Installation & User Manual

WooWooLoo GT Compact

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WooWoo

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Assembly - the ‘quick’ version

Here’s the quick and simple version of the assembly procedure for the flat-pack model. You can refer to the detailed information later on if you need to:

- **Always assemble the cabin on a flat, level surface.**
- **Hand-tighten the nuts and bolts to start with (until all the pieces are together)**
- **It’s best to have two people doing the assembly - easier and safer!**

Assemble the cabin with the supplied M6 bolts, washers and 11mm nuts which are inserted into pre-drilled holes. Use a hammer or mallet to gently ‘persuade’ the bolts into place if needed. **The pack of bolts etc is usually in the vent pipe for transport.**

The basic assembly procedure is as follows:

1. Lay the base down - the rear of the base has the cut-out for the toilet container
2. Place one of the side panels on the base and hand-tighten the four, 80mm bolts with washers and nuts (the side panels will need holding/supporting until the back is in place)
3. Place the second side panel on the base, and hand-tighten the four, 80mm bolts as before
4. Place the back panel in position. Starting at the top of each side, use six, 70mm bolts with washers and nuts (three down each side)
5. Place the front/door into position and secure using ten, 60mm bolts with washers and nuts (five down each side)
6. Identify the front of the roof panel (is a continuous strip of wood with no end grain on the very front) and place the roof on the cabin. Secure using six, 120mm bolts (pushed in from the inside) and hand tighten the washers and nuts
7. Place the recycled plastic front toilet cover in position inside the cabin. The wooden strip should be at the top, facing to the rear. Secure with two, 80mm bolts, nuts and washers
8. Drop the recycled plastic top toilet cover in place.
9. Put the wooden inner step in place, in front of the front toilet cover and secure it with two, 80mm bolts, nuts and washers
10. Ensure the door opens and latches correctly, and then tighten all the nuts (each side panel to base, rear to side panel, front to side panels, roof, front toilet cover (black recycled plastic), top toilet cover (black recycled plastic), and step
11. Attach the seat (located in one of the WooWoo GT boxes) with screws, ensuring it’s pushed right back against the wall - use the rubber washers under the seat to raise it by a few mm
12. Attach the flue using four, 50mm bolts, nuts and washers through the supplied plastic brackets with which the flue is supported
13. Place the spinning wind vent onto the flue.
14. The waste chute can be trimmed so that only 2cm protrudes into the container

Location and Pre-assembly Preparation

The toilet cabin can be located almost anywhere and is easily relocated if required.

When locating or relocating the cabin, you'll need to consider the following:

- The ground must be flat, level and free-draining
- You will need about 1 metre of clear access behind the cabin to manoeuvre the GT containers in and out with ease
- You will need to dig a small soak-away pit (aka leachate or seepage pit) behind or slightly to one side of the cabin **or** have a suitable container buried in the ground to catch the leachate liquid
- You need good wind flow at the height of the spinning vent to ensure it will freely spin - in other words, close up to buildings, trees or in a hollow isn't ideal

Exposed / Windy Sites

The weight of the cabin, especially when the toilet has been used, should ensure the cabin is stable in moderately windy locations.

However, in exposed locations or where high winds are often encountered, the cabin may be at risk of toppling over. Consider whether you want the cabin to be moveable or permanently sited as they may affect which method you choose to secure it. There are a few options to consider to stabilise the cabin in high winds:

- Eye plates (from a hook and eye) can be drilled and screwed into walls (ensure you are attaching through to the frame and not just the cladding). Wires or straps are run to a ground spike or anchor.
- A fence post can be concreted into place behind or to one side of the cabin. The cabin can then be screwed to the post
- A couple of metal bars can run through the joists between the ground and the floor. These bars can be secured using 'U' bars or 'ground stakes' concreted into place.
- The base/floor can be secured to the ground using 'ground anchors'

Search online for "***securing a shed to the ground***" for more ideas and products.

Try these: https://groundbolt.co.uk/erdanker-ground-anchors.html

If your WooWooLoo GT Compact is not permanently located, you can move temporarily to a more sheltered spot, if a storm is expected.

Ground/Base Preparation

It's important to ensure that the ground upon which you wish to locate the cabin is FLAT, LEVEL and FREE-DRAINING.

Ground that is not **FLAT or LEVEL** may lead to the cabin being unstable and rocking when people are using it, or you may find that the door does not align with the catch, or may misalign over time.

Having **FREE-DRAINING** ground will ensure that the life expectancy of the cabin is maximised, thereby protecting your investment. If the floor support timbers are sitting in water or are perpetually damp, they will eventually rot, regardless of any preservative treatments.

SHARP GRAVEL or **HARDCORE** bases are ideal as they will be naturally free-draining. Interlocking plastic 'ground grids' are also a good option if your ground is already level - they are filled with gravel to ensure drainage. Concrete paving slabs can also be used.

The cabin should not be installed directly on bare earth as this will cause the timbers to rot prematurely.

Dealing with leachate - introduction

Depending on the amount and type of use your toilet gets, along with the ambient air temperature and wind speed, some liquid will come out of the drain in the base of the WooWoo GT composting toilet unit as a 'leachate' or 'seepage'.

In most cases, the liquid can be dealt with by running the supplied flexible pipe into a small soak-away pit behind or to one side of the toilet. Where this isn't possible, you can capture the liquid in a suitable container for disposal elsewhere.

In warm weather, very little leachate will come out as most of the moisture is either evaporated or used in the composting process. In cooler temperatures, the composting process slows or stops, so more liquid will come out, in proportion to the amount of use the toilet gets.

Dealing with leachate - soak-away pit

Running the leachate into a small soak-away pit is the simplest method where the discharge point is **at least 10 metres** away from a watercourse. Please check legislation in your region/country to ensure you comply with any 'groundwater discharge' regulations.

In the UK, small amounts (less than 10 litres per day) of leachate are usually permitted as a non-hazardous 'groundwater' discharge. However, local nitrate- or phosphate-neutral zones may override that.

A soak-away pit doesn't have to be very large - 50x50x50cm would be ***more than adequate*** for dealing with a litre or so per day of discharge.

Dig the pit directly behind or behind to one side of the toilet location (bearing in mind that the supplied leachate pipe is around 1.5 metres long - you can buy a longer pipe if needed), line the soakaway pit with landscape fabric to help prevent soil ingression, and fill it with suitable gravel or hardcore.

Run the leachate pipe into the soak-away pit and cover it with a landscaping material of your choice.

Commercially available soak-away crates are usually far too large as they're designed for rainwater discharge or other higher-volume applications.

Dealing with leachate - 20-litre container

If you can't have a soakaway pit due to the proximity of a watercourse or other ground conditions, you can create a hole (lined with waterproof OSB, plywood or something similar) into which you place a durable 20-litre container.

The liquid should flow downwards from the connection at the base of the WooWoo GT composting container.

Run the leachate pipe into the top of the container and check the level regularly.

The contents can be diluted and used around trees and bushes as a fertiliser (always poured onto the earth and not directly onto branches or foliage), or disposed of appropriately elsewhere.

Assembly

The **WooWooLoo GT Compact** can be assembled in its final position or can be assembled elsewhere and moved (you will need a 3-4 strong people).

- **Always assemble the cabin on a flat, level surface.**
- **Take your time**
- **Hand-tighten the nuts and bolts to start with**
- **It's helpful to have another person to help at certain points**
- **Got questions - give us a call or email**

The cabin is assembled with the supplied M6 bolts (various lengths as described below) which are inserted into pre-drilled holes. A washer and a square 11mm nut is fitted from the other side. Initially, all nuts should be hand-tight.

The pack of fittings (bolts etc) is usually stuffed into the vent pipe for transportation.

A hammer or mallet can be used to gently 'persuade' the bolts through the wood.

Semi-assembled version

The semi-assembled version will be delivered with the floor, walls and door all in place and bolted together. Inside the cabin will be the roof, toilet front cover, toilet top cover, step and vent pipe.

Go straight to the **ROOF** assembly section [on page 13] to follow the instructions from that point.

Flat-pack version

The flat-pack version will be delivered on an oversized pallet. Carefully remove each of the components from the pallet and follow the assembly instructions below.

Supplied fixings

Throughout the assembly, we use M6 bolts, washers and nuts (with an 11mm head)] in a few different lengths to securely join panels together. The holes have been pre-drilled and are slightly oversized to give a bit of 'wriggle room' in case the wood swells or shrinks in transit or storage.

Side panels to base	8 x 80mm M6 bolts, washers & nuts
Back panel to side panels	6 x 70mm M6 bolts, washers & nuts
Door/front panel to wall panels	10 x 60mm M6 bolts, washers & nuts
Roof to side panels	6 x 120mm M6 bolts, washers & nuts
Toilet box front plastic panel	2 x 80mm M6 bolts, washers & nuts
Step	2 x 80mm M6 bolts, washers & nuts
Flue bracket (x2 brackets)	4 x 50mm M6 bolts, washers & nuts
Toilet Seat	2 x rubber washer

Lay the base down

Always assemble the cabin on a flat, level and even surface.

The rear has a cutout section to enable the toilet container to slide into place.

Although the base (and all timber in the WooWooLoo GT Compact Cabin) has been pressure treated, it might be convenient to apply additional wood preservative at this point if you so desire.

First side panel

Place a side panel (we're showing the left panel in this photo), onto the base. We've highlighted the base in **red** for clarity.

Locate the **four holes** in the lower wall plate, and the corresponding holes in the base (they will be bolted through these shortly).

Notice that the two pieces of wood (the vertical piece on the side and the horizontal on the base) align.

There will be a slight gap at the front.

You will need someone to hold the side panel upright and steady as you insert **four 80mm** bolts into the holes.

As the bolt goes through, it should locate in the associated pre-drilled hole in the base and drop through.

Where each bolt protrudes through the base, attach a washer and a nut, but only hand-tighten at this stage.

Second side panel

Repeat the same process to attach the opposite side panel, again using **four 80mm** bolts, washers and nuts.

Your helper should support both side panels as they will be susceptible to being caught by the wind at this stage.

Back panel

Offer the back panel up. The lower part has a piece of black recycled plastic.

Starting at the top on each side, insert the **six 70mm** bolts, and from the inside, attach the washers and hand tighten the nuts.

At this stage, the cabin should be self-supporting, but be mindful if there's a gust of wind!

Front panel including door

Offer up the lower part of the front section so that the cross-ledge sits on the base but between the side walls (base and walls shown in **red**).

It's helpful to have one person inside the cabin to attach the washers and nuts as they are inserted from the outside.

Starting at the top, insert the first of **ten 60mm** bolts from the outside, and then on the inside, slide on the washer and hand-tighten the nut.

Repeat the process for the other top hole, and then work your way down to complete the ten bolts (five on each side).

Now check that the door opens and closes properly and that the latch operates.

Roof

Identify the front part of the roof - the timber will span across the front with no raw edges (as shown in **red** on the photo), whilst the rear has the crosspiece *between* the edges. The channels on the roof covering will also run front to back (not side to side!)

Place the roof on the top of the building and align the pre-drilled holes in the roof timber with the holes in the side walls.

There are **six 120mm** bolts (three on each side) to insert from the inside. Put the washer and nut on from the outside (this might be a little fiddly due to limited access), and use a spanner to secure (again, loosely at this stage).

Front toilet cover (recycled plastic)

Locate the front cover for the toilet - it's made from 100% recycled farm waste plastic.

Offer it into place, ensuring that the wooden strip is at the top, facing towards the rear of the cabin.

Secure it with **two 80mm** bolts (one on each side) and attach washers and bolts.

Top toilet cover (recycled plastic)

The top cover is also made from 100% recycled farm waste plastic.

Drop the cover into place, ensuring the wooden support runs underneath, towards the front of the cabin.

Inner step

The inner step is placed across the two supports in front of the toilet cover. The holes for the bolt are towards the front of the cabin.

Secure in place using **two 80mm** bolts from the top, and secure with washers and nuts from below.

The step is open to the front to enable male users to stand (putting their feet under the step) and be closer to the toilet to urinate.

Tightening the nuts and bolts

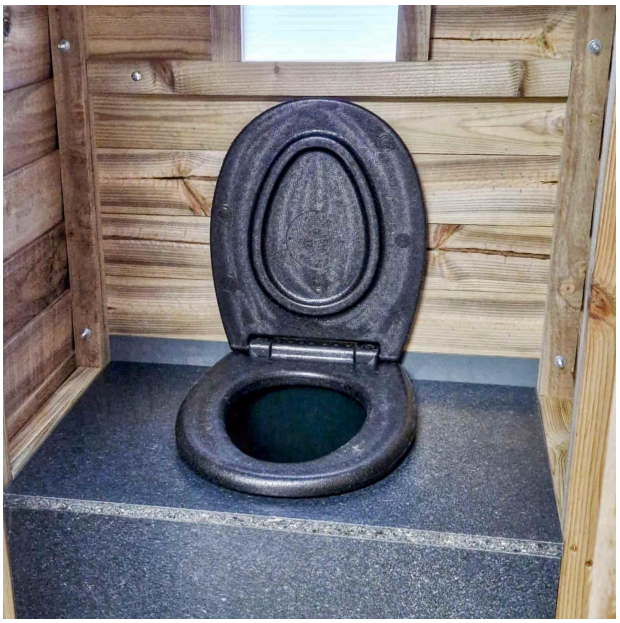
Now that the basic structure is complete, check that everything is ‘square’ by ensuring the floor is level (horizontal) and that all the walls are vertical. Check the door opens, closes and latches OK.

You can now fully tighten all the nuts and bolts to make the structure rigid and secure.

As there are quite a few to remember, here’s a quick checklist of all those fittings:

- ☐ 4 on each side wall, securing the wall to the floor (8 in total)
- ☐ 6 on the rear wall (3 on each side)
- ☐ 10 on the front (5 on each side)
- ☐ 6 on the roof (3 on each side)
- ☐ 2 on the front plastic toilet cover
- ☐ 2 on the inner step

Fitting the seat



The high-density polypropylene seat comes with two screws (the seat & fittings are located in the GT120 Starter Kit main box).

Place the two rubber washers under the seat to elevate it slightly (it needs a little clearance once the ‘chute’ to the composting container is fitted.

Making sure that the seat is right back, touching the rear wall, and is centred over the hole in the top toilet cover, screw the seat in place.

The screws should go through the hole in the rubber washer and should easily screw into the recycled plastic.

Don’t over tighten the screws. Fit the screw hole covers if desired.

Part of the waste chute will be visible at the front when you lift the seat lid - this is to be expected and is due to the style of the polypropylene seat (thinner at the front).

The waste chute can be trimmed with a saw so only 2cm protrudes into the waste container.

Flue supports

The pre-formed vent pipe is held in place using the two supplied plastic wrap-around supports. Each support has two fixings.

From inside, locate the two sets of two holes and insert the 50mm bolts.

Fit the two support brackets on the pre-formed vent pipe. From the outside, offer the support brackets up to the protruding bolts and loosely secure with a washer and nut. It can be helpful to have someone inside the cabin to keep the bolts in place until the washer and nut is on.

Once you're happy with the final position of the vent pipe, and the height (check the fit against the WooWoo GT container with flexible connector, you can tighten the nuts.

Attaching the wind fan

Place the spinning wind fan into position on the top of the flue. It's weight will hold it in place.

Getting it ready for use

There may be a few components, shipped inside one of the WooWoo GT containers, that you **will not need** with the WooWoo Loo GT Compact Cabin - these include a pair of wood rails and metal pipe support brackets.

The manual included with the containers is designed for self-build users and may contain spurious information. The document you are reading now will contain all the information you need to know!

Overview of the WooWoo GT composting toilet starter kit

The WooWoo GT composting toilet starter kit is an amazing off-grid composting toilet that, due to the clever and patented non-mechanical double base, enables **intelligent moisture control** to provide the ideal conditions for composting to take place within the containers using completely natural processes. This means you don't have to separate the urine from other materials (which can make the toilet more difficult to use), but at the same time, don't create a container of smelly slurry!

The bacteria behind the composting process are present in the air around us and will very quickly find a home and start to work inside the WooWoo GT container. As they do their work, they remove many of the odours and consume much of the liquids (up to 95%).

The mechanical wind vent will spin in the slightest breeze and create an upward air flow from the container, removing excess moisture and odours from the toilet, and ensuring the user has a pleasant experience.

People just use the toilet as they would a regular one, except there is no flush and no water involved! Because it doesn't use a urine diverter, it's so easy to use - males can stand up to urinate or you can sit on the toilet in any comfortable position.

When the first container is full, it can be easily removed and swapped for the second container. The first container is now left for a further period of time (ideally 6 months) so that when emptied, **you are only handling finished, safe and sweet-smelling compost**.

Whilst most of the liquids are either evaporated or consumed within the composting process, there will be some outputs depending on the ambient temperature, amount and type of use. This 'leachate' will typically be under 1 litre per day and can be dealt with in one of the following ways:

1. Where possible, run the leachate into a small soakaway pit behind the toilet
2. Collect the leachate in a 10 or 20-litre container, buried in the ground behind the toilet for later disposal
3. Run the leachate through a GEO-TRAP nutrient filter (available through WooWoo) which will remove the majority of the nitrates and phosphates so the remaining liquid can be run around the roots of trees and bushes

Capacities

Each of the containers with the WooWoo Loo GT Compact has a maximum physical capacity of 120 litres. This translates to around 200-220 'poo' uses per container and almost unlimited urine visits.

We've assumed filling one container over a six month period, so the two containers would fill over one year. Used this way, the contents will be starting to compost whilst the container is still in use.

However, there are several factors to be aware of that can affect the real-world capacity:

1. As composting takes place, the volume of the mass can reduce by up to 50%, creating more space within the container. Anything that negatively affects the composting process will slow this reduction down and therefore potentially reduce the capacity.
    a. Ambient air temperature - composting is suspended in temperatures under 8°C. You can still use the toilet and composting will start again as soon as it's warm enough!
    b. Too dry - composting needs moisture and if it gets too dry it will stop. It's a common mistake to use **too much** dry cover material. We have some great thoughts on ways to combat this - see later sections!
2. Non-typical use - installations where the use is generally more urine than typical, may benefit from additional dry cover material
3. Periods of high-intensity use

If you need additional capacity, you can either purchase 'spare' containers (available on our website: https://www.waterlesstoilets.co.uk/toilets/woowoo-gt-spare-container/) or empty the containers before the end of their composting journey and allow the contents to compost elsewhere.

Getting the container ready for use

To ensure the two-way movement of moisture through the base of the WooWoo GT, it's important to set it up right each time you bring an empty container into service.

Follow these simple instructions to get your WooWoo GT ready for use:

1. Using your chosen dry cover material (e.g. sawdust, wood shavings, chopped hemp fibre etc), pack it firmly into the 'legs' in the double base
2. Lower the base into position in the 'in use' container and continue to add a 5-10cm (2 - 4") of the cover material over the whole base

After every emptying, retrieve the base and remember to add a new layer of dry, organic material to the base before use, paying particular attention to the legs as these provide the conduit that enables the capillary action.

You will have two containers - one will be **in use** and have a lid with a large central hole, whilst the other will have a ventilated **composting** lid.

One set of wheels is supplied - just lift up the rear of the container you want to move and slide the wheels under to move it.

In the photo (left), we've used **fine wood shavings**, commonly sold as animal bedding.

Add a further layer of your cover material over the whole base.

With the cover material in place, put the **in-use** lid on (the one with the large hole for the chute) and move the container into position from the rear of the cabin, sliding it forward as far as it will go.

From inside the cabin, lift up the seat and place the chute through the hole, manoeuvring it until it slides into the top of the WooWoo GT composting toilet lid. The fit is quite tight and you may need to move the composting container forward or backward slightly.

With the chute pushed all the way down, so that the flange is now on the top surface, the seat can be lowered.

Attach the short flexible 110mm vent pipe connector to the outlet on the top of the WooWoo GT composting toilet lid and check that the other end is in a good position to connect onto the bottom of the flue.

Adjust the overall height of the flue if needed.

Finally, attach the leachate pipe to the outlet on the rear of the composting container and run this to your soak-away pit or leachate container.

Your WooWoo GT composting toilet is now ready to use!

Using the WooWoo GT toilet

The WooWoo GT toilet can be used almost like any normal water toilet. Toilet paper can be thrown into the toilet because it composts together with the toilet waste. However, all non-biodegradable waste, such as sanitary towels containing plastic should be placed into a separate bin.

To enable composting, the WooWoo GT needs to have an organic cover material added - this can be done in one of two ways, depending on the requirements of the owner or site:

1. The first option is that after each solid/poo use, a handful or scoop of organic covering material should be added to the toilet. Nothing needs to be added after a wee/urine use.
2. The second way is that the owner adds the organic covering every few days or every week, so the user doesn't have to do anything.

The most common error made in using the WooWoo GT is that people add too much cover material - this will reduce the overall capacity!

The composting process and capacity of the toilet can be enhanced by levelling and mixing the compost occasionally.

Servicing

When you want to empty the WooWoo GT, first lift the flexible part of the ventilation pipe off to the top of the toilet.

The waste chute is pulled up from inside the cabin so that the end is out of the container. Slide the toilet out from under the cabin, if necessary, disconnecting the

leachate pipe. We provide a ‘bung’ to stop any liquid coming out of the WooWoo GT whilst you move it.

In most cases, the WooWoo GT 120 can be manoeuvred by one person, provided the ground is level and firm. Seek assistance if necessary.

If you now want to use the WooWoo GT spare container, the full container is set aside and closed with the spare container lid. You can remove the wheels and fit them under the other container.

The waste in the full container can be left to decompose. If you do not have a spare container or need to reinstate this container, you can transfer the contents into a compost bin or another suitable container and allow it to naturally turn into compost.

Don’t worry about cleaning the inside of the container too much - some compost will act as a booster or inoculant to start the next batch!

Toilet waste should never be emptied into the environment without composting. Because of the efficient way that the WooWoo GT works, the contents are ready to be used as an eco-fertiliser after 6–12 months of composting, depending on the climate. Where possible, we always recommend batch composting within the WooWoo GT spare containers as these are safe, easy to use, involve minimal handling and promote good air circulation.

Use of compost

Fully composted toilet waste is recommended to be used only for ornamental plants, or around shrubs and trees, particularly if the toilet has some public access. If used in a vegetable garden, make sure the compost is completely decomposed by extending the compost time to at least 18 months - this will allow the compost to fully ‘mature’.

Please note that compost from the toilet is generally acidic, especially when fresh, so it’s good to add about a third of sand, soil, or other organic matter into it before using it as a fertiliser.

Accessories

WooWoo carries a range of accessories and supplies for your WooWoo GT. Please visit our website or call us for assistance.

Enjoy your WooWooLoo GT Compact and let us know if you have any questions!

Maintenance of the wooden cabin

The WooWoo Loo GT Compact cabin is made in the UK from pressure-treated timber. The treatment process is designed to protect the timber for at least 10 years against decay, provided it has not been allowed to stand in water/moisture.

Further treatments of the outside cladding and especially the floor bearers will significantly prolong the life of the cabin as well as improve its aesthetics.

We suggest using a wood preservative treatment every 2-3 years on the floor bearers. The rest of the cabin can have a suitable solid colour paint or translucent tinted treatment applied every few years.

Every year, check the integrity of the floor bearers, the floor, walls, door and roof. Apply some oil or grease to the metal hinges, latches and locks to keep corrosion at bay and ensure they operate smoothly.

Warranty

The wooden WooWooLoo GT cabin comes with a one-year warranty covering manufacturing defects. However, wood, being a natural product, will expand and contract with changes in temperature and humidity. The warranty does not cover splits or knots shrinking/falling out, ripples that may appear in the roofing or damage/failure due to extreme weather.

Any amendments or alterations to the building or the installed contents not made by WooWoo Waterless Toilets, may affect the warranty.

All warranties are subject to ‘reasonable use’ by the customer, an expectation that the cabin has been assembled, located and operated as described in these instructions and that any essential or regular maintenance required has been performed.

WooWoo’s liability under this warranty is limited to the supply and replacement of the affected parts of the cabin. The customer will be required to fit the part themselves or arrange for them to be fitted at their own expense.

For more information on the warranty, please visit:
https://www.waterlesstoilets.co.uk/warranty-information/ or get in touch with us.