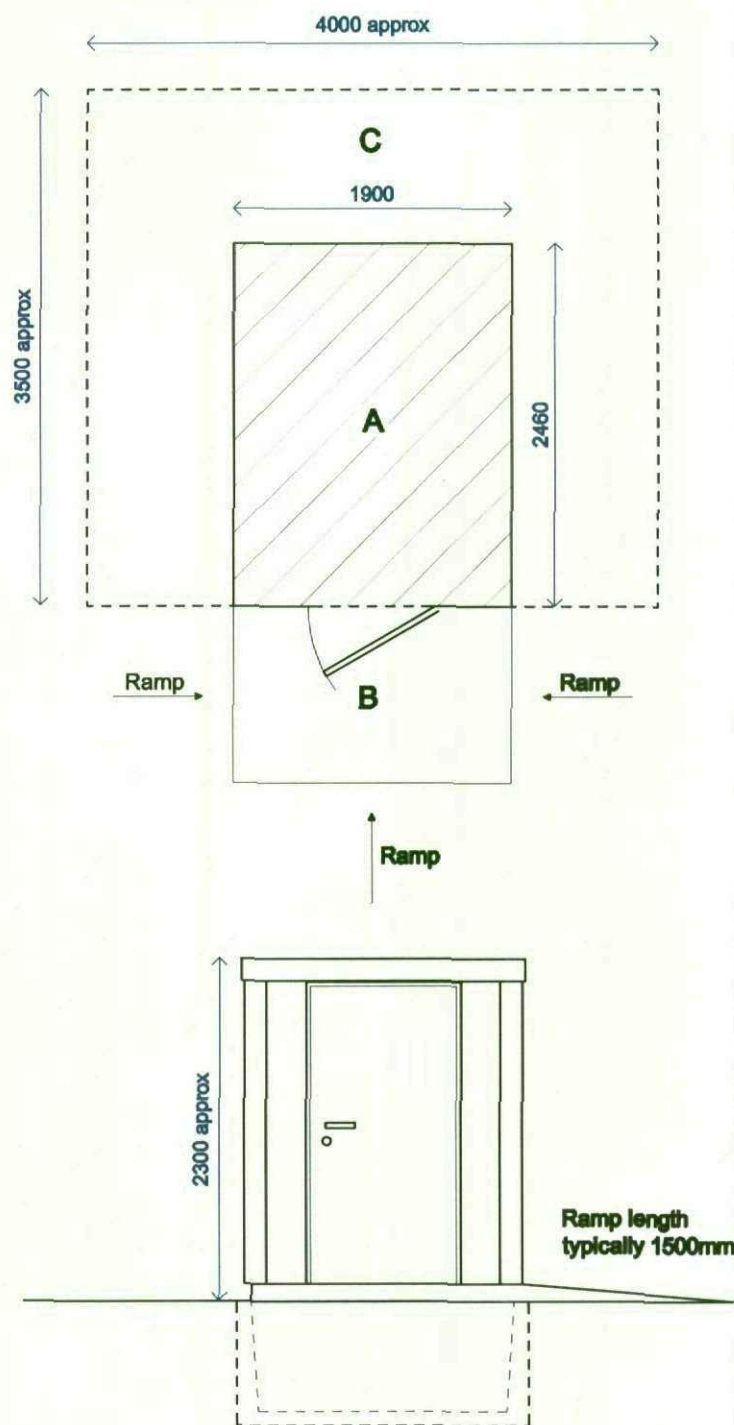




KEY

Hatched area 'A' is building footprint and excavation area. Excavations approx 2m x 2.5m x 850mm deep. **DO NOT PREPARE IN ADVANCE.**

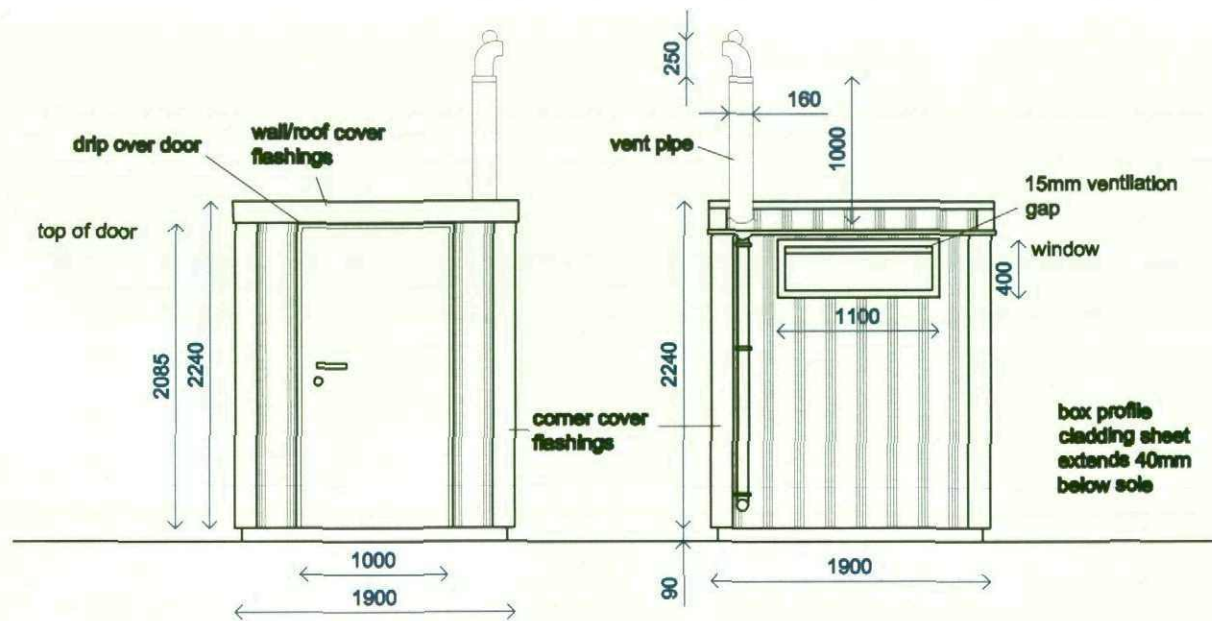
'B' is level area in front of door about 120mm above surrounding ground level and a minimum 1200mm width.

'C' is clear space of approximately 1m wide all round for erection and maintenance.

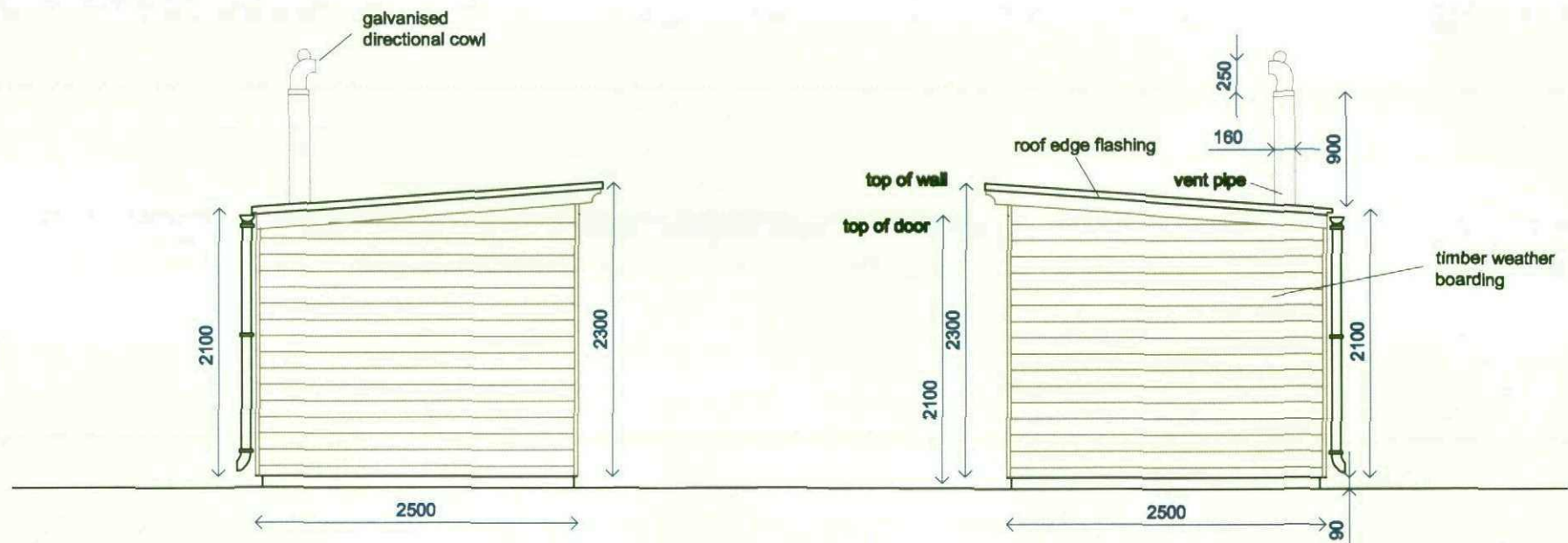
NOTES

1. Door opens out.
2. Ramp from any direction at maximum slope of 1:12

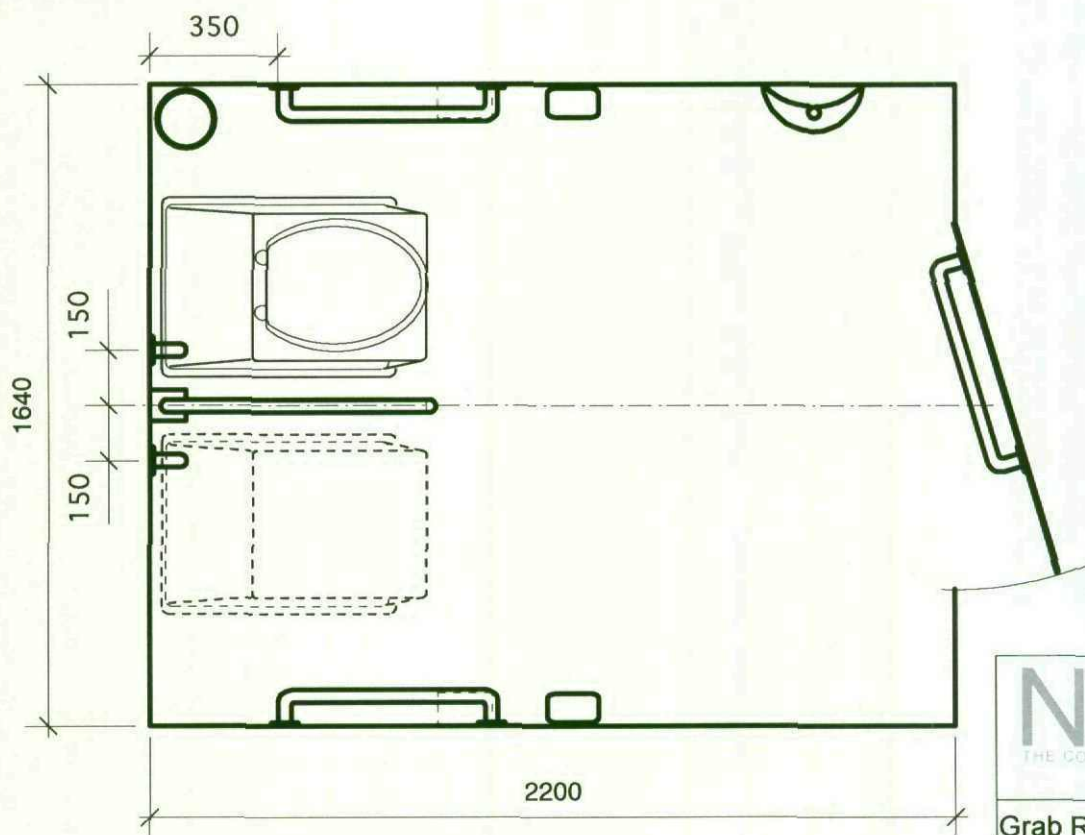
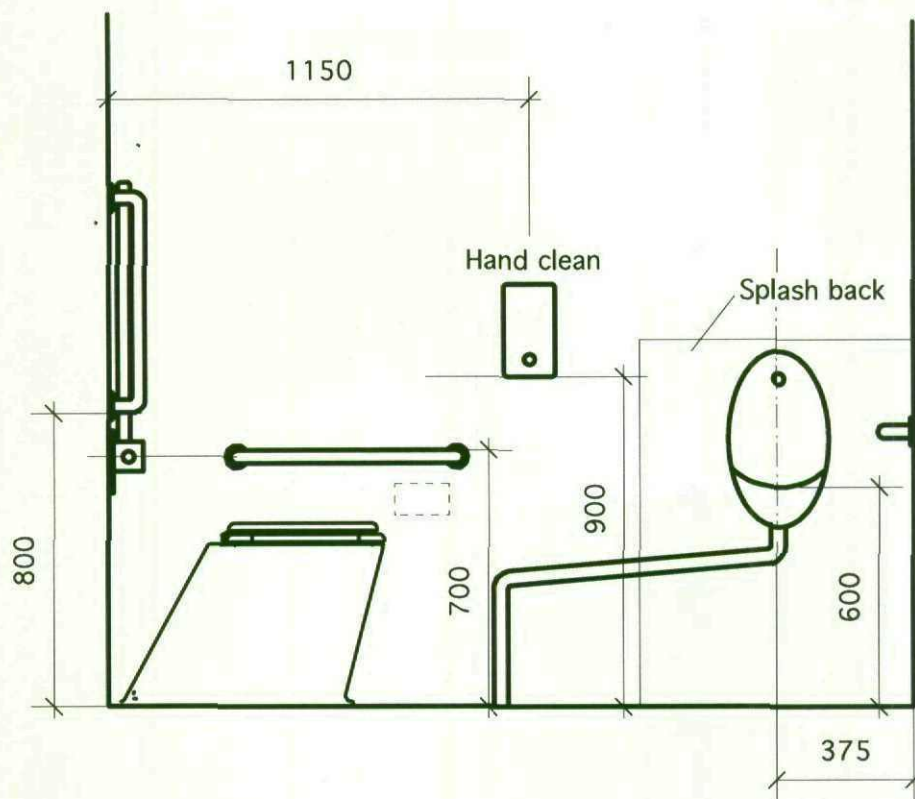
NatSol THE COMPOST TOILET SPECIALISTS	Full Access Compus Twin	
	Site Dimensions	
	Date 8.8.08	Scale 1:50
	Drg. No. <i>NS 01</i>	Dm. B.Wade
Natsol Ltd Tel: 01686 412853 www.natsol.co.uk		



NatSol THE COMPOST TOILET SPECIALISTS	Combus Twin - Full Access	
	Metal front and rear	
	Date 10.02.09	Scale 1:50
	Drg. No. NS 02	
Natsol Ltd Tel: 01686 412653 www.natsol.co.uk		Drn. B.Wade



NatSol THE COMPOST TOILET SPECIALISTS Natsol Ltd Tel: 01686 412653 www.natsol.co.uk	Compus Twin - Full Access	
	side elevation	
	Date 09.4.08	Scale 1:50
	Drg. No. <i>NS 03</i>	
	Dm. B.Wade	



NatSol
THE COMPOST TOILET SPECIALISTS

Grab Rail Wooden Building

Drg. No. NS **04**

Date: 17/5/07 Scale: NTS

Drawn: NJG

NatSol Ltd
Tel: 01686 412653
www.natsol.co.uk

NatSol

COMPOST TOILET SPECIALISTS

Urine and Rainwater Soakaways

As levels of use, site conditions and local regulations will vary considerably, NatSol is unable to provide site-specific design advice on disposal of urine from the toilet or rain from the roof. These notes are provided as an illustration of typical requirements to allow the planning of an installation but do not guarantee compliance or adequate performance for a given site. Whilst the volumes discharged are generally too small to cause concern, Building Control and the Environment Agency should be consulted.

The volumes of urine or roof runoff are small but under-sized soakaways in heavy soil will fail. This could result in surface backing up and flowing into the compost chamber via the urine outlet. To reduce the risk of this happening it is recommended that the roof water is kept out of the urine soakaway and directed to a separate soakaway.

Roof water

Typically this will be collected in a water butt. However any overflow must be directed away from the building foundations and urine soakaway. If a soakaway is required then a pit 600mm square by about 600mm deep filled with broken bricks or similar to a depth of 500mm should suffice in all but the heaviest soil. See fig 2. A layer of geotextile excludes soil.

Urine

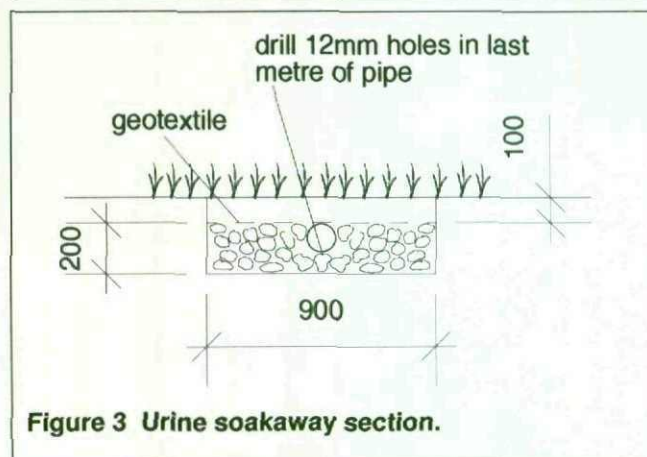
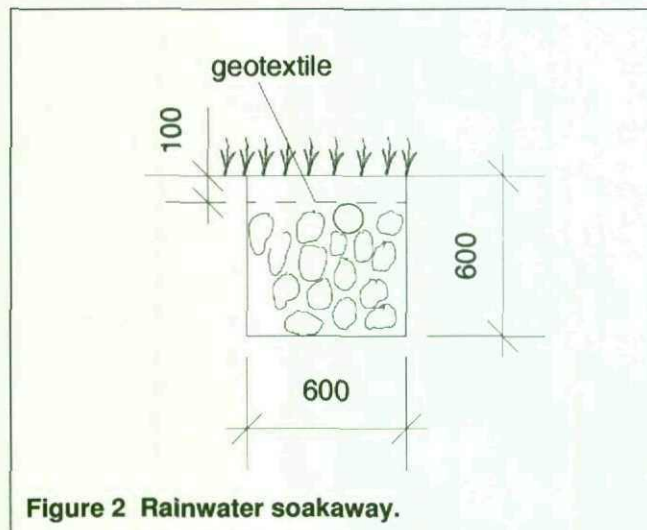
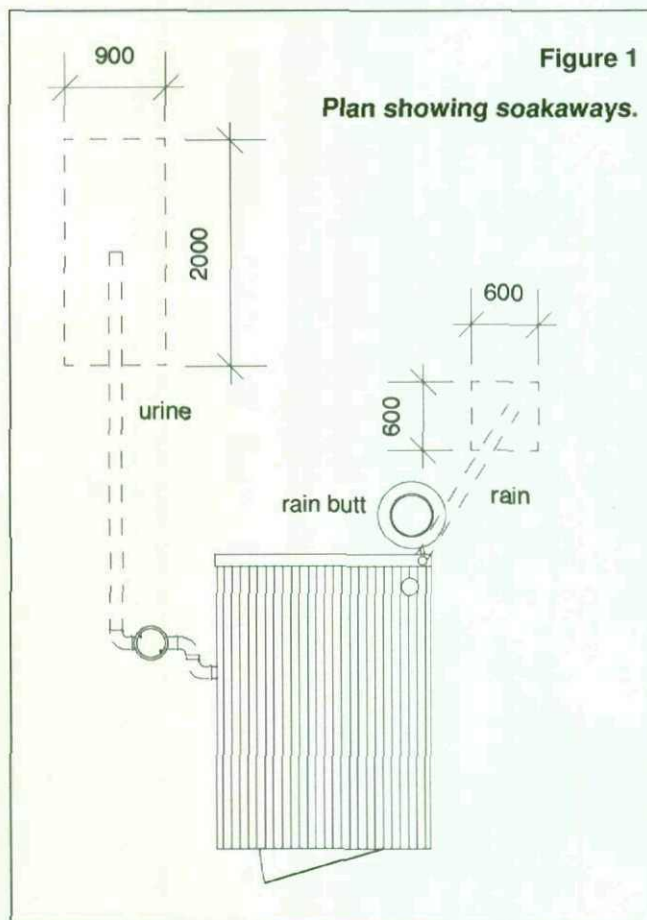
The urine soakaway should be shallow to allow dispersal and treatment in the biologically active topsoil. Fig 3 shows an arrangement suitable for all but heavy clay soils.

The 110mm soil pipe should be drilled (13mm) or slotted on the underside for the last metre or more that enters the soakaway.

The main concern in heavier soils or sites with a high water table, is that the soakaway could act as a land drain and collect water causing the compost chamber to flood. Where this is a concern contact NatSol to discuss possible solutions.

T: 01686 412653
www.natsol.co.uk

NATSOL Ltd, 20 Bethel Street, Llanidloes, Powys, SY18 6BS



NATSOL - COMPUS TWIN toilet installations

SUMMARY OF TOOLS, MATERIALS AND PERSONNEL REQUIREMENTS - ALL STAGES FROM EXCAVATION TO FITTING OUT

1. Materials you must obtain - NOT supplied by NATSOL:

- a. $\frac{1}{2}$ m³ of concrete as bedding layer for vaults [C20P to BS 5328 (1:2:4 mix)]
- b. additional $\frac{1}{2}$ m³ of concrete [as above] for haunching around base of vaults
- c. additional soil pipe and fittings if required to reach remote soakaway site
- d. silicone grease for pipe jointing
- e. exterior finish for timber clad buildings – OS COLOR products recommended

2. General building tools & equipment including the following:

- a. **safety clothing**
- b. tape measure
- c. marker spray
- d. digger to excavate
- e. **machinery to unload 800kg from delivery lorry and to lower 750kg into ground**
- f. spades, shovels
- g. concrete mixer [could be done by hand]
- h. wheelbarrow
- i. 50mm thick screed rails – 2 @ 2.5m long with pegs fixed at each end
- j. 2m long screeding bar
- k. long spirit level
- l. mastic gun
- m. hammer
- n. saw [for cutting plastic pipe]
- o. ladder
- p. powerful cordless drill or generator and drill
- q. large flat bit screwdriver
- r. socket drives for cordless OR spanners
- s. drill bits for piloting timber or metal and plastic
- t. small assortment of ZP woodscrews

3. Personnel & skills required for vault installation [approx time 6 hours]:

A machine operator, banksman and 1 or 2 others qualified in general building skills particularly wet work. The vaults will need to be lifted using machinery and a "D" shackle. The slings are supplied by **NatSol** but not the shackle.

4. Personnel & skills required to erect building [approx time 5 hours]:

General qualified building skills - 3 or 4 people for erection of frames and roof, then 2 for finishing

5. Personnel & skills required to fit out [approx time 4 hours]:

General DIY or plumbing skills, 1 person is fine, 2 is useful.

Qualified electrician needed to connect fan on toilets with fan driven [as opposed to passive] ventilation systems.

NB. The construction times mentioned above [points 3,4,5] are given in good faith but NatSol Ltd cannot be held responsible for the additional cost incurred by installation times in excess of these or for any other circumstances [e.g. delay in completion of the installation] which may arise as a result of extended installation times.

20 Bethel Street Llanidloes Powys SY18 6BS T 01686 412653 F 0870 6221384

info@natsol.co.uk www.natsol.co.uk

Company no: 5624596 VAT no: 869 9277 43