Building a brick VIP toilet with a door. Method 2

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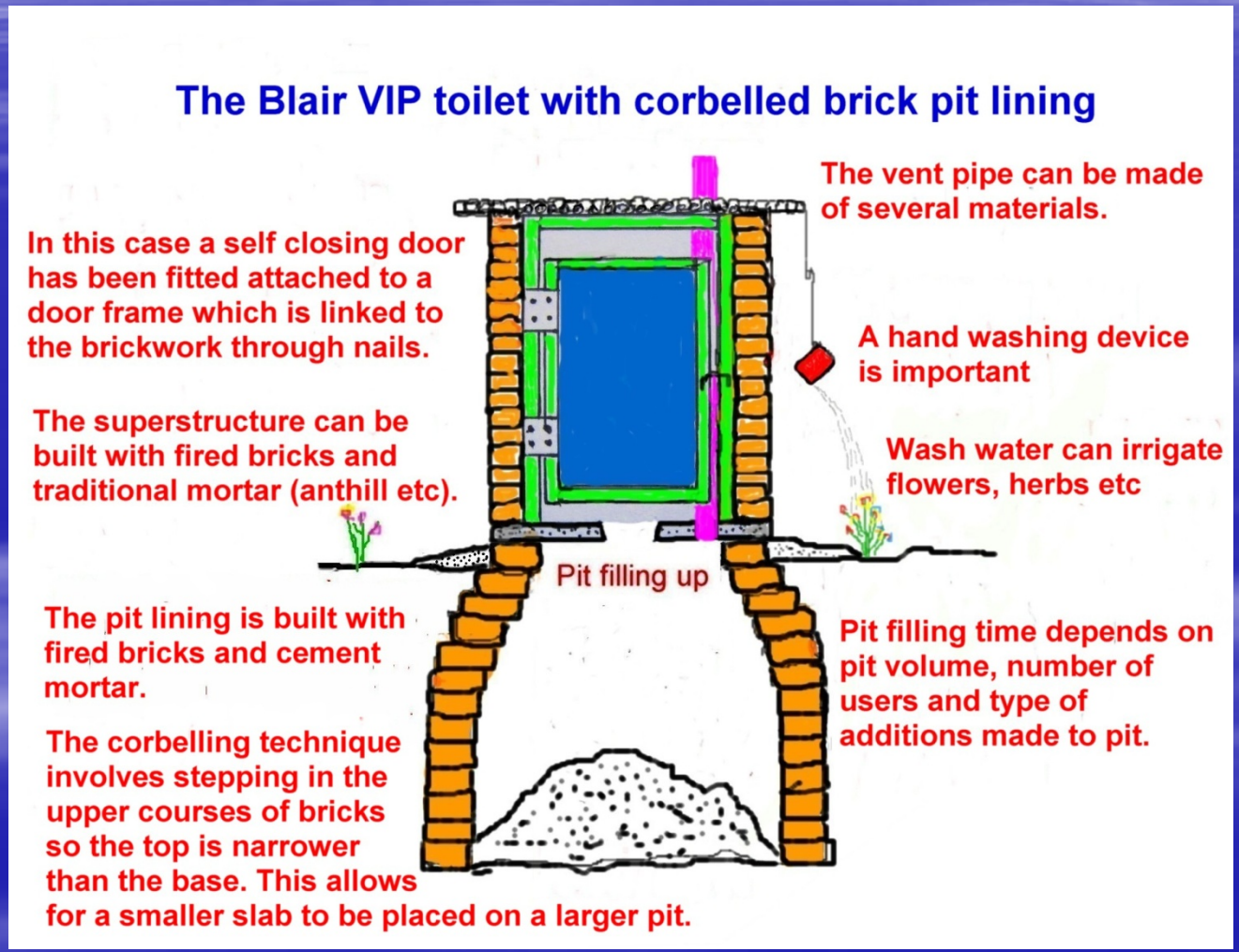
The VIP toilet is used in many African countries for use in schools.

Whilst the spiral door-less structure is more durable in the school environment ,a simple structure made with a door can work if the hinges and door frames are durable.

This power points shows how a simplified unit which allows for recycling of both the hardware and the pit compost has been designed and this can be made by school children.

Because of its special shape the unit is called a "Horseshoe Blair VIP" in Zimbabwe

In this presentation the pit has been lined with bricks and the slab fitted already



Preparing the parts

Once the slab has been mounted the size of the door and roof frames can be measured . The door frame and roof frame are made of timber (brandering)

Preparing the parts

The roof and door frames are measured up against the slab

Two pressure treated gum poles (1.4 – 1.7m long) are mounted in front of the slab. These will act as guides for building the brickwork and also the door frame will be attached to one of the poles. Holes are drilled with an earth auger for the poles

Mounting the two treated gum poles

These are mounted in the drilled holes so the door fits neatly between them

Starting the brickwork

Once the poles are mounted and secure they act as good guides for the construction of the brickwork. A weak cement mortar using 20 parts pit sand and one part Portland cement is used. The brickwork is built around the rim of the slab.

Linking the brickwork to the poles

The bricks are mounted against the poles. Wires can be placed around the poles on a few courses to hold the brickwork more firmly.

The brickwork continues

A spirit level can be used to ensure that the brickwork is built vertically. In this case the brickwork was built by eye. However the shape of the structure gives it a great strength even if it is not built perfectly

Building up to about 20 courses

As the wall gets higher the pupils need something to stand on the do their brickwork

The inside of the toilet

Some cement work is built around the poles at the entrance. The squat and vent holes are spaced apart so the vent does not interfere with squatting.

Mounting the door

The door frame is covered with a suitable material (heavy duty shade cloth, plywood etc) and rubber hinges made from car tyres are used as hinges. Later the hinges were replaced by more durable polyurethane units

Mounting the roof

The roof frame was covered with a plastic sheet and then a thick layer of grass and mounted over the structure

Mounting the roof

The roof timbers are attached to the poles with wires

Mounting the vent pipe

Various types of vent pipes can be used. In this case a vent made from cement filled hessian material was used. A hole is made in the roof through which the pipe passes

Mounting the vent pipe

The pipe passes through the roof and is mounted in the vent hole in the slab

The completed toilet

A proud group of pupils stands in front of their building achievement