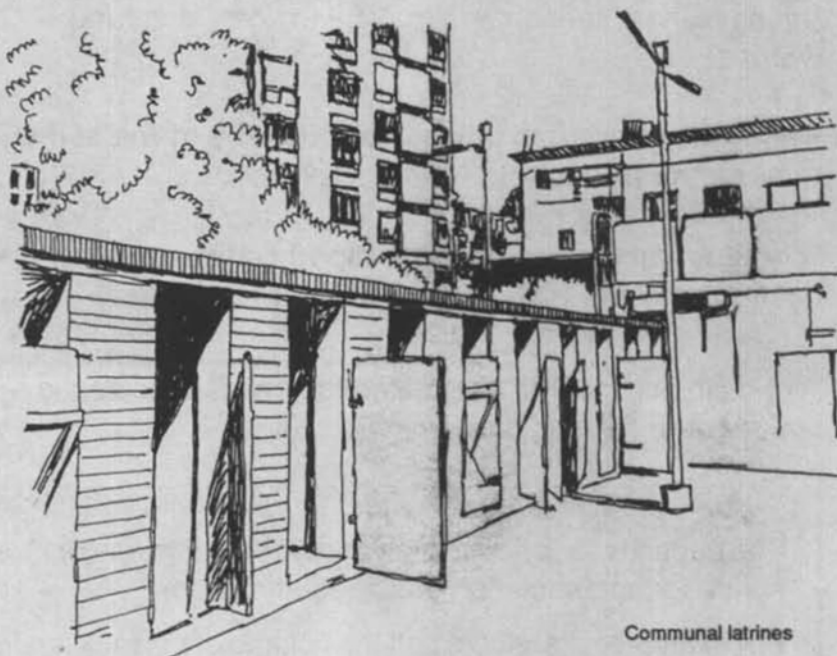


# Technical Brief N° 28/Public and communal latrines

## Public and communal latrines

Public latrines are located at markets, lorry parks, bus stations and similar places where they are used by people who are away from their homes.

Communal latrines are located in or near housing areas, and are used by the community - people living in nearby houses who have no household latrines.



Communal latrines

- **Design and construction of public and communal latrines is straightforward**
- **Operation and maintenance are usually difficult**

Therefore . . .

before starting to build a public or communal latrine there must be clear plans . . .

- for cleaning and operation
- for the wages of any paid staff
- for paying any water and electricity charges
- for maintenance and repairs
- for proper management and control

# Technical Brief N° 28/Public and communal latrines

## Design and construction

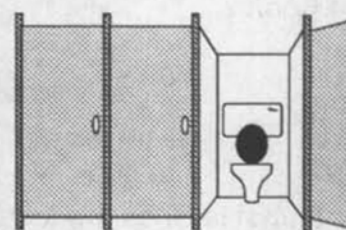
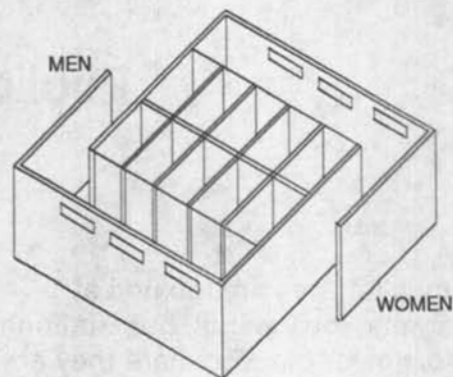
**Separate facilities for men and women should always be provided.**

Exceptionally, a single special toilet for disabled people (those using wheel-chairs) may be used by men and women.

**Public or communal latrines are usually of the same type as the household toilets nearby.**

**Where an ample and reliable piped water supply is available, WATER CLOSETS are appropriate.**

Water closets may be connected to sewers or to septic tanks where there is no sewerage.

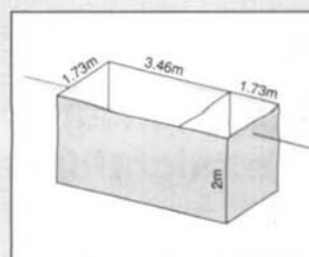


The capacity for a septic tank should be sufficient for at least one day's retention of liquid, plus space for accumulation of sludge and scum.

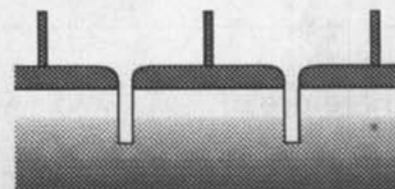
For example, assuming: half the volume of the tank is allowed for sludge and scum; the latrine is expected to be used 1000 times each day; each WC flush uses 10 litres of water.

The tank volume required is  $2 \times 1000 \times 10$  litres = 20 cubic metres.  
For a depth of two metres, the area required is 10 square metres

For a two-compartment tank, the dimensions could be:

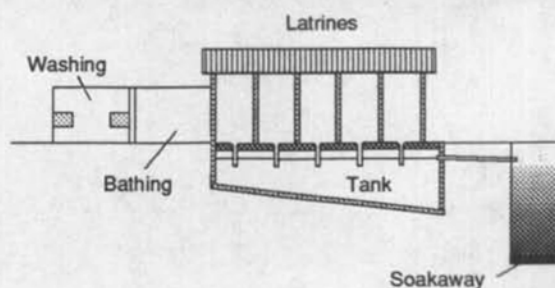


An **aqua privy latrine** (sometimes called a 'septic tank latrine') has the latrine above the tank. A vertical pipe is set below each toilet and extends below the water surface.



This type of latrine is suitable where water supply is limited or where solid material is used for anal cleansing.

Where water has to be carried to the latrine (for example, from a public standpost) facilities for bathing and/or washing clothes may be provided to keep a flow of water passing through the tank.



## Pit latrines

Either:

**A VENTILATED IMPROVED PIT LATRINE (VIP)** with darkened interior for the toilet cubicles, and adequate vent pipe (see note below) with fly proof netting.

Or:

**A POUR- FLUSH LATRINE** with a trap below each toilet bowl providing a 20mm deep water seal.

Or:

**ALTERNATING TWIN-PIT LATRINES** for example, the K-VIP shown here.

The number of pits or pit compartments should be one more than the number of toilet cubicles.

For the first two years or so:

- Toilet A goes to compartment 1
- Toilets B and C go to compartment 3
- Toilet D goes to compartment 5.

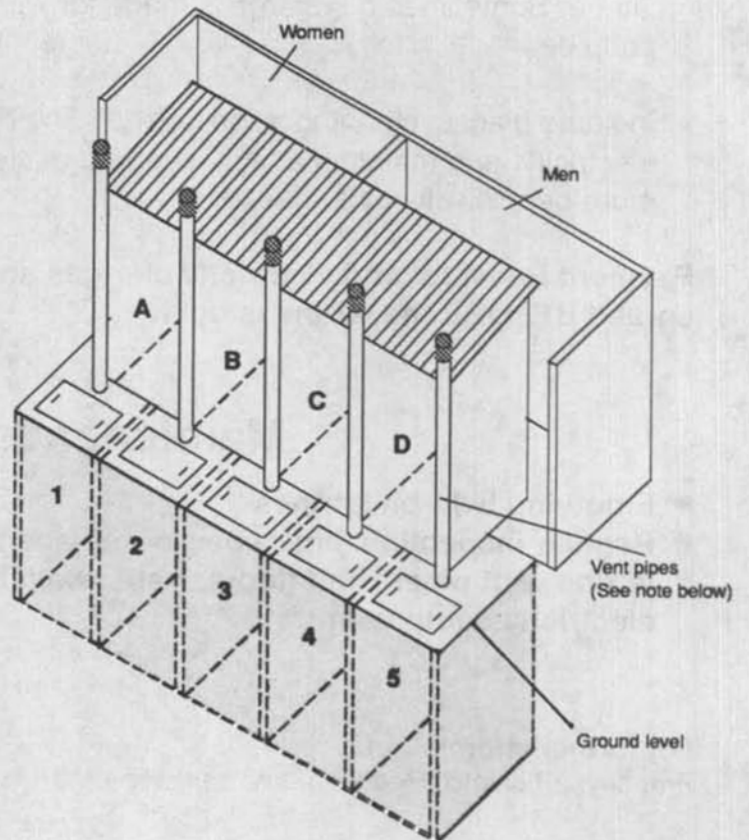
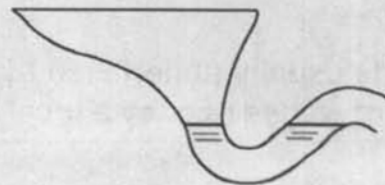
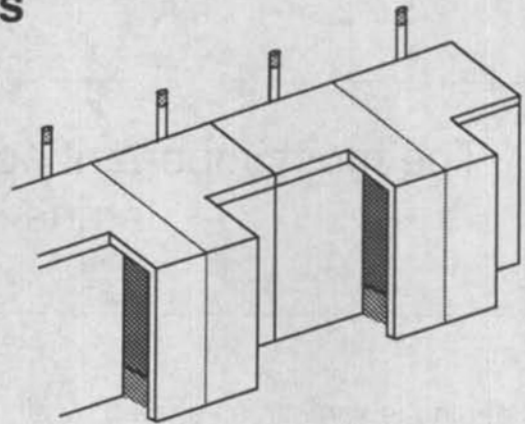
For the next two years or so:

- Toilets A and B go to compartment 2
- Toilets C and D go to compartment 4.

Then compartments 1,3 and 5 are emptied and used again.

### Note:

Vent pipes should be at least: 150mm diameter if a smooth pipe (e.g. PVC)  
225mm diameter if a rough pipe (e.g. mud)  
225mm square if made of blocks or bricks



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## Cleaning

The most important operation for a public or communal latrine is keeping it clean

Cleaning is sometimes shared by all the people who use the latrine, working to some kind of rota. **Such arrangements are rarely satisfactory.**

**Cleaning is usually undertaken by people paid to do it.**

**Payment of wages (e.g. by a local council) must be agreed BEFORE the latrine is built.**

A system which works well in some places is for users to make a small payment to use the latrine. Sometimes no charge is made for women and/or children, and/or unemployed people.

In some places, cleaning is 'privatized'. The cleaners keep the fee, pay for the water and electricity, and maintain a high standard of cleanliness because the cleaner the latrine, the more people will pay to use it.

**Payment for water and electricity charges and for maintenance and repairs must be agreed BEFORE the latrine is built.**

## Maintenance and repairs

- Emptying twin-pit latrines
- Regular inspection, and repair or replacement if necessary, of fly proof netting of VIP latrine vent pipes; and floors, traps, walls, doors and roofs; and any water and electricity equipment.

### For further information:

Franceys, Pickford, Reed. *On-site sanitation*, WHO, 1989.

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Twenty-eighth in a series of Technical Briefs for field-workers. Technical Briefs 1-32 are collected in *The Worth of Water*, a new book with an introduction by John Pickford. Available from IT Publications, 103-105 Southampton Row, London WC1B 4HH, UK, for £10.75 including post and packing.