

Notes for clients constructing their own building for a ZERO DISCHARGE 2 – ZD2

There are broadly speaking two types of building a client may construct:

A. A simple building similar to a NatSol building in that its function is simply that of a toilet cubicle without additional facilities. See attached **DIY footprint**. Such a building will usually stand on the flange of the toilet tank unless constructed from masonry.

If it is to be a masonry building then separate foundations will be needed. It will also be necessary to construct timber stud walls around the pedestal positions on the inside to match the positions that the wall surfaces would be in as shown on the **DIY footprint**. This is to ensure that the grab rails are in the correct position in relation to the pedestal, the positions of which are fixed. Please discuss this with us if in doubt.

The vent pipe can be supplied by us direct or through a local builders' merchant if we know the length required. It is 160mm grey plastic (or black if required) and should go straight through the roof from the floor socket which is in the RH rear corner of the cubicle. The roof flashing will vary depending on the type of roof constructed. We may be able to advise on this.

B. A larger building with other functions. If this is to be a heated, airtight building you must discuss this with us and we will send you a document called '**Installing Compost Toilets in Heated Buildings**'. That's relevant even for the ZD2 which is not composting.

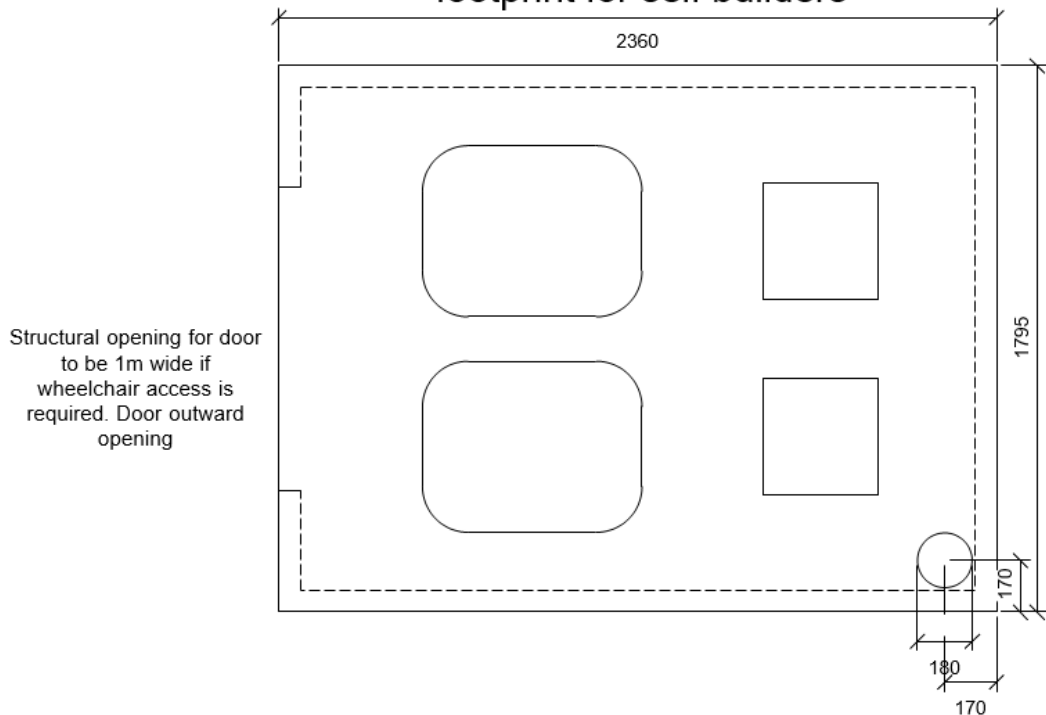
If unheated, then some of the content of the **DIY footprint** drawing is still relevant. The main difference is that you should not use the vault flange to support any part of the building weight and you will need to construct timber stud walls which extend over the tank flange for the reasons described above in **A**.

One issue to consider with a larger building is that the toilet cubicle floor is also the lid of the tank as supplied by NatSol, complete with access hatches. However, the building will have other floor surfaces which meet the cubicle floor surface by the cubicle door. There could be an issue if the foundations for the vault, and the foundations for the floor outside the cubicle, move relative to one another due, for instance, to having a different depth. You must also access to the cubicle for removal of compost.

Ventilation issues

In all unheated, non-airtight buildings we use passive ventilation through a 160mm pipe which **MUST** run directly up through the roof from the floor socket and be terminated by the cowl we supply. Any variation from this will normally require the installation of a fan unit using a couple of Watts and the pipe can then be reduced to 110mm and can take a more circuitous route. We would like to discuss this with you and advise you. We would provide the fan unit and power supply.

Zero Discharge 2 (full access) building footprint for self builders



Notes

- a. The drawing above is actually for the Full Access Composter vaults. However, the overall size is identical so in terms of sizing your building nothing changes.
- b. Structural opening for door to be 1m wide if wheelchair access is required. Door outward opening
- c. Building sole and internal lining boards together must extend between 60 and 75 mm over the edge of tank lid as shown. Less than this and the weight of the building may damage the flange.
- d. Max building weight 750kg evenly distributed. Avoid pressure points. Use continuous sole on which posts rest.
- e. Drill tank flange using universal drill bit supplied - DO NOT USE HAMMER SETTING. Drive turbo coach screws with washers (supplied) up through holes into building sole.
- f. Approach path and landing area outside should NOT cause rainwater to flow into the cubicle as this may enter through apertures in the tank floor.
- g. The building should have a ventilation slot somewhere since the toilet is passively vented. It is a good idea if this slot occurs at the top of a windowpane or around a skylight. Any flies which enter the building will be attracted to light and if a gap of about 15mm is provided e.g. between the top of the glazing material and the window frame, then this can act as an escape route. Do not make gaps larger than about 15mm as small birds may enter the toilet cubicle and start nesting in spring.