

Material required:

- 1x M300 (or M350) composting tank
- 2-4x CL400 (or CL300) toilets
- 1x CK100
- Ø200mm ventilation pipe & clamps
- Wood chips (~500 litres)
- 2-4x Ø250mm discharge pipe
- 1x Submersible pump (optional)
- Garden hose (optional)

The M300 (or M350) consists of the following components:

- Lower tank part
- Upper tank part
- Upper hatch + screws
- Lower hatch + screws
- Floor supports
- 2x floor elements
- 4x washers + nuts/bolts
- Tap (for liquid removal)



Step 1: Planning & Preparation

See the diagram to the right.

The M300/M350 tank can be placed on the ground, or partially buried up to approx. 80cm.

It is important that the front and top hatches remain accessible for someone using a rake. The front hatch is used for compost removal while the top hatch provides access to the top of the compost heap, e.g. for equalising.

Typically one should allow for approx. 1m of space in front of the tank. There are no space requirements to the side or at the back of the tank.

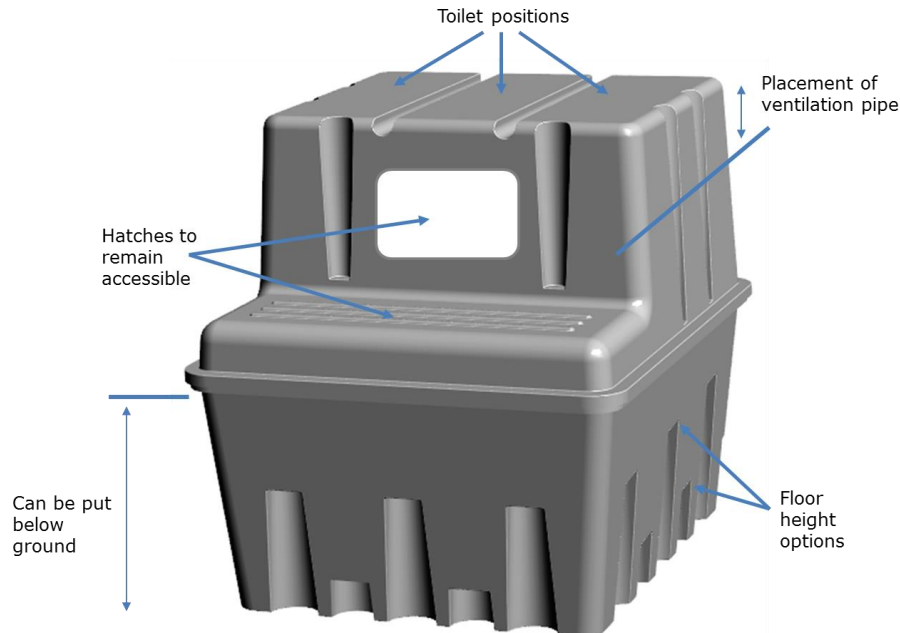
The CL300 and CL400 toilets are dry toilets, and need to be placed directly above the tank with vertical discharge pipes. See also step 2 for placement.

The connection of the ventilation pipe can be planned on any of the four sides at the top of the tank.

The tap for liquid removal shall be planned below the lowest point of the floor, and can be placed on any of the 4 sides of the tank.

When planning for fluid removal using a submersible pump, the exhaust pipe shall be planned to leave the tank above the highest point of the floor, and can be placed on any of the 4 sides of the tank. Do not forget to plan for an electricity connection for pump.

In the M300 tank configuration the floor elements are placed at the higher level while in the M350 tank configuration they are placed at the lower level (see engineering drawing for respective heights).



Step 2: Cutting pipe openings

The diagrams to the right show the top of the composting tank.

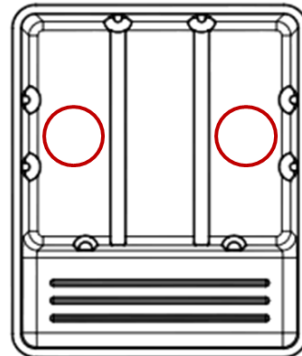
Clivus Multrum delivers the tanks without the openings for the ventilation and discharge pipes to allow maximum flexibility when installing.

The typical placement of the toilet discharge pipe openings is indicated with the red circles and depends on the number of toilets connected. However, if placement requires, it is not a problem to cut the openings elsewhere on the top of the tank as long as they align vertically with the toilets above.

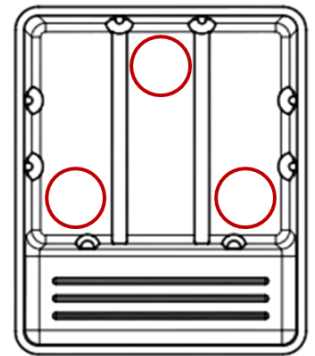
The ventilation opening should be cut at the top end of the side of the tank. See the diagram below indicating a typical placement.

Similarly for the discharge of the optional submersible pump.

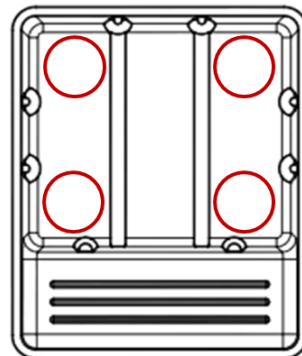
The openings can be cut a saw suitable for plastic cutting.



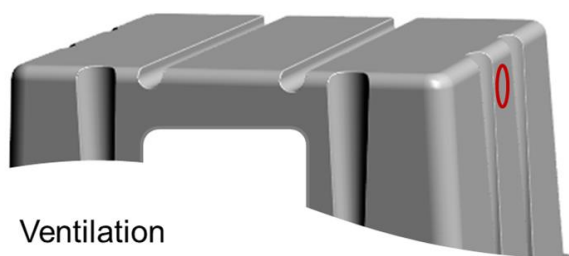
2 toilets



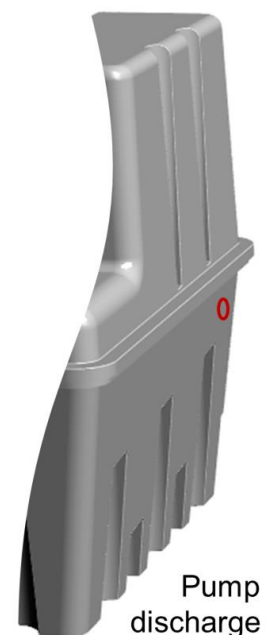
3 toilets



4 toilets



Ventilation



Pump discharge



Installation & Commissioning

M300/M350 – CL300/CL400 – CK100

Step 3: Placement of composting tank

The composting tank is self-supporting and can be placed directly on the floor without additional support or isolation.

In case the tank is partially buried it is important that the bottom of the tank is firmly above the water line to prevent it from floating.

- 1) Install the bottom part of the tank.
- 2) Place the floor supports.
- 3) Install the submersible pump (optional) and connect it to a circuit breaker according to the installation instruction provided with the pump. Ensure that the float switch can move freely.
- 4) Rest the floor elements (2) on top the supports
- 5) Place the top part of the tank on top of the bottom part.
- 6) Use the washers (4), nuts and bolts to attach the top and bottom part of the tank.

Note that the tank is not strong enough to support the toilets. The toilet needs to be supported by the floor or a bench.

Step 4: Discharge pipe

Place the discharge pipes and seal.

When using the CL300 and CL400 dry toilets, the discharge pipe shall be placed vertically.

It is important to fix the toilets' discharge pipes such that they do not risk falling inside the composting tank

Step 5: Toilet placement

CL300: Place the toilet on a bench to support it.

CL400: Place the toilet on the floor. Unscrew the top from the bottom part of the toilet (3 screws) to access to the screw openings (4) for attaching the toilet to the floor.

Ensure that the toilet's discharge is fitted inside the discharge pipe.

Step 6: Ventilation

Ventilation is important for a healthy composting process, and to avoid foul odours to enter the bathroom.

Cut the ventilation pipe at the place where the ventilator shall be placed. Join the pipe and ventilator on both sides.

Ensure a good seal to avoid false air draw.

Place, fix and seal the ventilation pipe onto the opening on the tank.

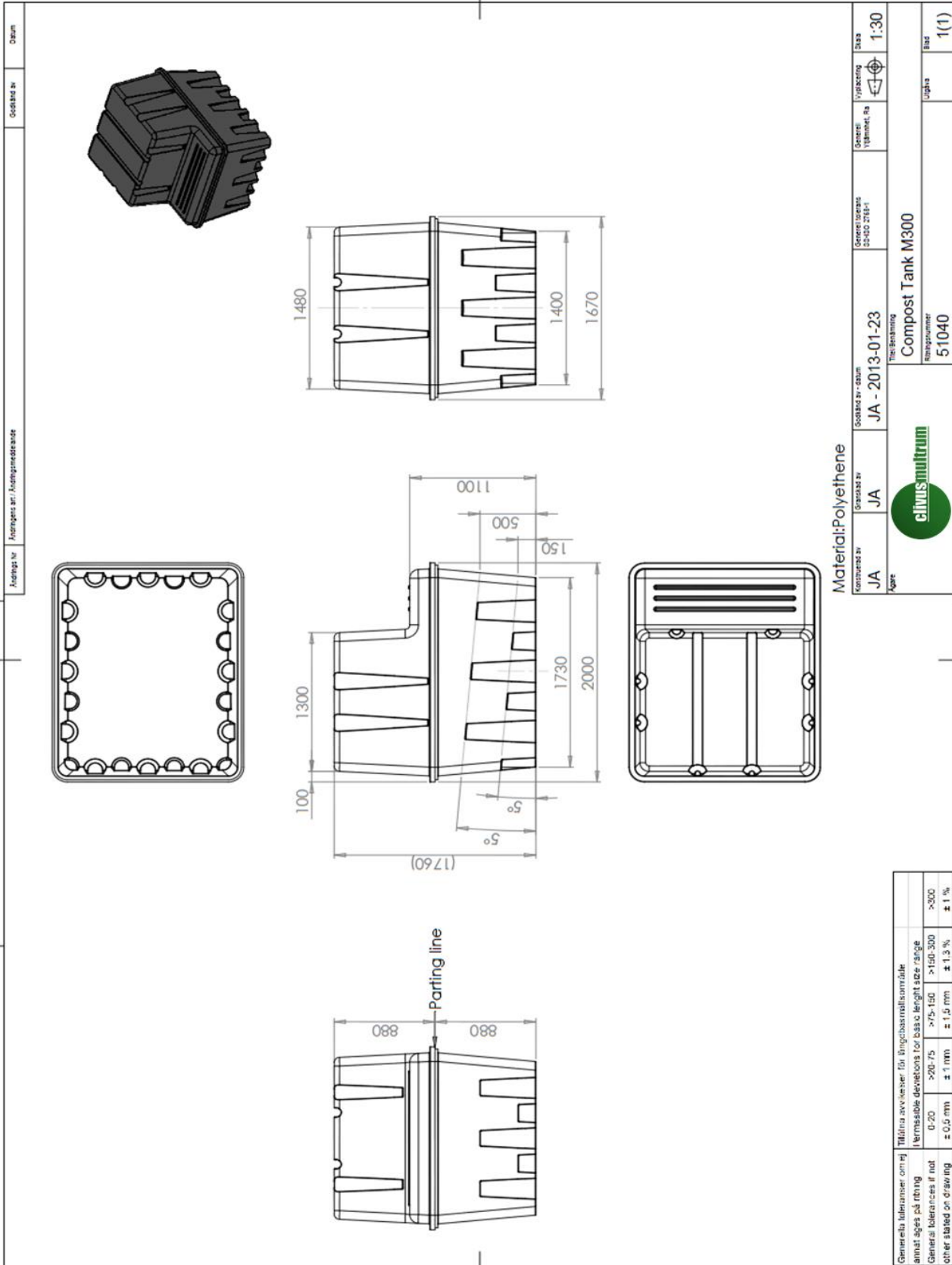
Connect the CK100 fan to a circuit breaker according to the wiring diagram that can be found on the inside of the junction box.

Step 7: Garden hose (optional)

For excess leachate removal using gravitation connect a garden hose to the tap at the bottom of the tank.

Step 8: Commissioning

Using the top hatch, fill the tank with approx. 500 litres of wood chips.



Material: Polyethene

Konstruktör av	Granskad av	Godkänd av - datum	Generell typbeteckning	Skala
JA	JA	JA - 2013-01-23	CL300 21041	1:30
Titel/Beställning			Generell typbeteckning	Skala
Compost Tank M300			CL300 21041	1:30
Material			Beställningsnummer	Skala
Polyethene			51040	1(1)

Generella toleranser (om ej annat anges på ritning)	Tillåtna avvikelser för dimensioner i millimeter
General tolerances if not other stated on drawing	Permissible deviations for basic length size range
± 0,20	>75-150 ± 1,3 %
± 0,50	>150-300 ± 1,3 %
± 1,00	>300 ± 1,3 %