

CM14 Next Gen.

INSTALLATION MANUAL

AUS|NZ

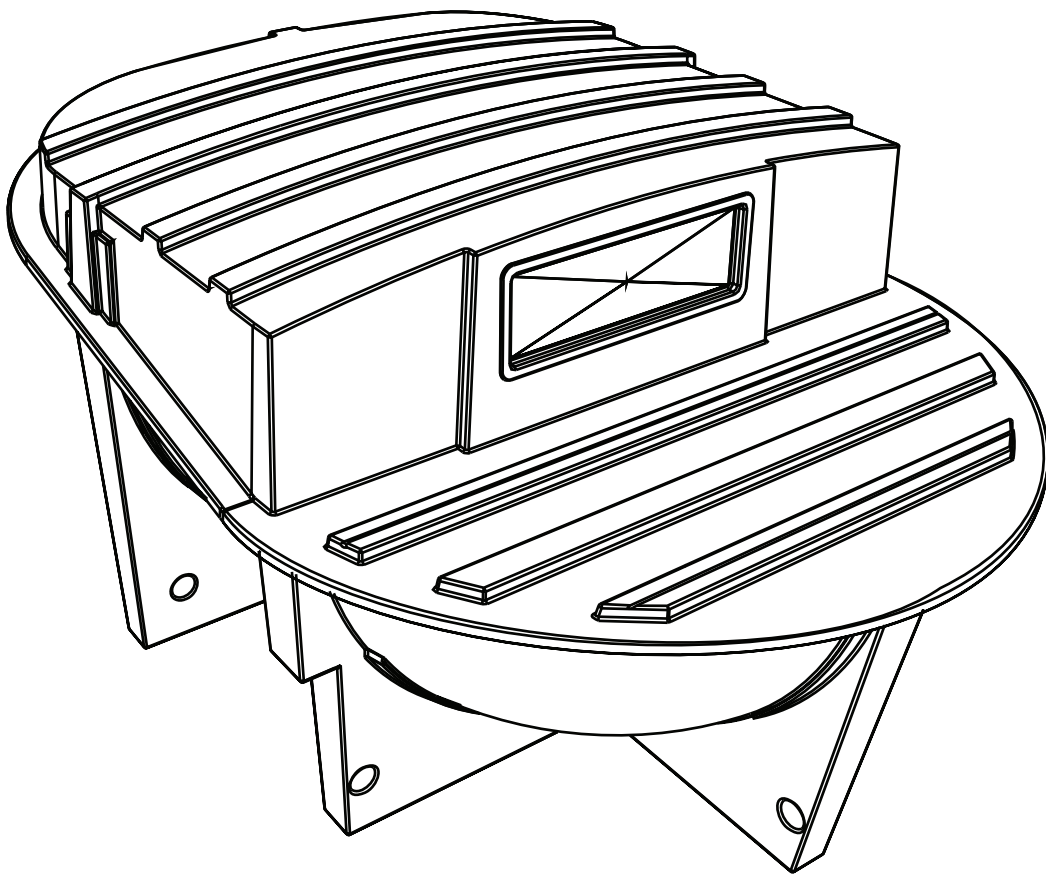
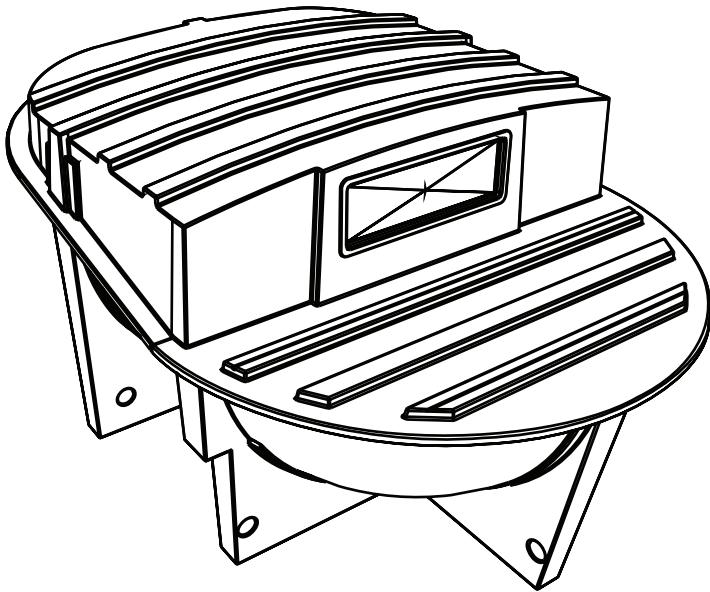


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CM14 TANK ITEMS



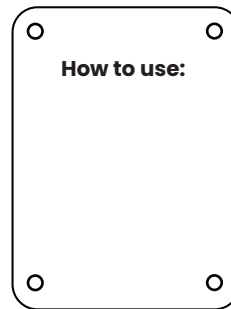
1x CM14 TANK



1x MAINTENANCE RAKE

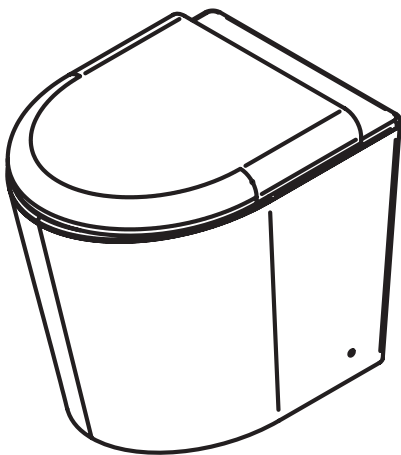


1x SILICONE SEALANT

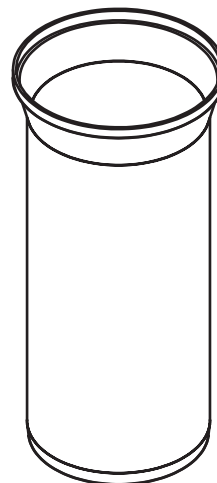


1x 'HOW TO USE' SIGN

PEDESTAL ITEMS



1x PEDESTAL & TOILET SEAT



1x WASTE CHUTE



12x DEKTITE SCREWS

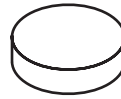


1x DEKTITE #6

DRAIN ITEMS



2X MI CONNECTOR Ø50MM



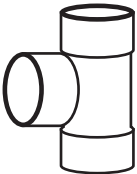
1x THREADED ACCESS CAP Ø50MM



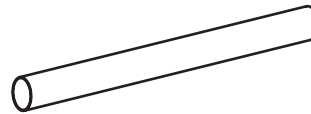
2x 45° BEND Ø50MM



1x SOCKED SLOTTED PIPE Ø100MM 2M L, WITH LIT REDUCER Ø100-50MM



1x TEE Ø50MM

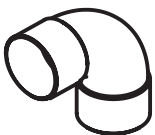


1x PVC DRAIN PIPE Ø50MM

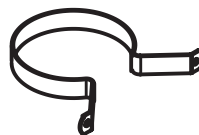
VENT ITEMS

Domestic Installation: Ø100MM PIPING

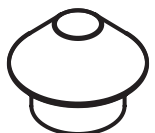
Commercial Installation: Ø150MM PIPING



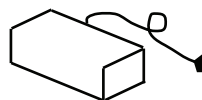
2x 90° BEND



2x VENT SUPPORT BRACKETS & 4 SCREWS



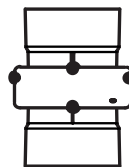
1x VENT COWL



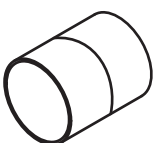
1x TRANSFORMER



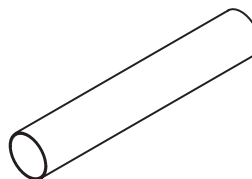
1x WALLACE SEAL



1x FAN IN HOUSING WITH BUG MESH



2x SLIP JOINERS



3x VENT PIPE SECTIONS

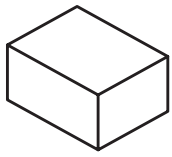


2x LIT REDUCER Ø150-100MM (FOR COMMERCIAL ORDERS)



1x DEKTITE #4 WITH 12x DEKTITE SCREWS

CONSUMABLES



BULKING
AGENT



MICROBES

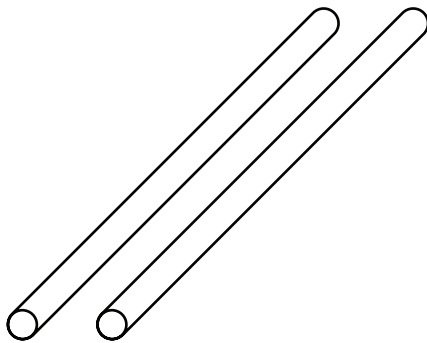


SPRAY
BOTTLE

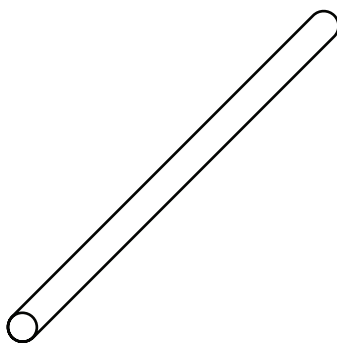


ENZYME
CONCENTRATE

OPTIONAL PACK FOR BURIED INSTALL ONLY



2X PIPE Ø50MM
1.5M LONG



1X PIPE Ø50MM
1.2M LONG

1x DEKTITE

TOOLS REQUIRED



Screwdriver
(Phillips/plain)



Spade



Spirit Level



Caulking gun



Scissors/Knife



Drill



PPE



Ladder



Jigsaw



Tape Measure



Marker

MATERIALS REQUIRED

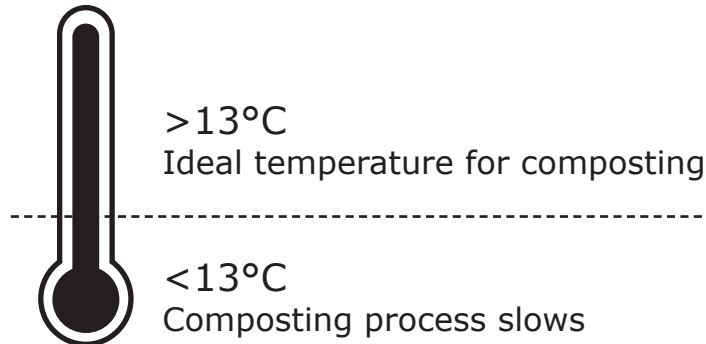
- Water to wet starter material.
- Additional 50mm PVC pipe (coupling and bends if absorption trench is to be located some distance away from tank). Additional pipe bends if needed for vent pipe.
- In poor soil conditions, extra length of trenching arch or agi drain may be required.
- Drainage gravel for excess fluids drain.

INSTALLATION SUMMARY

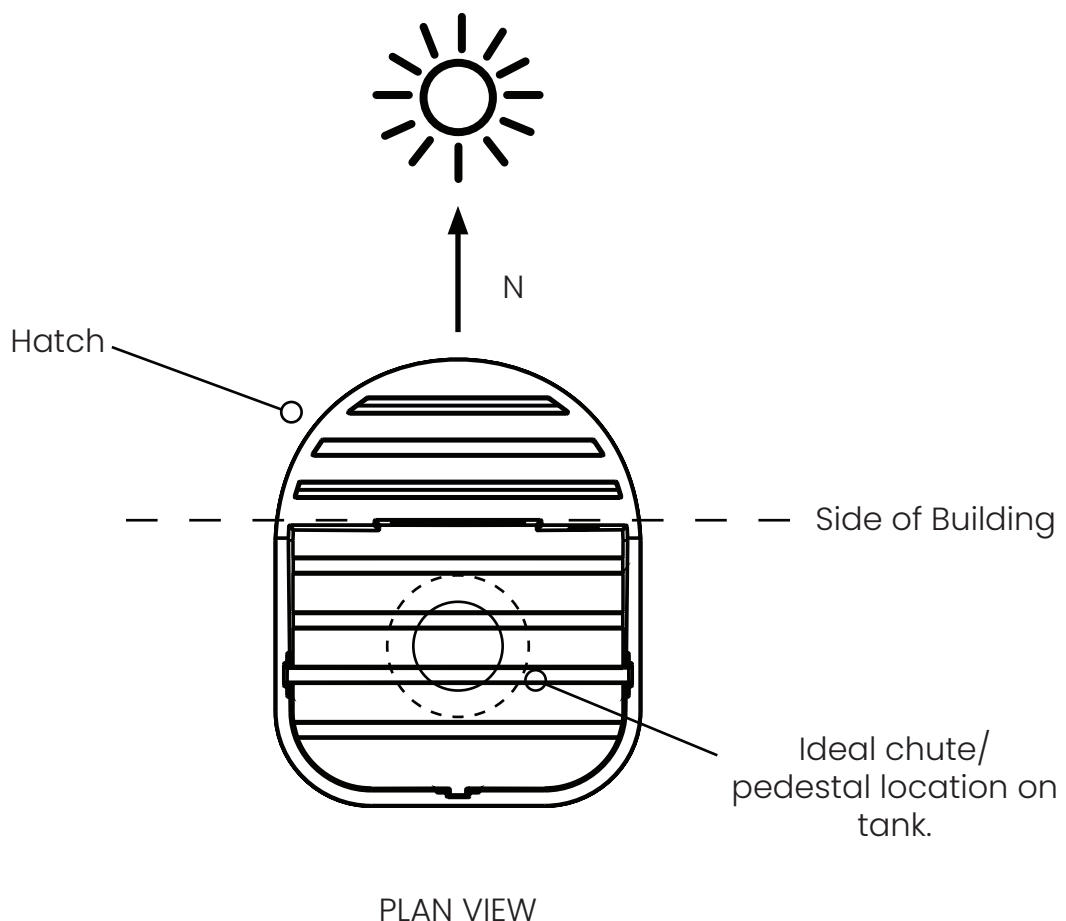
1. Ensure the tank is in a position so that the toilet chute will be perfectly straight over the tank below.
2. Ensure the tank foundation is solid with a concrete, sand or crusher dust bed.
3. Mark and cut holes in the floor for the toilet chute.
4. Mark and cut holes in the tank top.
5. Insert toilet chute and pedestal.
6. Install the vent system.
7. Install the liquid end-product drain pipe and absorption/transpiration trench.
8. Connect fan to power source.
9. Check everything is sealed.
10. Place a starter-bed of suitable bulking agent (e.g. wood shavings) in the unit.
11. Wet bulking agent before use of toilet.
12. Add starter bacteria after 14 days of use.

CONDITIONS

Any decomposition process works better where temperatures are warmer. Over the winter months the composting process slows or can even temporarily stop where temperatures in the pile drop below 4°C.



As the composting tank is black, it will absorb heat from the sun. **Simply by installing the compost bin on the north side of the house will make a dramatic difference to the composting process.** In addition, a translucent hatch and enclosure can be installed around the compost bin. In extreme alpine conditions it may be necessary to insulate the tank itself in addition to the above.



POSITIONING THE TANK

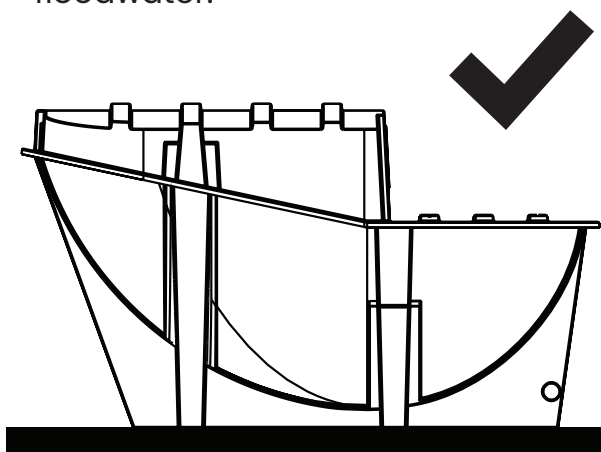
If there is very little room between the top of the tank and the floor of the building, the order of the installation can be changed as follows: Firstly, cut the hole for the pedestal in the floor of the building (refer to page 9, Toilet Chute & Pedestal). Position the tank under the hole and then mark the position of the hole onto the tank. After the tank has been marked, it can be removed from under the building. Cut the hole in the tank and fit the chute collar before placing the tank back into position.

- Check the position planned for the toilet chute. The toilet chute must be positioned over the top of the compost tank. For less maintenance of the compost pile, the optimum location for the chute/s to enter the tank is mid-width, in the rear half of the tank. A clearance of at least 150mm from edge of chute to edge of tank-top is desirable to avoid rapid build up of the pile against the sides.
- Check there are no major support beams, pipes or electrical wire that are in the way of the toilet chute.
- Where mains power is to be used, check that a power point has been installed near the location for the ventilation fan.
- Locate where the excess liquid drainpipe and tench is to go and take this into account when positioning the tank.

TANK SUPPORT

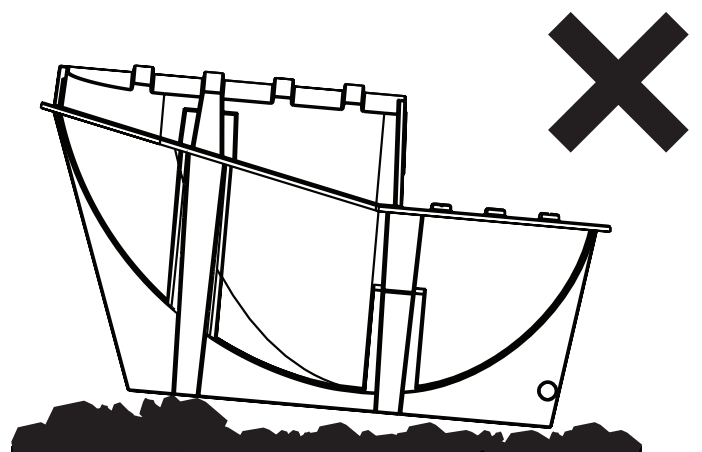
The composting tank must be supported by either packed earth with the tank placed on a base of sand, or a wooden frame on a solid base (e.g. a concrete slab). Insulation between the tank and the concrete slab will reduce heat loss and aid the composting process.

NOTE: The tank and enclosure should be protected from surface water and floodwater.



Smooth Ground

50-75mm bed of sand, crusher dust or similar solid sub-soil

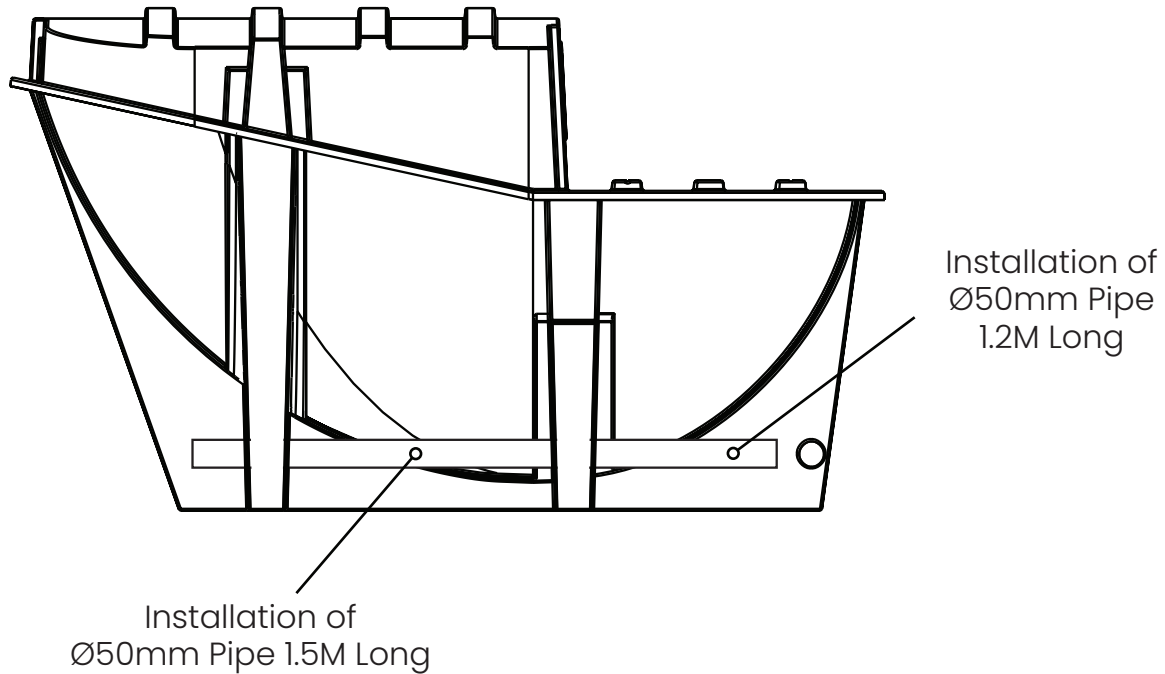


Uneven Ground

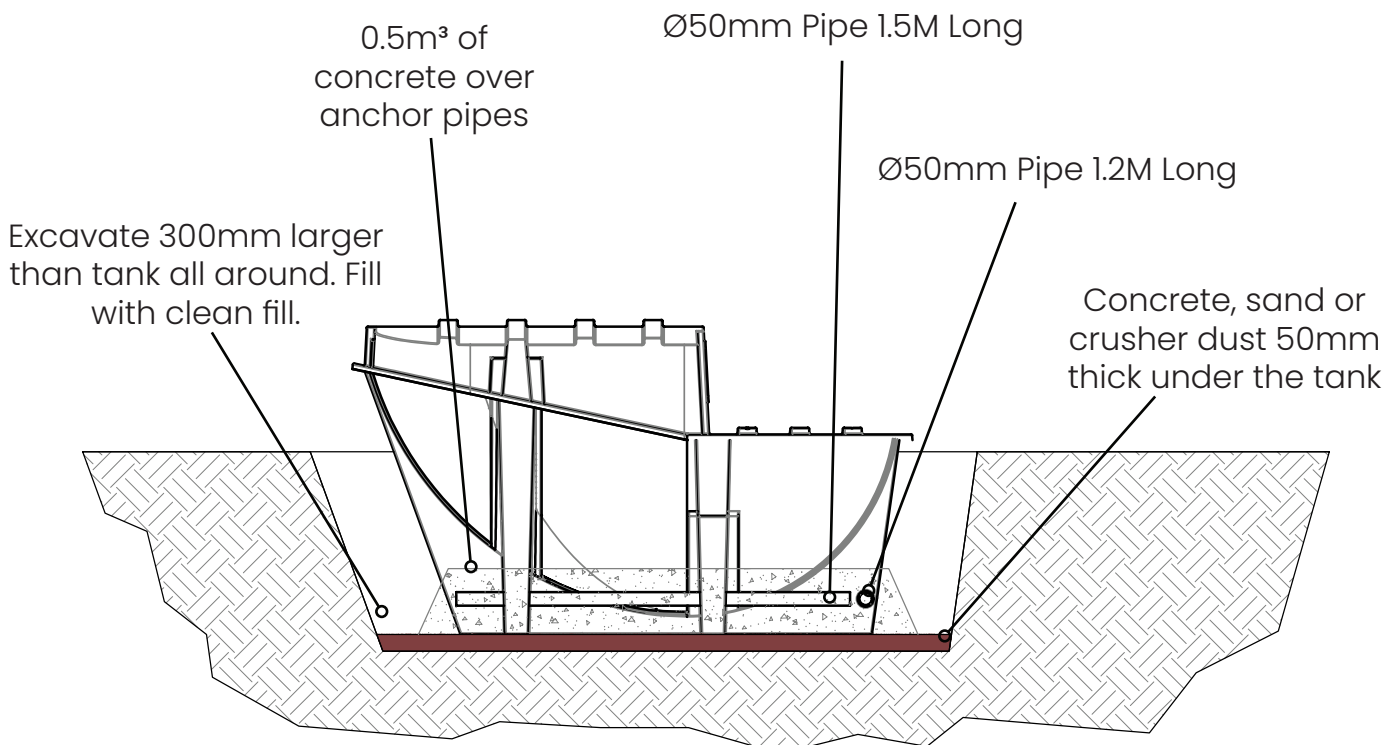
FOR BURIED INSTALL SYSTEM ONLY

For a buried system it is required to hold the tank down with galvanised rods. These are slid into the slots provided on both sides and the front of the CM14 tank.

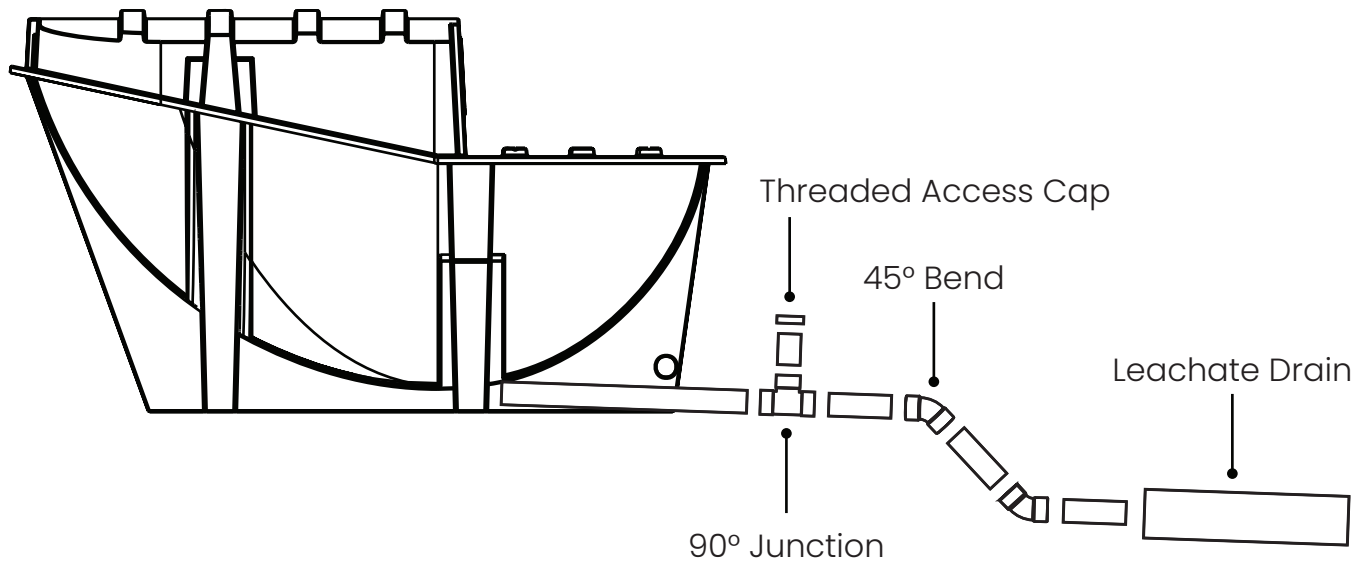
LEFT SIDE VIEW



LEFT SIDE VIEW SECTIONAL IN GROUND

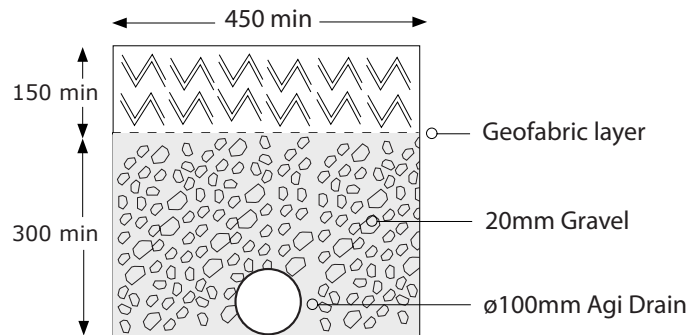


LEACHATE DRAIN INSTALLATION

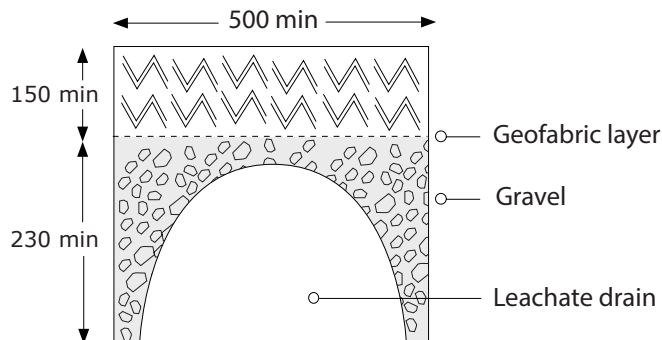


Drain Options

Socketed Slotted Pipe

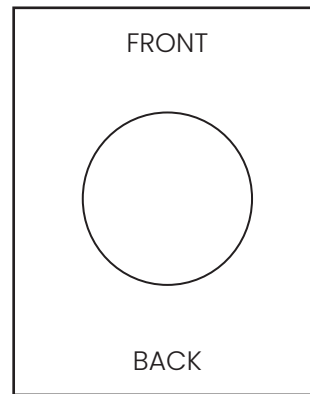


Trench Arch

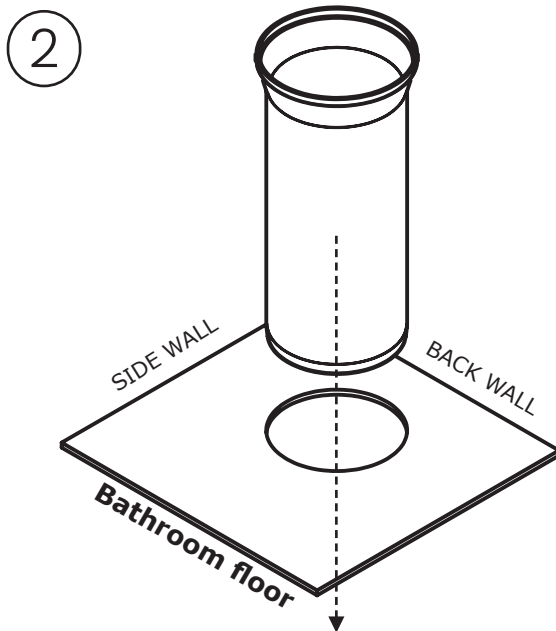


TOILET CHUTE & PEDESTAL

- 1 Please refer to the separate pedestal installation manual for instructions on how to locate the pedestal in your bathroom.

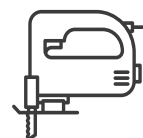
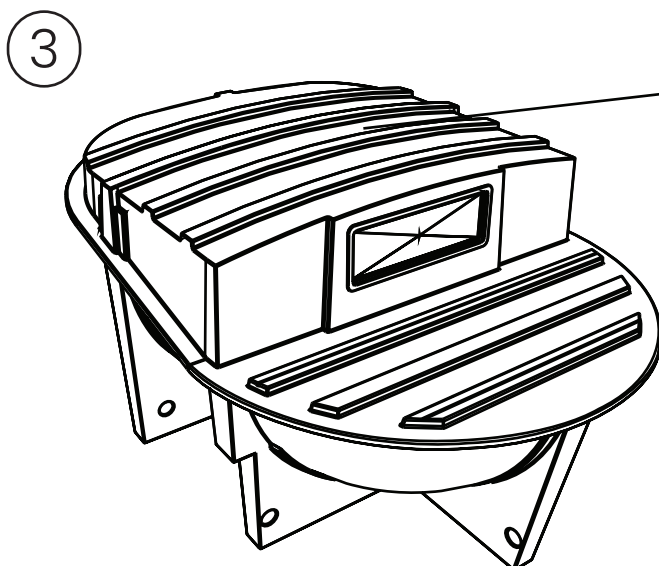


A3 Template to cut chute hole at the correct size.



< 5mm of sideways play around the hole.

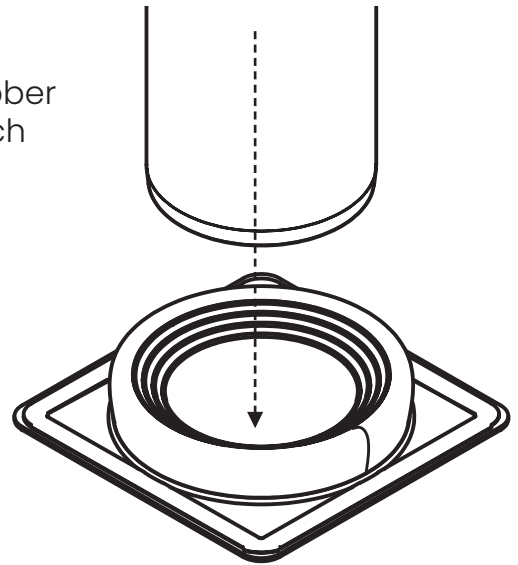
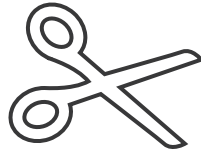
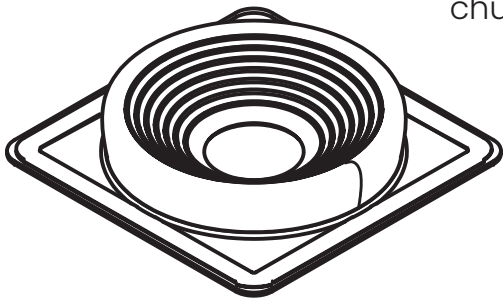
Note: If the floor of the building is high above the top of the tank a chute extension piece/s may be needed. Extra lengths are available from your supplier. Joints should be screwed with short self-tapper screws, and sealed with silicon. If more than 2 chutes are joined then additional support straps or brackets are needed to support their weight from the building frame, instead of hanging only by the top chute.



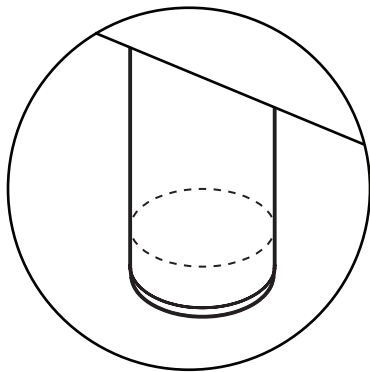
Using the outside of the toilet chute as a template, mark and cut the chute hole into the top of the tank.

4

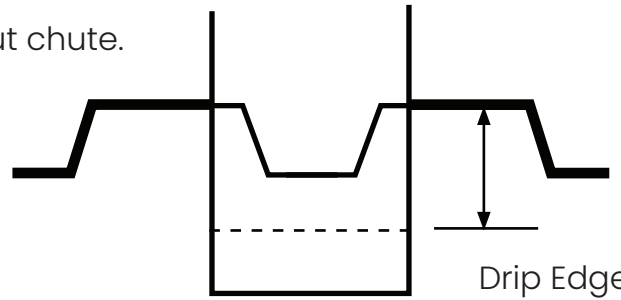
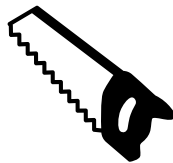
Enlarge the hole in the rubber chute collar so it will stretch snugly around the toilet chute without gaps.



5

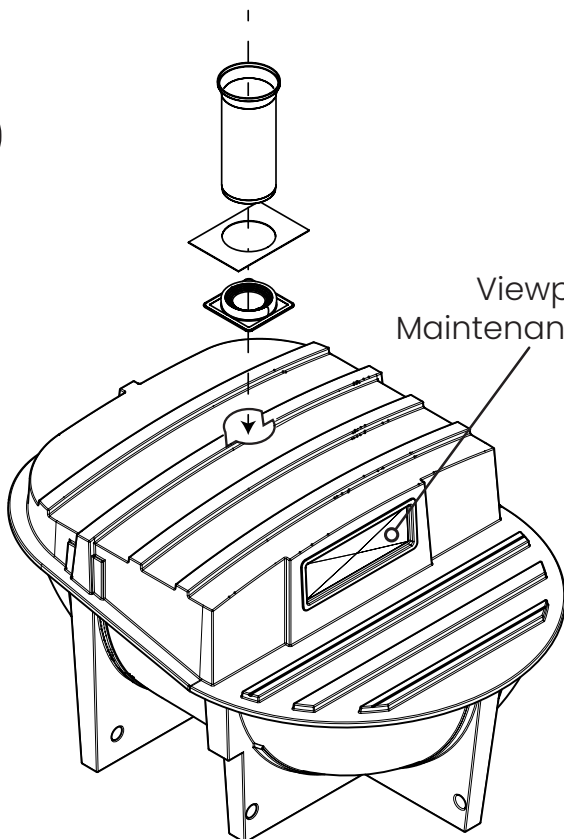


Mark and cut chute.

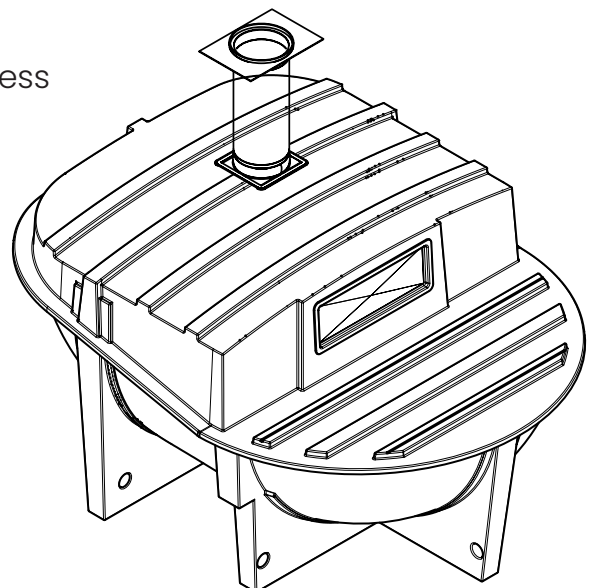


SECTION VIEW

6

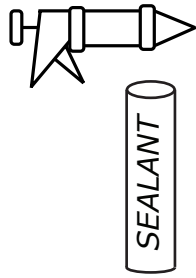


Viewpoint/
Maintenance Access

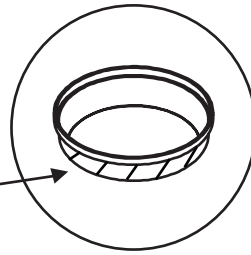


7

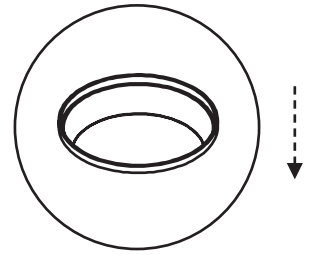
Lift the toilet chute slightly and put sealant between the toilet chute and the floor then **press chute down** again to seat firmly onto the floor.



TOP FLOOR



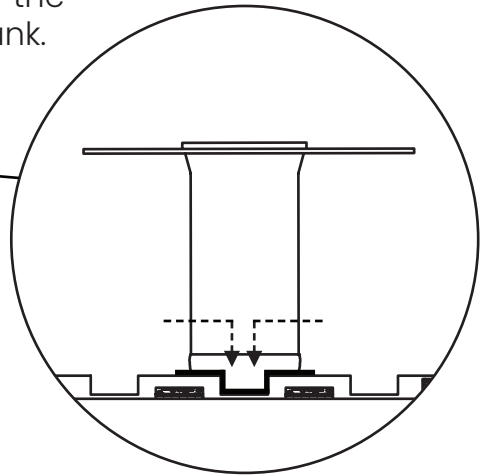
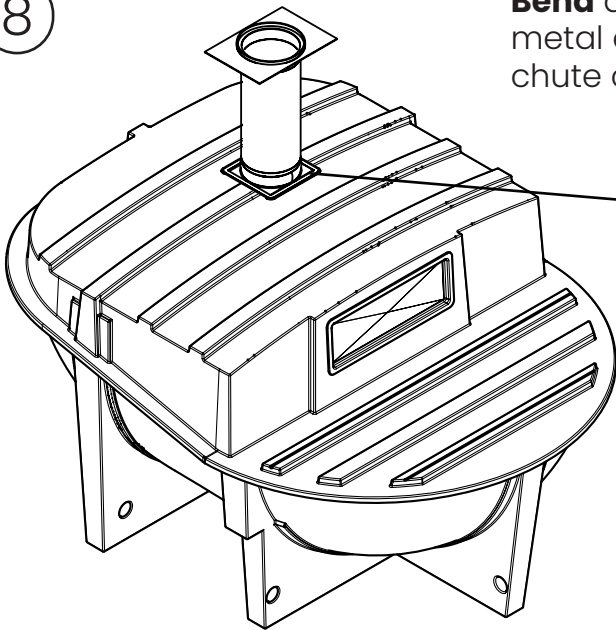
Lift up



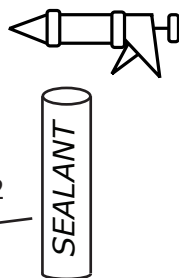
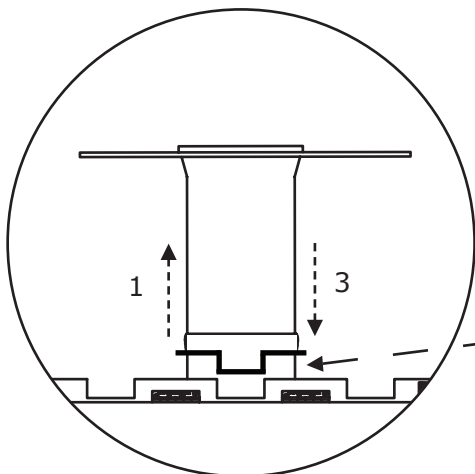
Push down

8

Bend and move the metal edging strip of the chute collar to the tank.

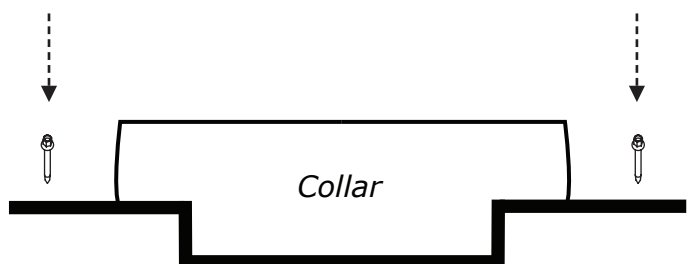


9



Run a bead of silicon sealant around the underside edge of the collar.

Using the 1/2 stainless screw provided, secured the collar of the tank top by screwing through the metal edging strip.

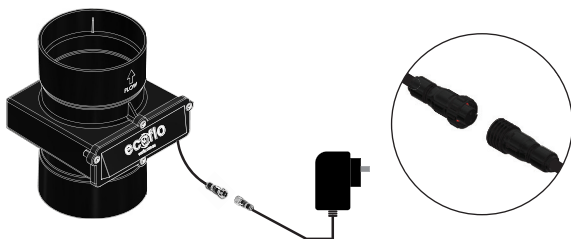


POWERING YOUR FAN

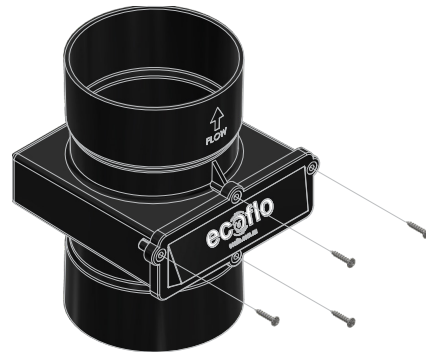
A 120 /12 volt regulated transformer is included to run the fan from mains power. The positive wire the transformer is marked with a white line. The fan has anti-polarity protection and would not run if connected incorrectly. If you have a solar panel, refer to the instructions provided with it.

Connect the fans to the transformer as follows:

- 1** If the housing has external IP plugs, simply connect the two plugs and screw the IP cap over the port to secure. If the transformer cables have wire stripped ends, proceed to **step 2**.

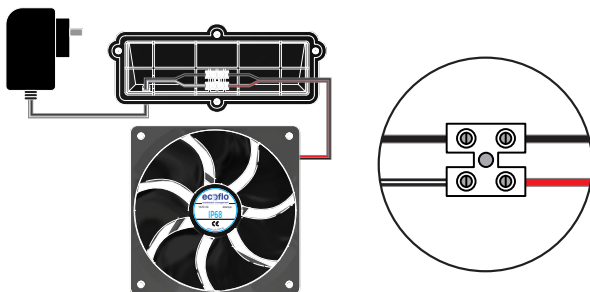


- 2** Unscrew the fan housing cover.



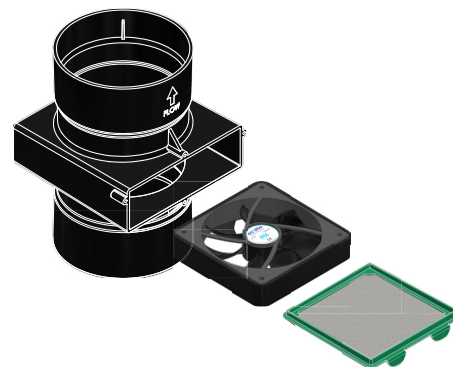
- 3** Attach the transformer cables to the terminal block as shown below.

Black to black (negative)
Red to black with white stripe (positive)

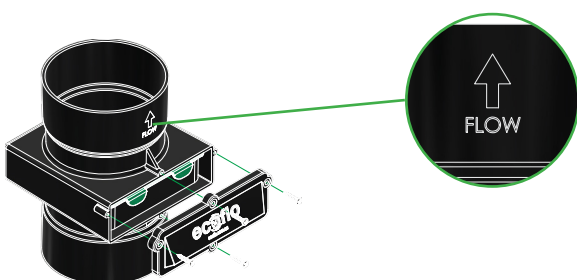


The fan has anti-polarity protection and will not run if connected incorrectly.

- 4** Insert the fan with sticker facing up and fan mesh into the housing, with the fan mesh on top.

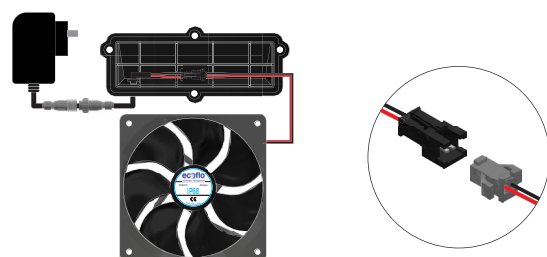


- 5** Test the fan. Airflow should be directed upwards, towards the top of the fan housing (see arrow). Screw fan cover back onto housing.



Replacing the fan:

For fans connected with IP plugs, disconnect the fan as shown below and replace. For those with stripped cables, refer to step 2-5.



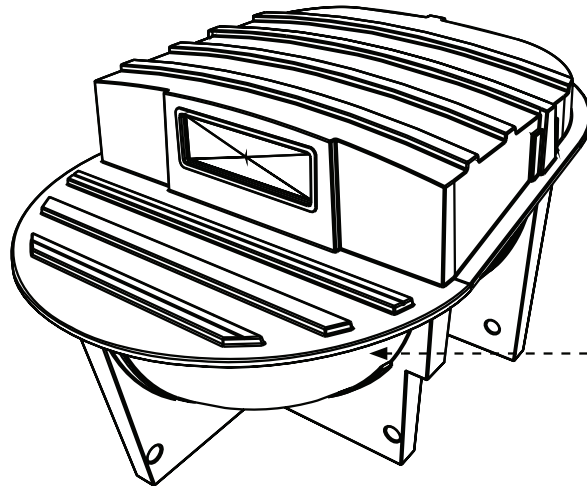
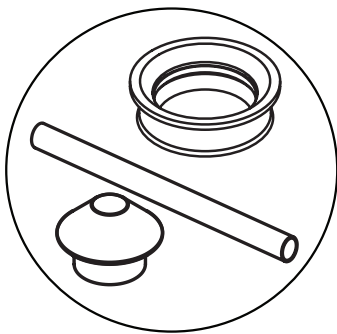
PEDESTAL INSTALLATION

See separate instruction manual for pedestal installation.

INSTALLATION OF VENTILATION SYSTEM

Note: As air flow is essential to the operation of the unit, **the fewer bends that are used when installing the vent system the better.**

1



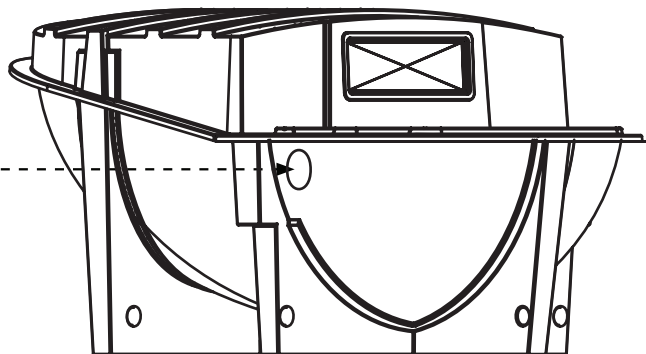
Plan the vent pipe layout.

NOTE: The hole for the vent pipe is best at the side of the tank, as far as practical from the nearest chute entry. Refrain from placing it along the front face as this can hinder opening of maintenance access.

2



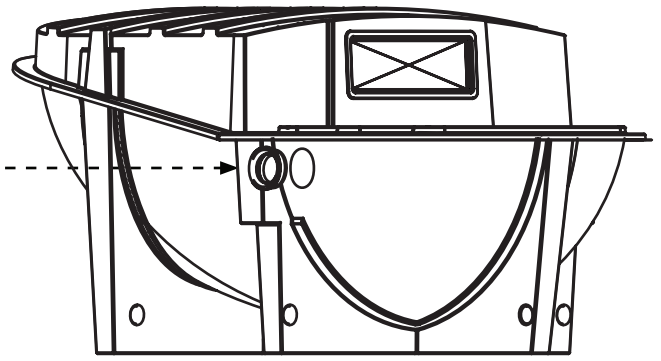
Cut hole for wallace seal.
Follow the diametre noted
on the wallace seal.



3

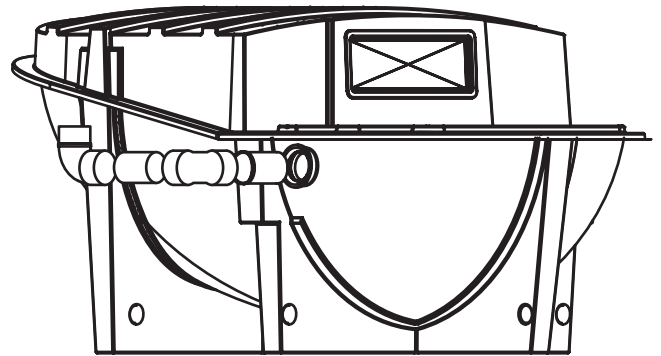
Secure Wallace seal into position.

Tip: Putting the wallace seal in hot water for 5 minutes can help when installing the PVC pipe.



4

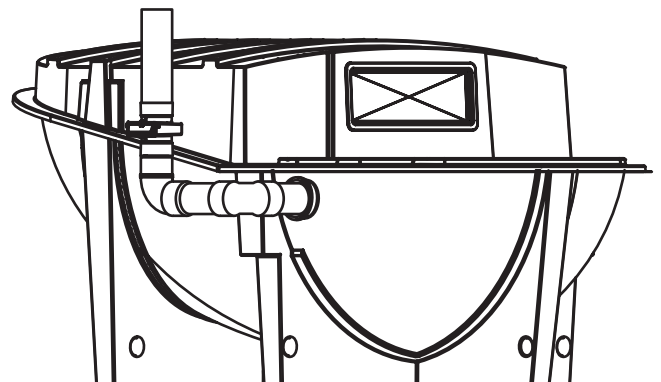
Secure pipe fittings according to building/roofing instructions. Complexity may vary.



5

Position the fan housing so that it can be easily accessed and secure with silicon.

NOTE: The fan should run 24 hours a day to continuously circulate air through the compost heap and minimise odour.

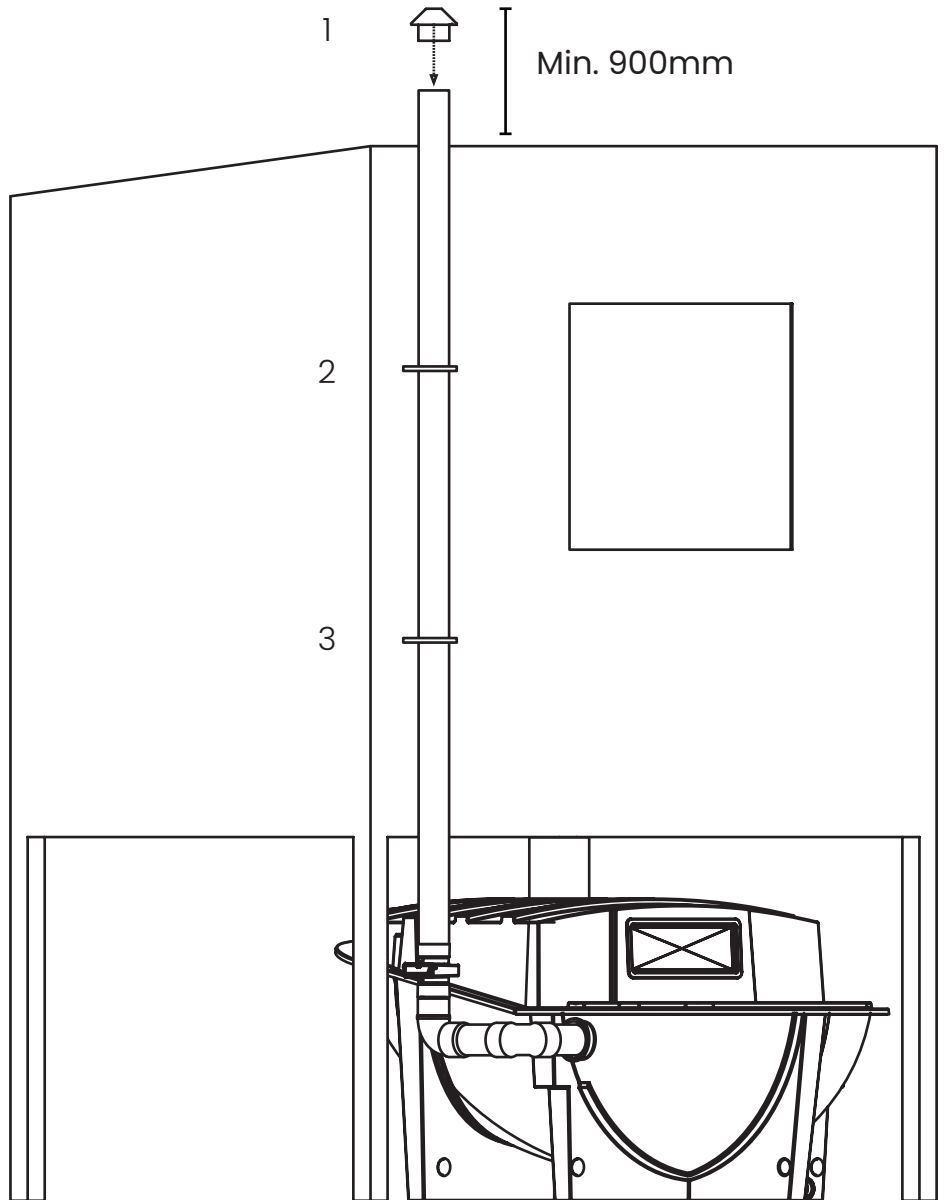


6

Install the vent cowl or optional turbo vent (1). Secure with 3 self-tapping screws.

7

Attach the upper section of the vent pipe. **The pipe should be supported against the wall** of the building with the brackets provided (2, 3). This configuration will vary depending on location of CM14.



STARTER-BED OF ORGANIC MATTER

SUITABLE BULKING MATERIAL



Wood shavings



Hemp

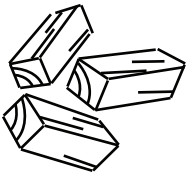


Dry Leaves



Peanut or coconut husk

NOT SUITABLE BULKING MATERIAL



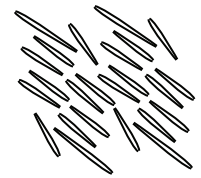
Large wood chips



Lawn clippings

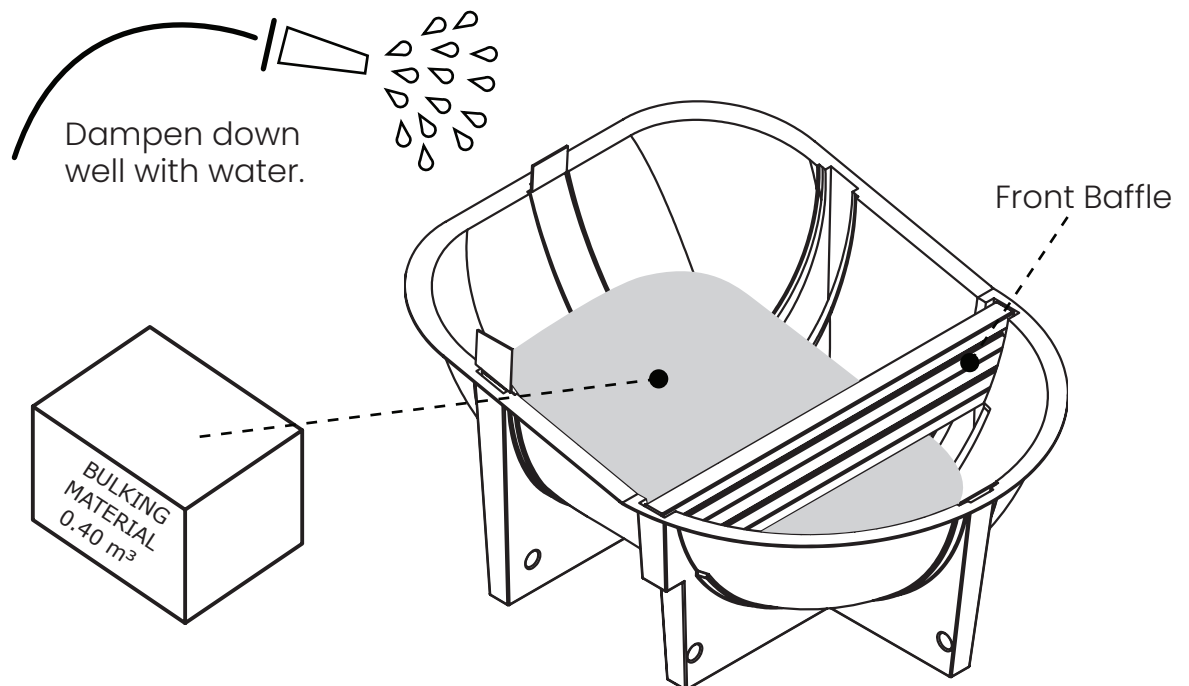


Fine sawdust



Sugar cane mulch

1 Starter bed of bulking material to underside of baffle.



2 INSTALLATION COMPLETE

CONTACT

The place of purchase is responsible for handling warranty claims and addressing product concerns during the warranty period.

AUSTRALIA



Ecoflo Wastewater Management

ecoflo.com.au

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info@ecoflo.com.au

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