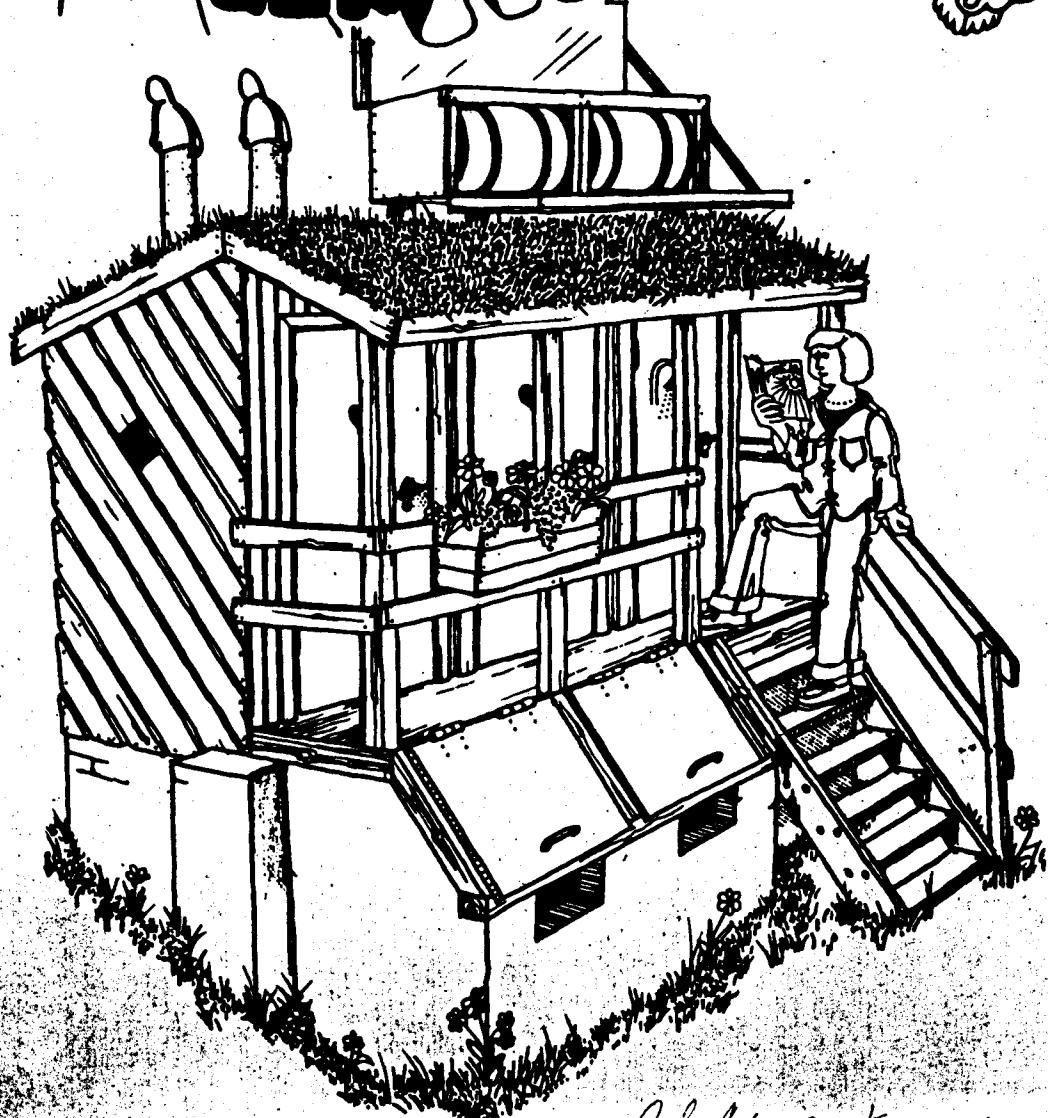
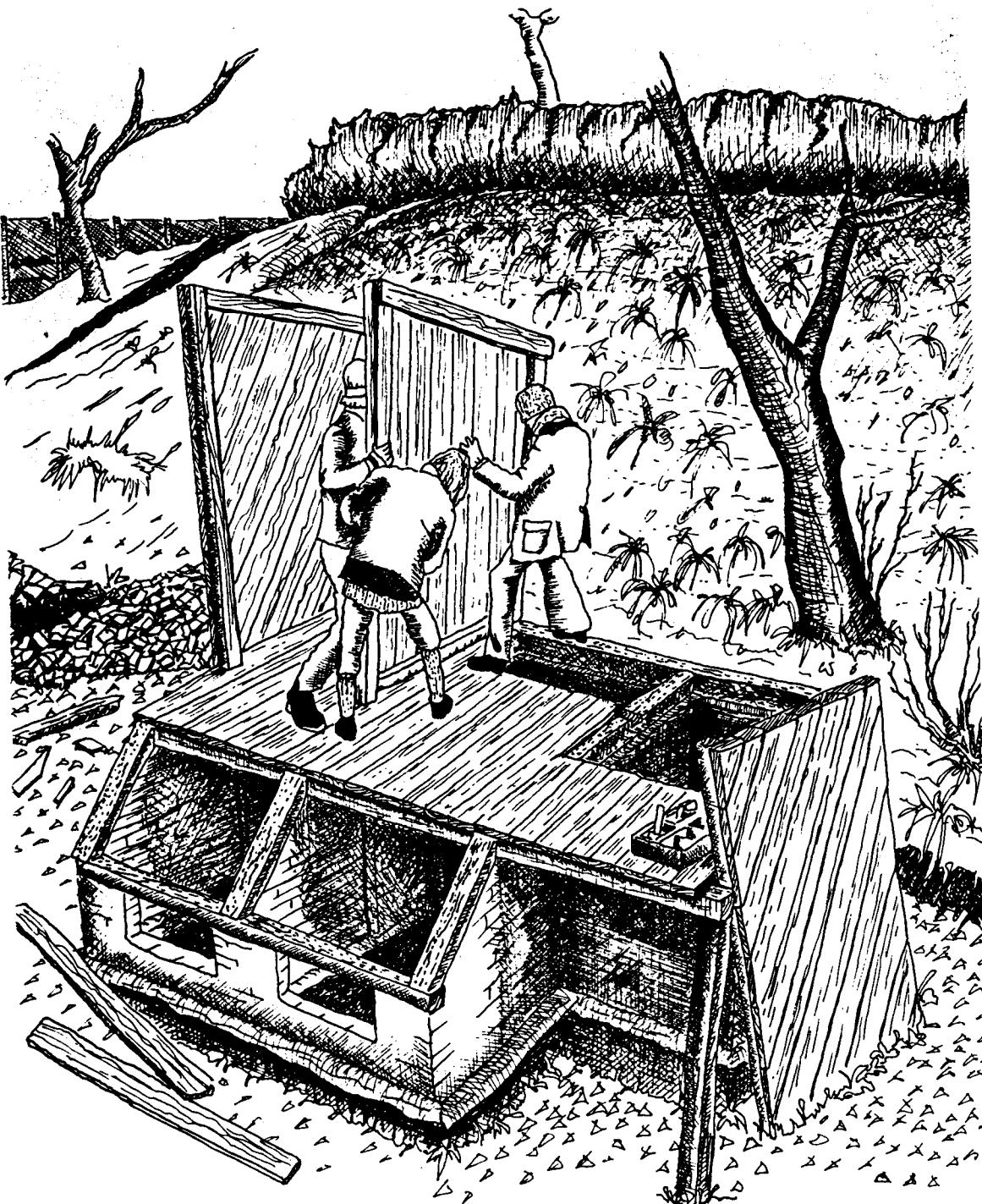


OPE-JA'S BY SALV GGER MUL



Carl Asbjørn Knudsen



ISBN 87-7344-003-5

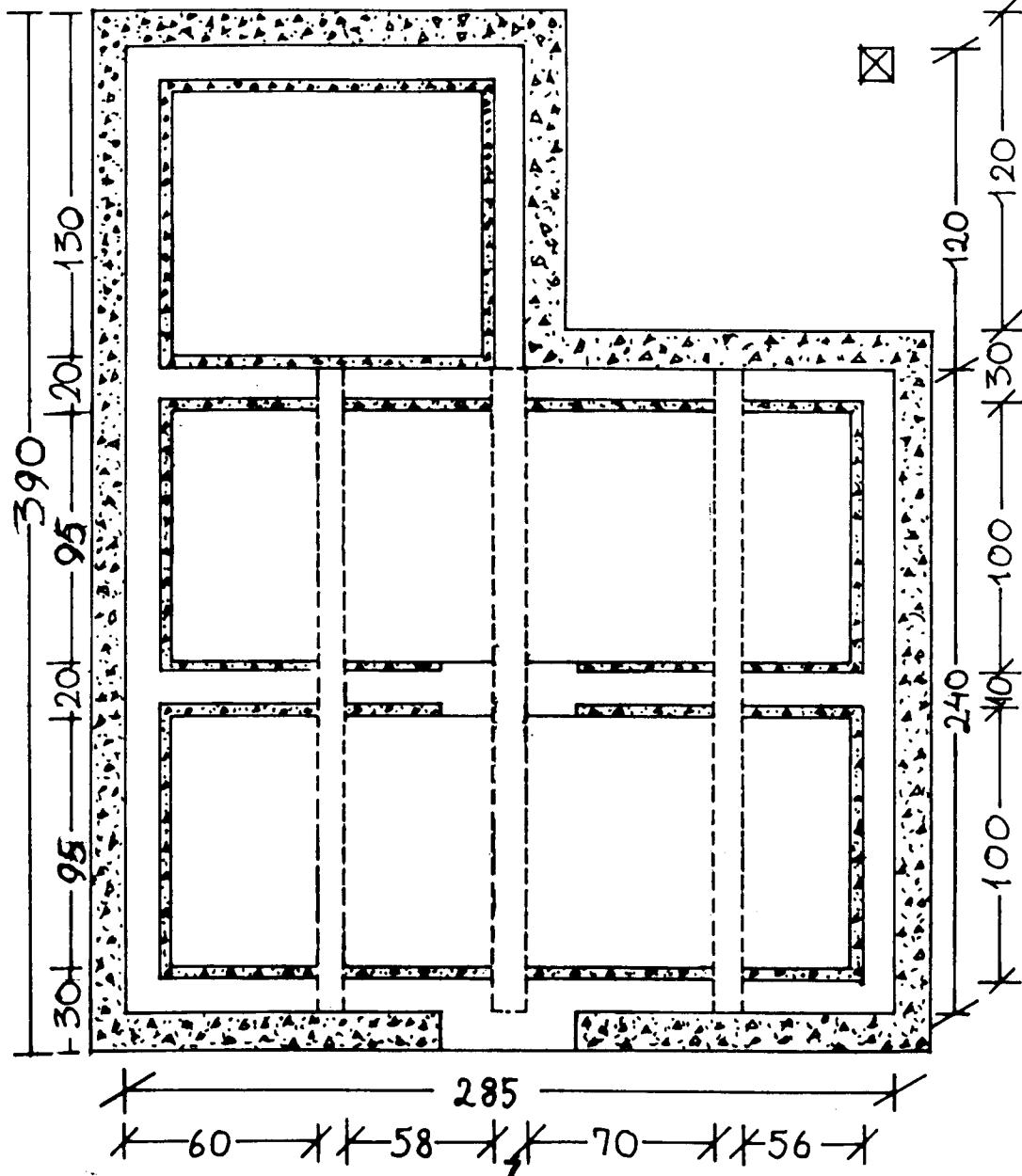
1:20

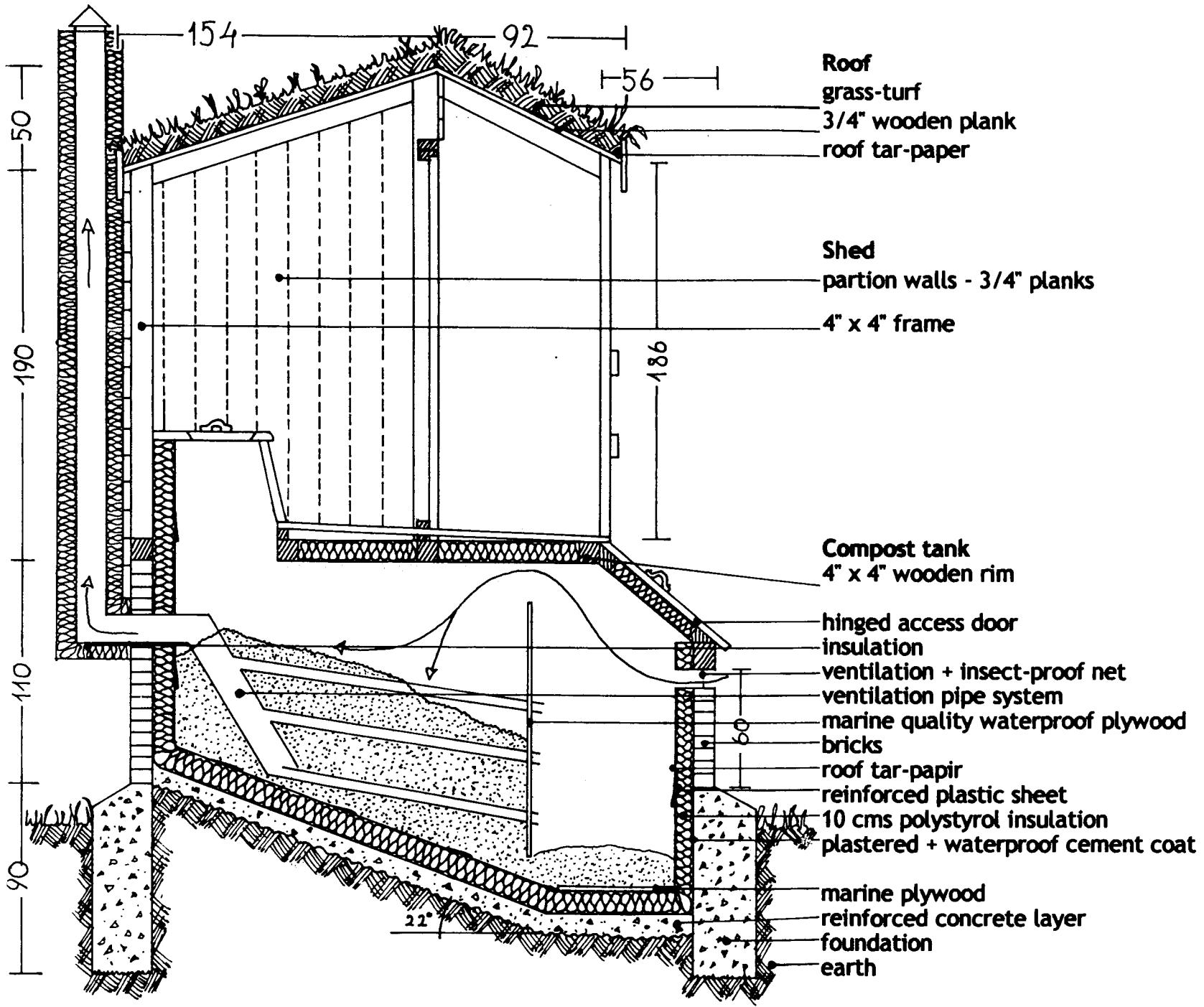
+30+

176

310

145 140





Plastic ventilation tubes in the actual compost mass - must be U-shaped or V-shaped with the opening facing downwards and the rounded or pointed side facing upwards.

The ventilation pipe from the container to the roof - must be insulated to prevent condensation.

1:20

Solar batch heater

Shower/bathroom

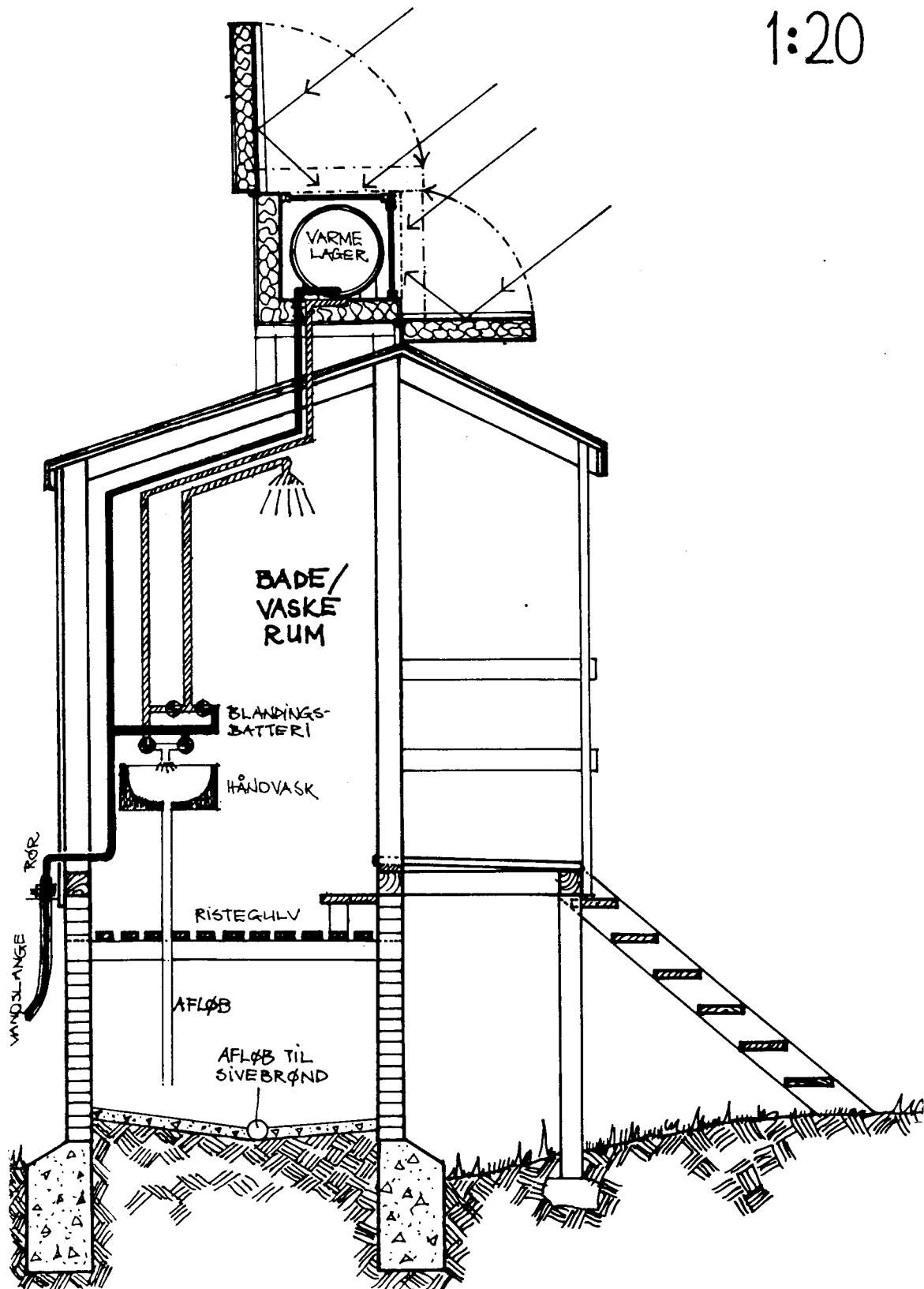
Wash basin, taps etc.

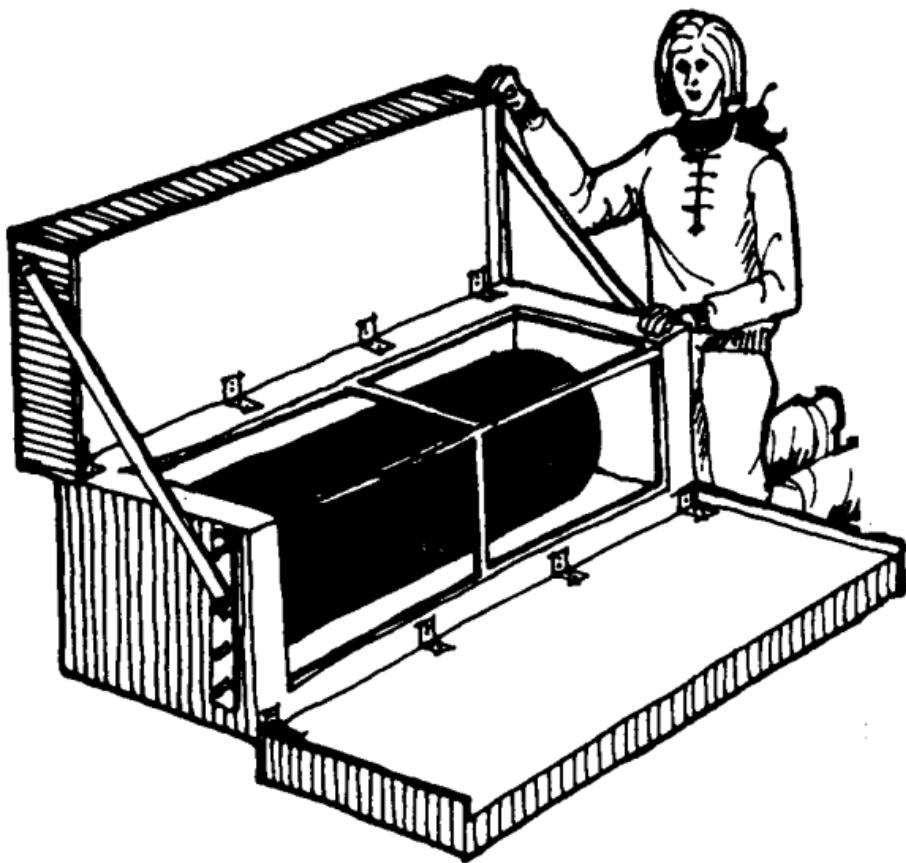
Water inflow pipe

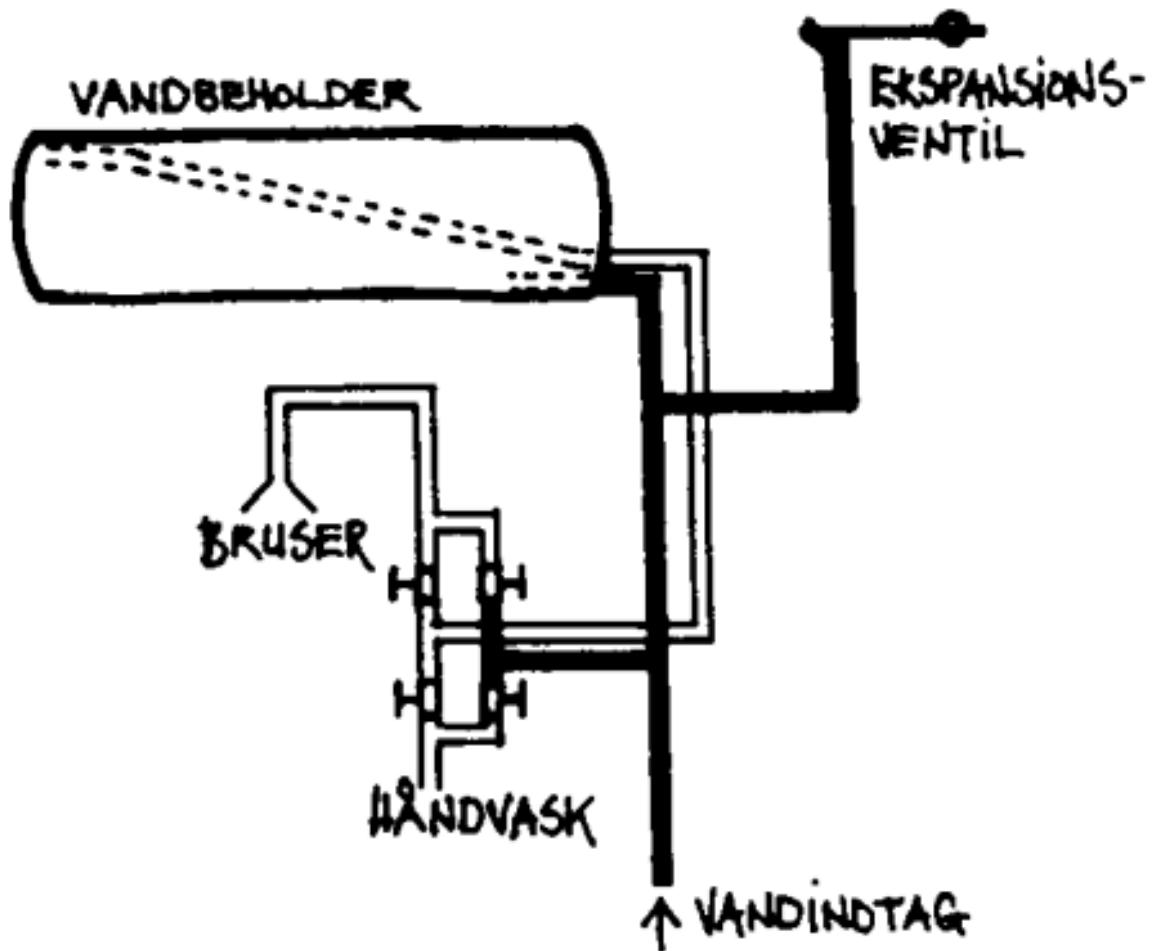
Wooden slatted floor

Drain

Greywater
drain to leach
system







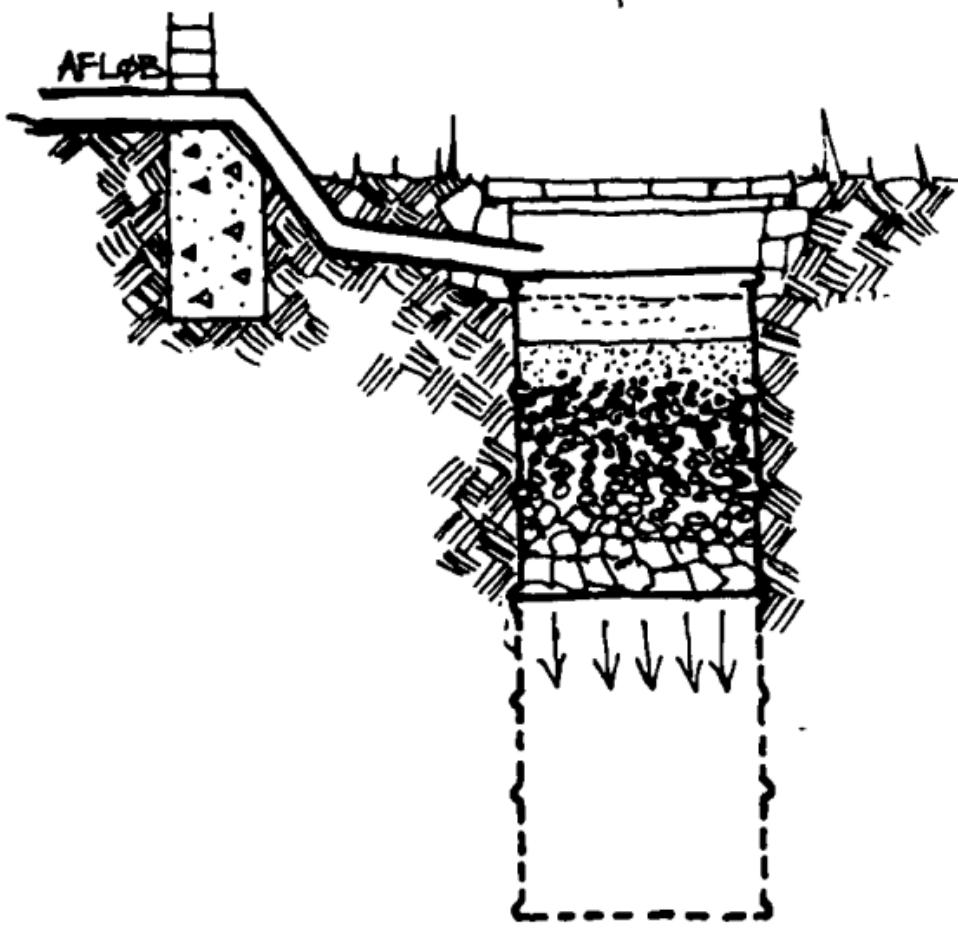
Expansion valve

Water tank

Shower

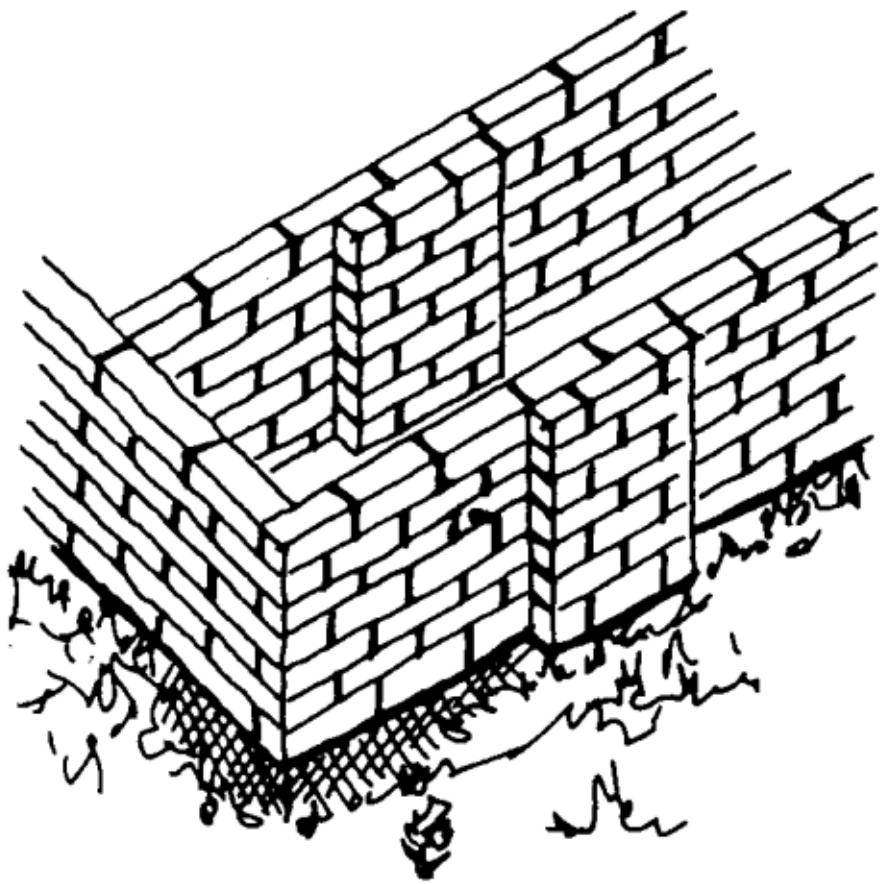
Wash basin

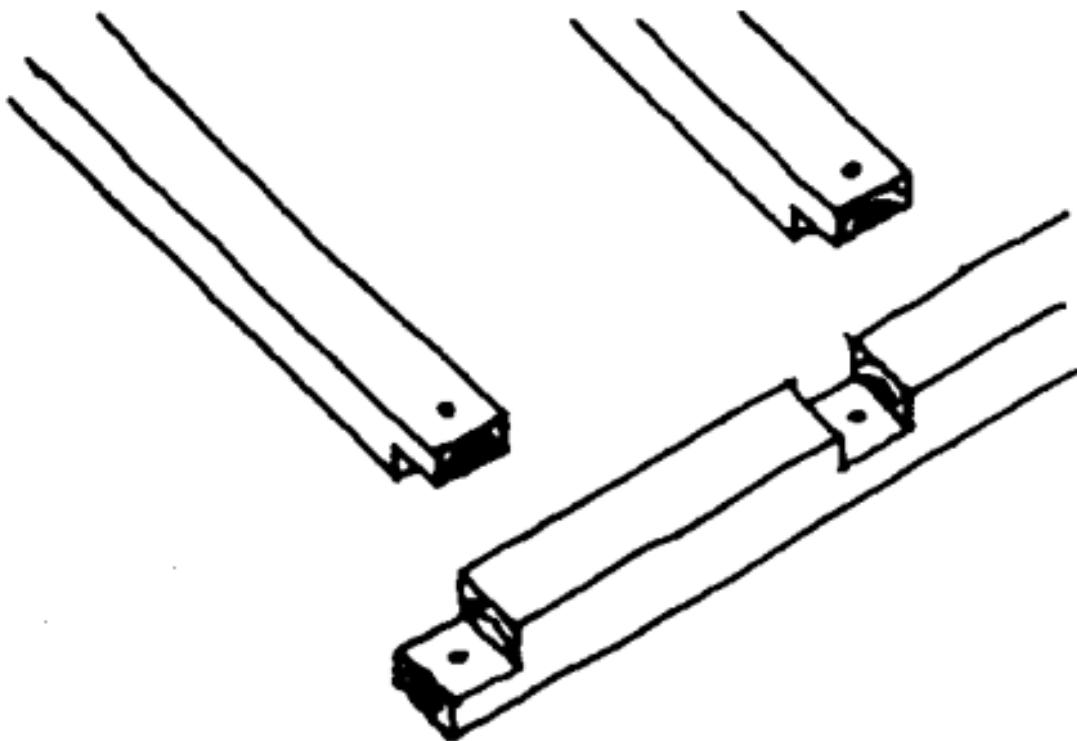
Water inflow

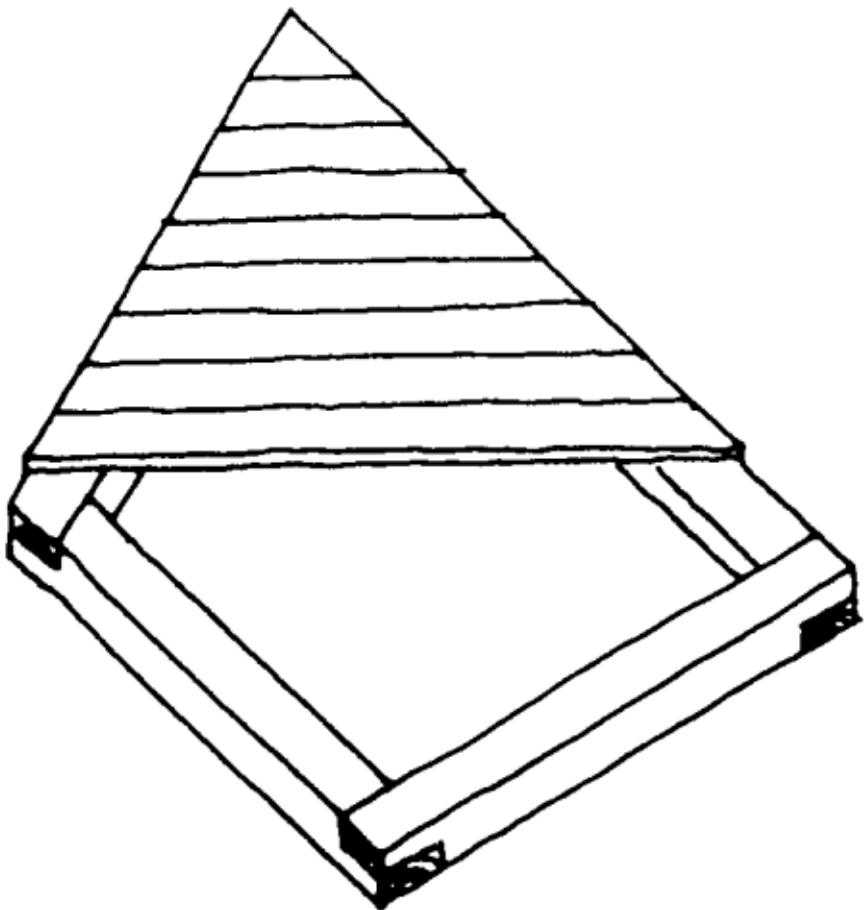


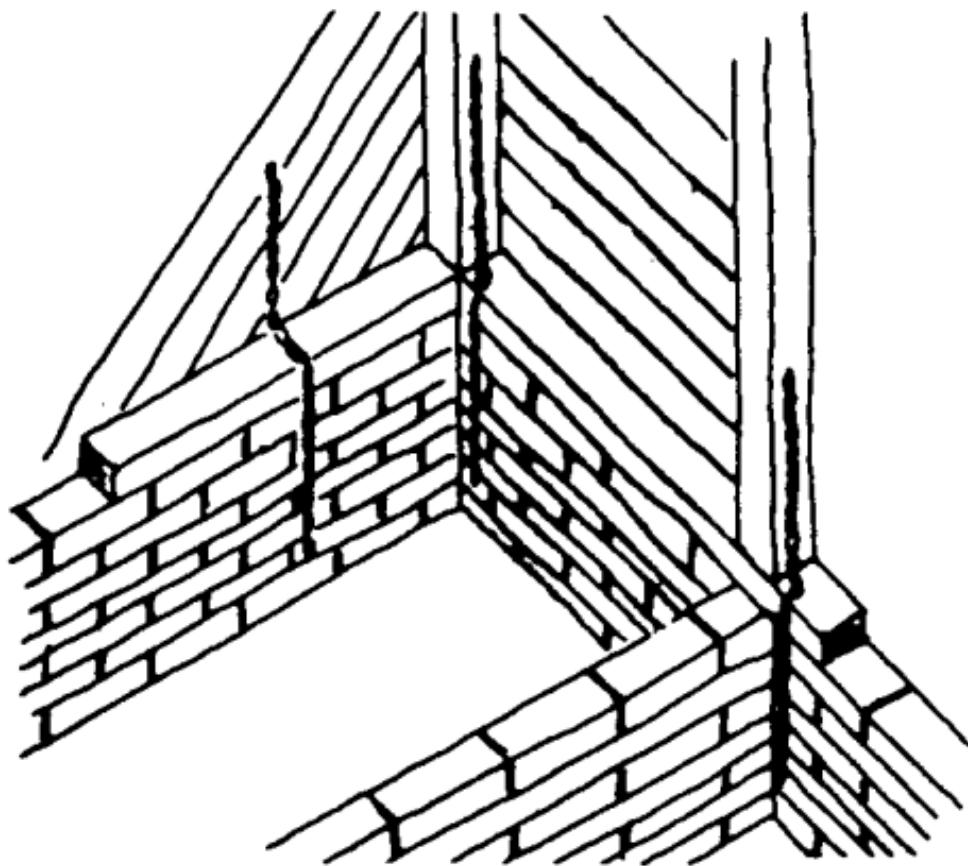
Water reservoir
Peat filter for soap
Sand
Gravel
Small stones
Larger stones

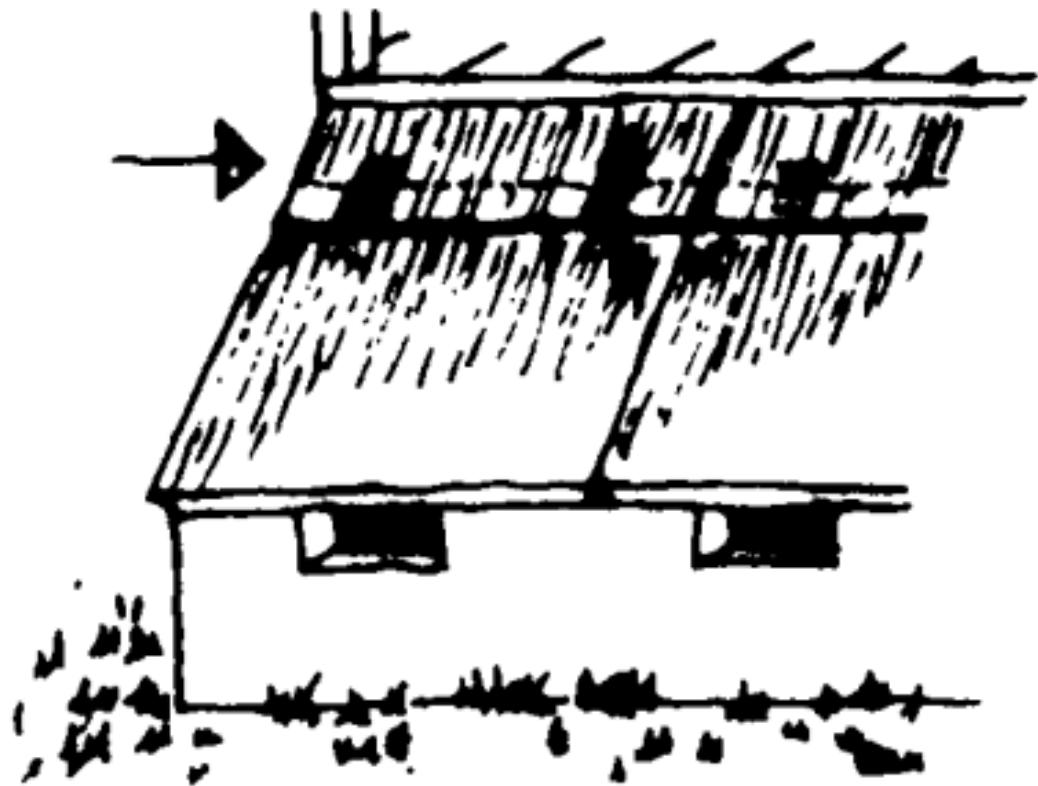
In clay soils - 2 oil drums are recommended.
The upper drum as an extra water reservoir

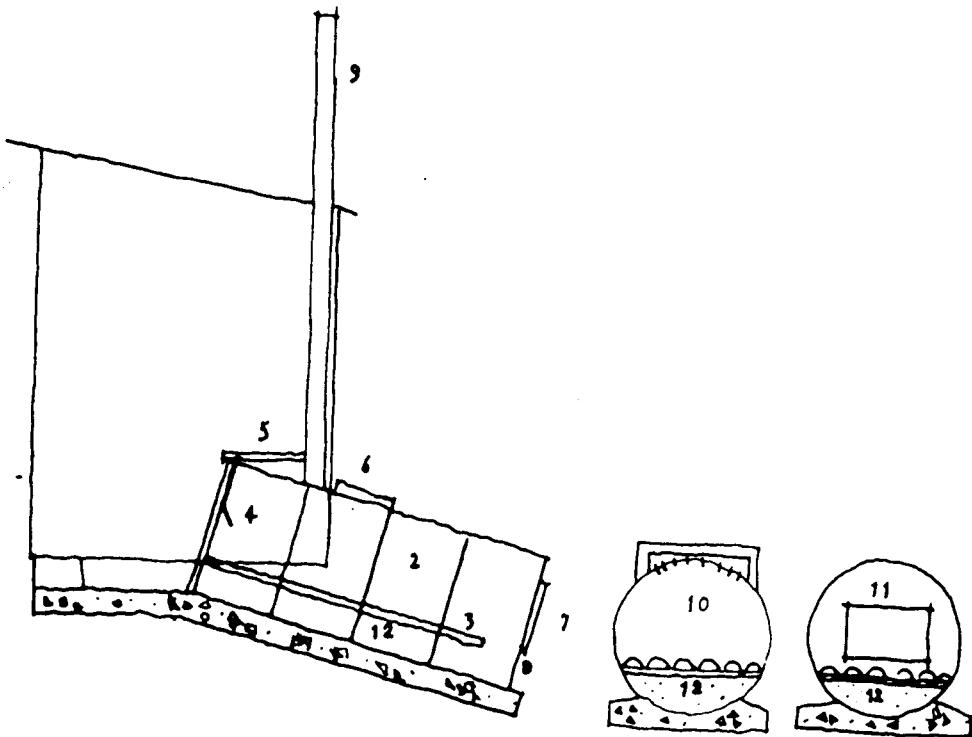






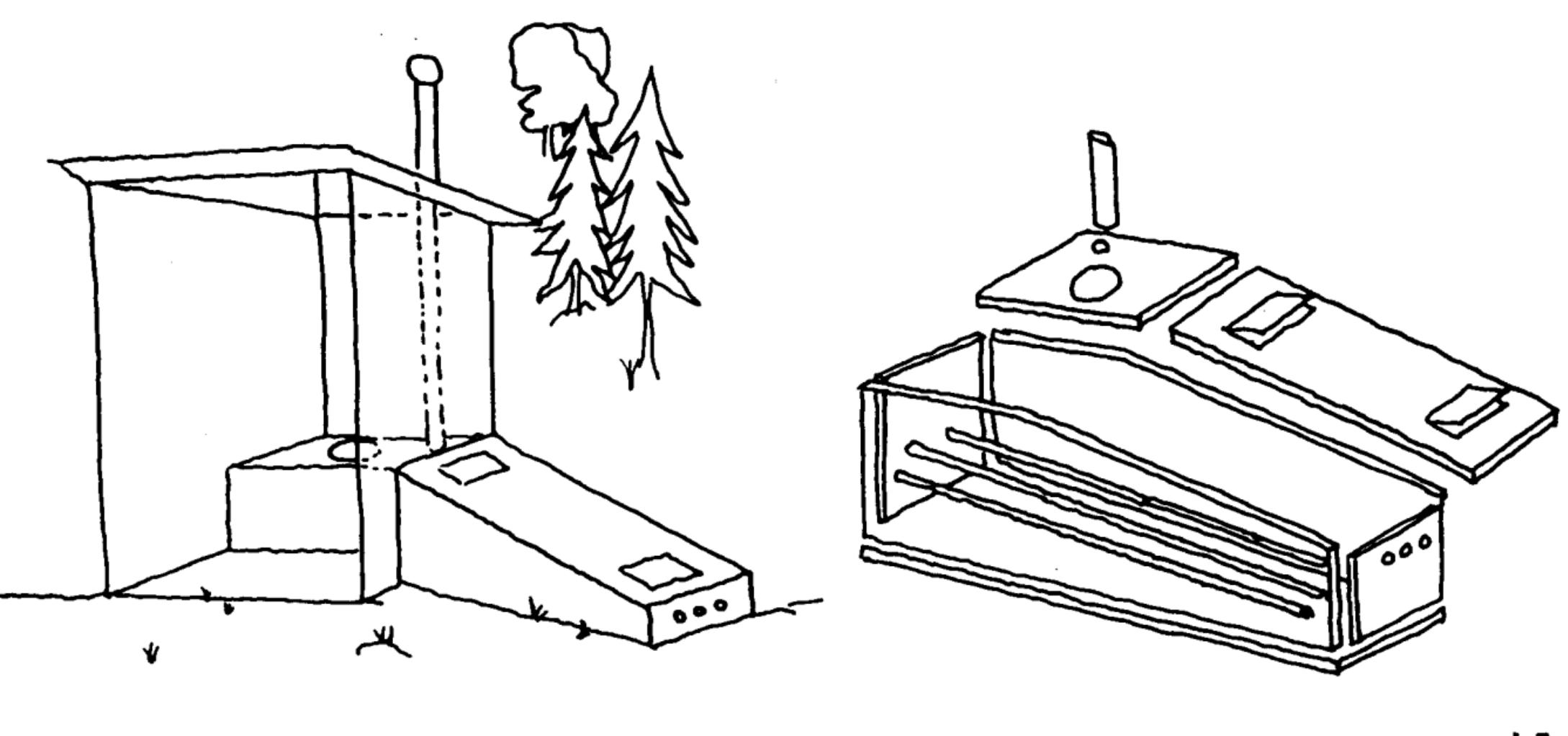






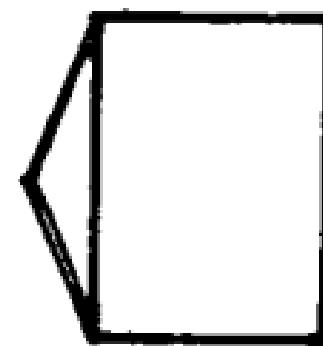
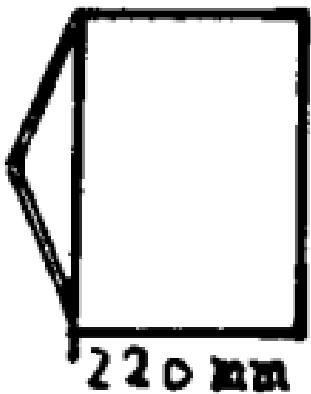
FOUR-RING COMPOST TOILET

- 2: 4 concrete rings - 60 cms long, 100 cms diameter
 - placed on reinforced concrete bed
- 3: plastic roof-gutters placed upside down for aeration
- 4: metal splash-sheet for spread of urine
- 5: toilet seat cover
- 6: hatch for kitchen and household organic waste
- 7: hatch for removal of decomposed material
- 8: air entry holes
- 9: ventilation pipe
- 10: frontal view of plastic guttering
- 11: rear view of plastic guttering and hatch
- 12: bed of peat and earth



1.000 mm

1.500 mm



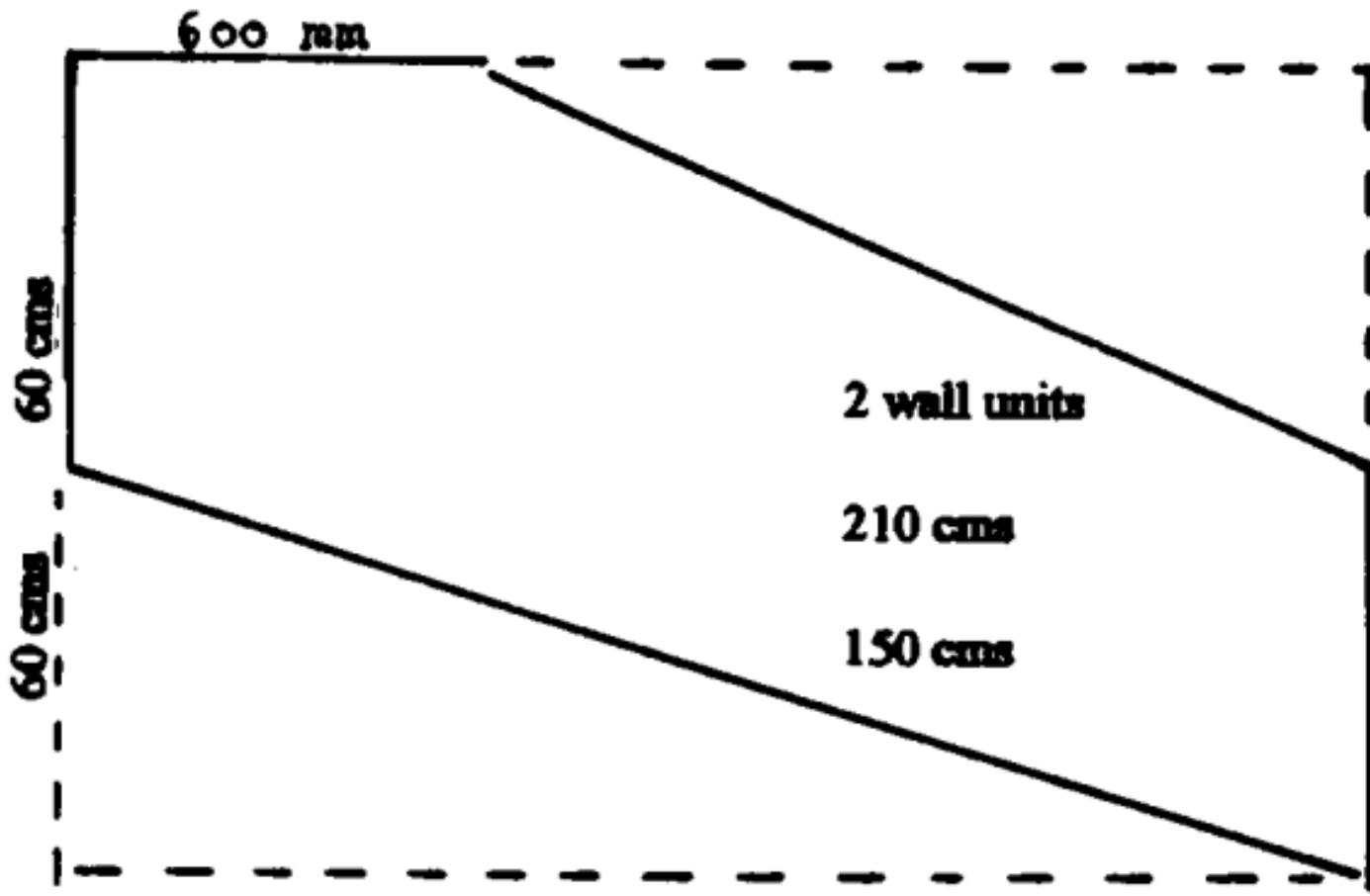
80 kg med 30 mm

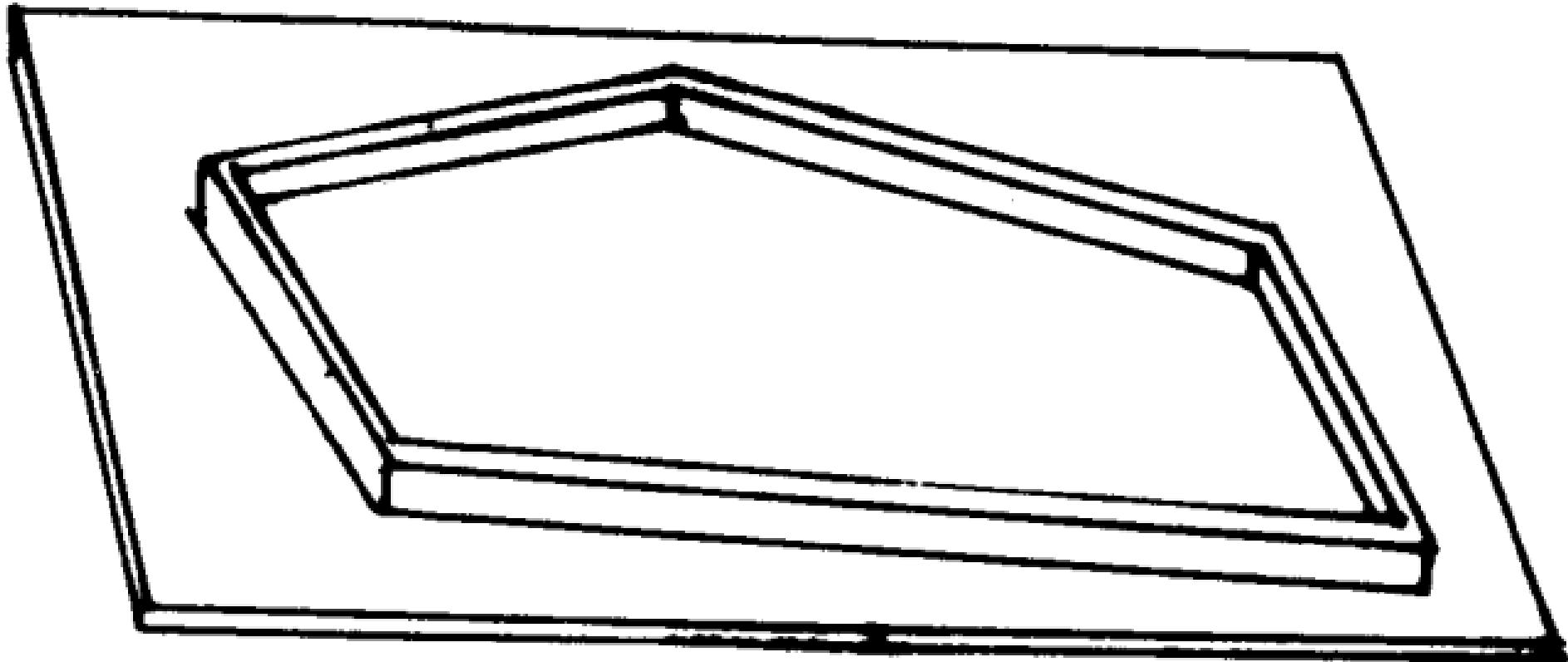
Top

150 cms

100 cms

2 hatch openings
with rain barriers





form

2.100 μm

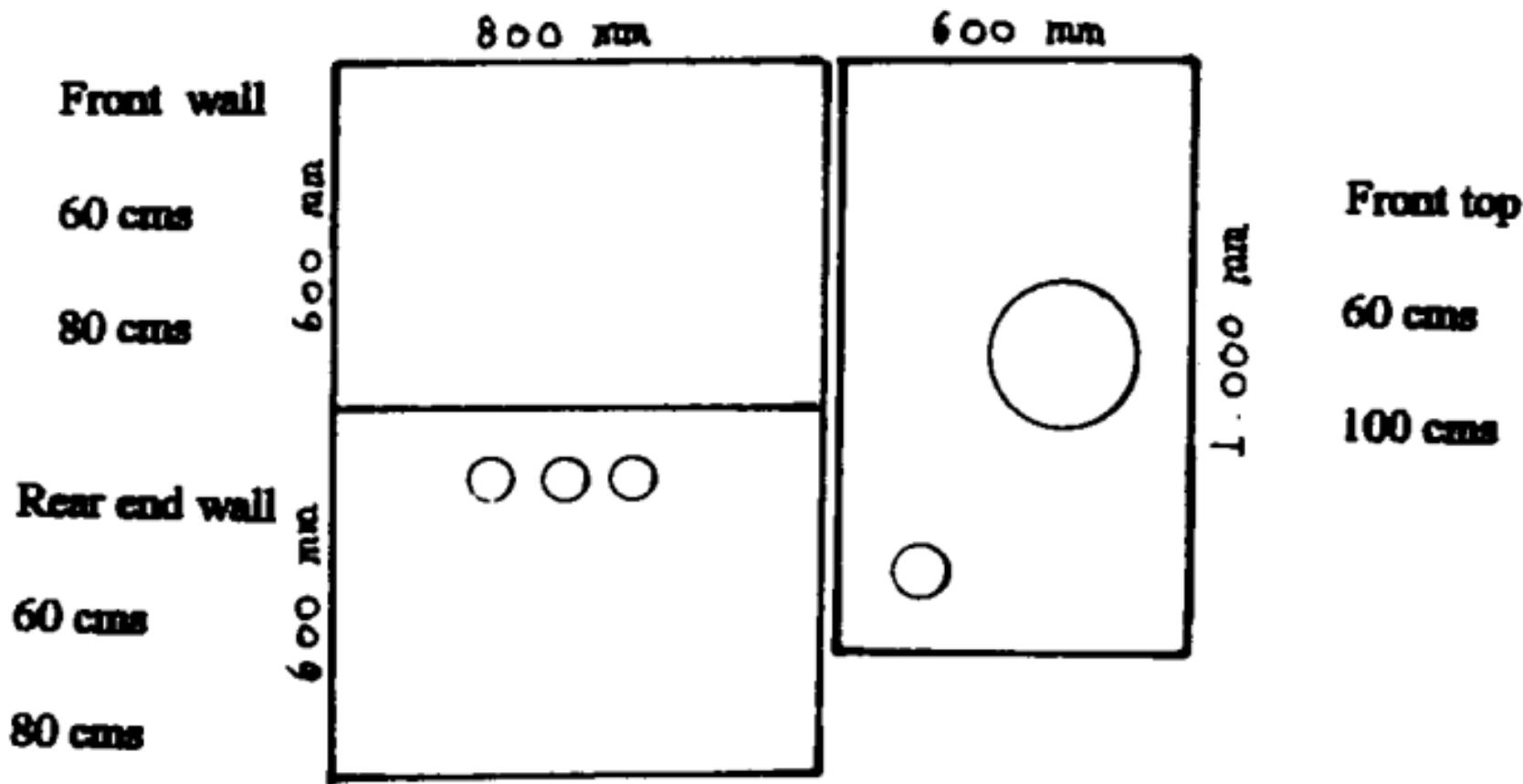
Bottom

210 cms

100 cms

120 kg med 30 mm

1.000 μm



All elements are made of 3 cms [30 mm] thick concrete, reinforced with strong chicken net.

Aeration channels or tubes are V or U-shaped with the openings facing downwards.

The unit must be insulated if it is used during the winter months and is built outside an already existing building.

Simple Home-made Clivus Composter

from - "Vi prøvede en ø- Vejlø"- NOAH/Fremad Denmark [1970's]

