Supplemental Information for Carousel Installation

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If I do say so myself, you should buy ***The Composting Toilet System Book*** as it will give you most of the information needed to manage such a system. See: http://www.ecovita.net/ctsb.html

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Why supplemental information?

The instruction manual was excerpted from a Norwegian manual and we have found local fittings and techniques that will make the installation better and easier. There remains a need to manage compost leachate and graywater See: www.ecocyclet.com

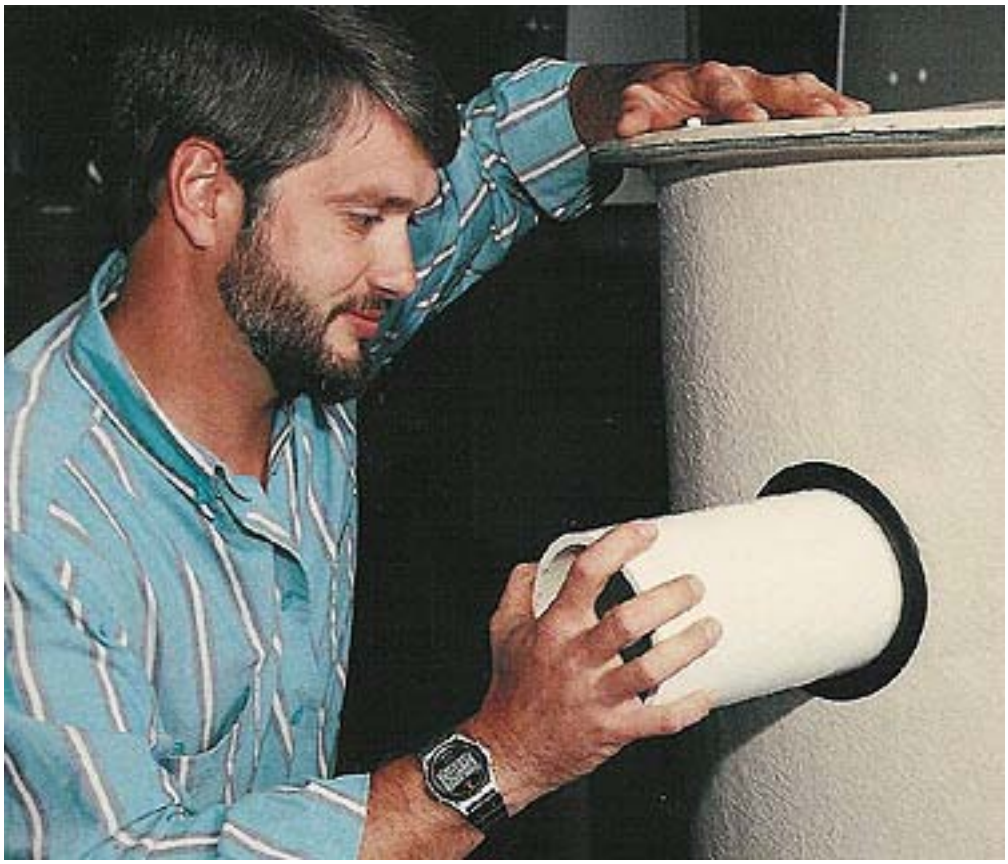
What you need to know

Attaching the toilet and exhaust pipe to the Carousel

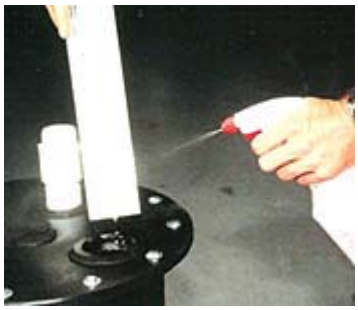
1. The connecting pipe from the toilet to the Carousel and the exhaust pipe are installed to the lid of the Carousel. Chose one of the quadrants that is convenient and make the connections as illustrated below.

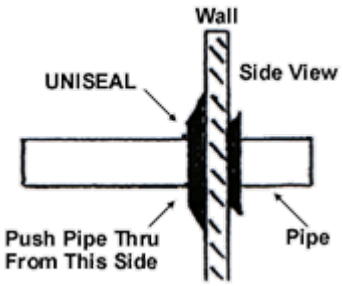
Attaching drain pipes to the Carousel

(We specify Uniseals) http://www.aussieglobe.com/uniseal1.htm



HOW TO INSTALL THE UNISEAL®





- Cut hole to the hole saw size indicated for the UNISEAL you are using. (See specification sheet or back of header card.) Example: 3" UNISEAL = 4" Hole (Hole saw).
- Insure that the hole is clean cut with no sharp edges. Irregularities could cause poor sealing and ultimate leakage.
- Insert the UNISEAL into the hole with the wide side facing the pipe to be inserted.
- Make certain that the pipe end to be inserted is clean cut. File the edges so that there are no sharp points to cut the UNISEAL.
- Using detergent, lubricate the outside of the pipe end to be inserted, and then push the pipe through the UNISEAL from the large flange side. The detergent will be squeezed off as the pipe passes through the UNISEAL. The co-efficient of friction of the rubber holds the pipe tightly in place.

- SIZING THE HOLE FOR THE UNISEAL
  - PIPE ID 1-1/2" (38mm) • PIPE OD 1.900" (48mm) HOLESAW SIZE 2.500" (63.5mm)
  - PIPE ID 2" (50mm) • PIPE OD 2.160" (55mm) HOLESAW SIZE 3" (76.2mm)
  - PIPE ID 3" (76mm) • PIPE OD 3.500" (89mm) HOLESAW SIZE 4.000" (101.6mm)
  - PIPE ID 4" (101mm) • PIPE OD 4.500" (114mm) HOLESAW SIZE 5.000" (127.0mm)

Quick disconnect fittings

To move the Carousel or the drain line, you will need a quick disconnect fitting between the pipe in the carousel and the pipe that leads to the leachate garden, or leach field. You will need what is called a *True Union Ball Valve*. This allows you to shut off the liquid in the Carousel and disconnect the pipe to the drain so you can remove and replace the Carousel or the plumbing.

Connecting the pipes from the lid of the Carousel to the building and roof

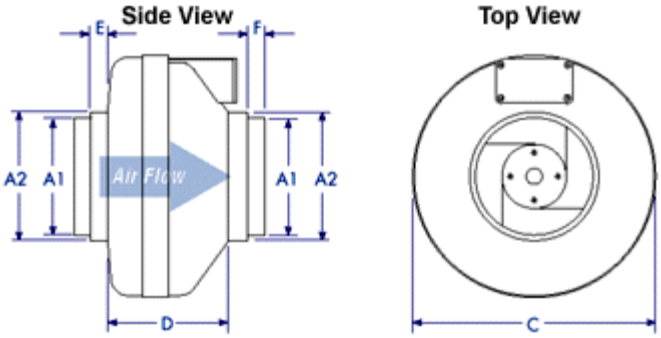
The excrement chute and exhaust pipe should be hard plastic but lightweight pipe such as Foamcore™ Drain, waste and vent or aluminum duct as they passed up through the building and roof. A simple Tee is placed on top of the exhaust pipe and bloused with fly screen to keep out rain and flies.

However, a short section of telescoping flexible duct could be attached to the bottom of the pipe where it connects with the permanent lid to allow a little flexibility when moving the Carousel in and out of position.

There are no Uniseals large enough for the excrement chute and exhaust pipe in that case use what plumbers call “water stops or bushings ” So use Fernco™ Water stops to attach the excrement chute and exhaust pipe to the top of the Carousel at a convenient location. See; www.fernco.com

Exhaust Fans/Blowers

Remember that a fan or blower is an impediment to air flow when it is not running! Before you buy a fan or blower, try a simple plastic Tee on top of the exhaust pipe bloused with fly screen. However, if you really need an in-line blower, make sure it is moisture proof. The one we specify is the Ecotech Model number # 978402 at $218.00 each; with an optional Fan speed controller # 978402-1 at$ 21.00 each.



A1	A2	C	D	E	F
4”	5”	9 ½”	5 ¼”	7/8”	7/8”

The Ecotech blower is an in-line duct fan, made of an Engineered Thermoplastic Resin UL listed for outdoor use or in wet locations. Direct drive external rotor motorized impeller assembly. True airfoil backward curved wheel. Installs in any orientation. 4" duct diameters, 108 cfm

A UL recognized waterproof conduit should be used for all outdoor applications to prevent moisture entry via knockout in wiring box). Ecotech’s fans are caulked at the motor screws, the wiring cables and along the seams of the fan to prevent moisture from entering the housing. Ecotech fans have long been the choice for residential installations but can now be used for commercial projects with the recent UL commercial application rating.
Easy to install.

- Prewired and supplied with a mounting bracket for easy installation
- Available singularly with bracket or in a variety of kits for specific applications. Each kit includes the appropriate fan and accessories
- Tested and approved by UL and CSA (or equals)
- Approved for residential and commercial applications and for wet locations
- Suitable for air stream temperatures up to 140° F
- Easy connection using external wiring box with waterproof gasket
- 122-649 CFM
- 4" duct diameter (other sizes are available should the need arise)
- 100% speed controllable
- Five-year factory warranty

RPM	Volts	Rated watts	Watt Range	Max. Amps	Max. Ps
2900	115	19	13-19	0.18	0.87”

What to sit on?

You might consider the Ecovita Privy kit. See: http://www.ecovita.net/privy.html