COMPOSTING TOILETS

Building Regulations and compost toilets

In 2010, the new part G of the Building Regulations for the UK came into force. The new regulations are part of a drive to reduce domestic water consumption by 18% and they mention compost toilets for the first time.

Part G 4.19 states (accessed and text copied as of Jan 2018)

"**Chemical toilets or composting toilets may be used where: a. suitable arrangements can be made for the disposal of the waste either on or off the site; and b. the waste can be removed from the premises without carrying it through any living space or food preparation areas (including a kitchen); and c. no part of the installation would be installed in any places where it might be rendered ineffective by the entry of flood water.**"

This means provided you have a planned route to take the waste from the toilet out of the building, without going through a living area, a Separett or an Air Head compost toilet would meet building regulations. If the building you wish to install a compost toilet is an outbuilding or garden building and is of such size that it does not require building regulations, then the installation of a compost toilet would not require you to meet the above requirements.

The Environment Agency and compost toilets

In England and Wales, the Environment Agency are under-resourced and are moving more towards more 'self certification', especially in low-impact systems such as compost toilets connected to individual dwellings. Unfortunately, finding the relevant information from the EA (Environment Agency) can be tricky!

Remember that the EA and SEPA are there to ensure that processes you engage in are safe for people to use, and don't damage or pollute the environment directly or indirectly. You might find the regulations frustrating, but they are there to ensure a safe environment for future generations!

As mentioned above, discharges to the ground of under 10 litres per day can generally be self-certified under an 'exception' clause as the discharge is considered very small. Nevertheless, you must ensure the discharge is done responsibly ie at least 10 metres away from a watercourse etc.

We suggest doing a written assessment of how you plan to deal with the outputs from your compost toilet – detail the positions of the discharge and composting points, possible contamination effects and limits etc, does the land flood, where will the compost bins be located? Have this documentation available in case officials want to ask you for more information. This will show you've been thorough and have thought through the entire process.

Please do check with officials in your locality – this is only a guide and has been reproduced in good faith. The summary was correct when we obtained it, but is subject to possible revisions, alterations and local interpretation which may slightly or substantially alter what is or isn't permitted.

Environment Agency summary [RM, EA, April 08] regarding:

Regulatory considerations for disposal of solid and liquid wastes from composting toilets

Solid Waste

Subject to other comments below a composting toilet generates sludge which, depending on its treatment and disposal or recovery is subject to a range of regulatory controls. Within the context of the Sludge (Use in Agriculture) Regulations

sludge from a composting toilet is, unless site specific reasons require otherwise, regarded as septic tank sludge, i.e. ‘residual sludge from septic tanks and other similar installations for the treatment of sewage’.

If the toilet is connected with a householder (i.e. located on a domestic premise), and the waste it generates is kept within the premises (e.g. spread onto a garden), it is not subject to control under the Environmental Permitting Regulations 2007 or Sludge (Use in Agriculture) Regulations 1989. If the waste leaves the premises (e.g. to be spread onto other land) the situations described below may apply. However, in all cases the site specific nature of the operation must be individually assessed.

If the toilet is connected with a business, and not a private individual, the composting operation may be subject to controls under Environmental Permitting Regulations 2007. For example, the Para. 12 Exemption, Schedule 3 of the Environmental Permitting Regulations 2007 may be applicable.

Any further treatment of the waste from the composting toilet (before it is disposed or recovered/recycled) may be subject to controls under the Environmental Permitting Regulations 2007. For example, if the waste is subjected to secondary composting before its disposal or recovery the Para. 12 Exemption, Schedule 3 of the Environmental Permitting Regulations 2007 may be applicable. Alternatively, the waste may be sent to a sludge treatment centre for treatment in accordance with the Sludge (Use in Agriculture) Regulations 1989.

Depending on the specifics of the toilet composting operation, the waste compost may be more suitable for spreading to land under an exemption to Environmental Permitting Regulations 2007. For example, the waste may meet the definition of a waste suitable for spreading under a Paragraph 7 exemption. It is recommended that advice be sought before registering a Para. 7 Exemption for the land spreading of composted toilet waste, falling under the definition of a type of source segregated biodegradable waste that has undergone an aerobic treatment.

Liquid Waste

For individual toilets –

- Discharge direct to watercourse is not permitted.
- Discharge to a soakaway is permitted provided that the soakaway is not
- …Within 10 metres of any watercourse
- …Within 50 metres of any well or borehole or spring

No consent would be required from the Environment Agency.

For larger groups of toilets –

Consent to discharge may be required and the EA should be contacted to assess any possible risks to groundwaters.

In either case, contact the local Buildings Regulation Department at the local council for requirements regarding location of soakaways in relation to buildings

THE CHOSEN TOILET

The **WooWoo GT LUX Starter Pack** is available either with 2 x 120-litre or 2 x 330-litre composting containers, and comes with a porcelain drop-through toilet pedestal for the ultimate in ‘at-home’ luxury and durability with a full composting toilet!

The **GT LUX** means you can have a full composting toilet without water or sewerage connections. Composting takes place *within* the WooWoo GT container so when it comes time to empty, you are only ever handling compost. Residual odours are removed with either the non-electric wind fan (for installations in out-buildings etc) or the electric fan (for installations within the fabric of a dwelling).

The **WooWoo GT LUX** is what’s known as a **split** system, where the toilet pedestal is in the building and the composting container is directly under it. You will need a minimum of 800-1000mm clearance (depending on the model) under the floor for access to the composting container.

Because it doesn’t use a urine separator, it’s easy for people to use with minimal instructions, and cleaning is simple and straightforward.

- elegant porcelain toilet pedestal – all the comfort and feeling of home
    - soft close seat and lid
    - non urine-separating – nothing to go wrong
- efficient composting ability through passive moisture level regulation and ventilation
- serviced in minutes – low maintenance for the operator
- endless capacity with spare containers
- handy size, easy to move with wheels and sturdy handles
- durable and reliable in use
- no need for special instructions for users
- choose either the wind powered fan or 230v fan according to the installation
- available in 120-litre or 330-litre capacities
- designed and made in Finland with a proven track record across the world in all climates
- can be installed close to watercourses*

Each of the containers has a unique capillary base that regulates moisture content in the solids mass above, ensuring perfect conditions for efficient composting. With two containers in the starter kit, one can be ‘in use’ whilst the other is ‘composting’ the contents. Additional containers can be purchased to increase the capacity as needed.

How does the WooWoo GT Lux work?

The **WooWoo GT LUX** is a composting toilet system that catches all the solid and liquid matter (no need to use a urine separator), making it incredibly simple and foolproof to use and ideal for locations that have multiple or public users.

The unique **capillary base** allows some of the excess liquids to be absorbed back to the composting mass, just like underwatering flower pots. This unique self-regulating feature of the **WooWoo GT LUX** speeds up the composting process significantly – efficient composting requires that the mass inside the container is neither too wet nor too dry. Excess ‘seep’ liquid runs out either into a container (for periodic emptying) or into a small soakaway pit.

When the first container is full, it is moved out and replaced with an empty one. The full container has a different lid put on and the contents are left to complete the composting process (which will have already started). After a suitable period of time, the contents can be emptied and left to mature for a while longer, eventually to be used as a mulch around trees and bushes. Alternatively, the contents can be emptied out at any time and transferred to another compost bin/area if you want to return one of the containers back to service before the contents are fully composted.

The capillary base, together with the efficient ventilation system, means the **WooWoo GT LUX** is odourless, pleasant and simple to use, making it ideal as a communal toilet on a campsite, glamping site, forest school, community garden or allotment, or even in a remote dwelling.

Doesn’t it smell?

No. The unique features of the WooWoo GT LUX, such as the capillary base, ensure that the contents don’t get saturated so efficient composting can take place. Added to this, the active ventilation system draws odours out of the container and assists in evaporating moisture.

You can choose from the wind-powered fan for completely off-grid installations or the mains electric fan. When installing the WooWoo GT LUX within the fabric of a dwelling, or where the ventilation pipe cannot be routed vertically, we suggest the mains-powered fan for absolute odour removal. If you choose the ‘no fan’ option, you MUST provide some form of assisted ventilation to remove odours.

How to use the WooWoo GT LUX

For the user, the **WooWoo GT LUX** is simple to use – they just ‘go’ as they would with any other toilet – there’s no requirement for men to sit down as it doesn’t rely on the separation of liquids and solids at the point of use. After every solid use, the user adds a scoop of cover material (like fine wood shavings or sawdust from chainsawing). That’s all there is to do!

Alternatively, the operator can add some cover material (wood shavings or sawdust) at the end of each day instead of the user being required to.

How to maintain the WooWoo GT LUX

For the owner/operator, the **WooWoo GT LUX** is a low-maintenance solution for providing an off-grid, waterless toilet facility. If you run the seep/leachate into a soak-away pit, all you need to do is occasionally inspect how full the main composting container is. If the seep/leachate is collected, then that container will need to be checked every week and emptied accordingly.

When the **WooWoo GT LUX** container is full, swapping to a new container should only take a few minutes. Slide the full container from the building by first detaching the flexible part of the vent pipe and the leachate tube. Depending on the building configuration, the ‘chute’ that connects the toilet seat to the container will need to be released.

Now you can pull the container backwards and out. Depending on the operator, the **GT 120** can usually be moved by one person, although the **GT 330** will need two people.

What’s the capacity of the WooWoo GT LUX?

The actual capacity depends on a number of factors including ambient temperature and wind speeds (as these have an effect on moisture evaporation rates), however with the WooWoo GT LUX 120, you should expect around 250 solid uses per container and with the GT LUX 330, expect around 800 solid uses per container. The amount of urine does not have a significant impact on overall capacity as any excess liquid will come out as leachate or be re-absorbed into the composting mass.

Capacity will be reduced in winter due to slowing of the composting process, lower ambient temperature and lower evaporation rates.