

Questions? Call our Customer Assistance Centre: 1-888-436-3996

Installation Guide

MuliToa 60 / MuliToa 45 MuliToa 20 / MuliToa 10

MullToa Composting Toilet is a biological composting toilet that uses the processes of evaporation and aerobic decomposition to transform human fecal waste, urine, and toilet paper to a hygienically safe product (humus) that may be safely utilized. Proper installation and maintenance is important. Please read instructions completely and give us a call if you have any questions. Always check with your local health authorities and building inspectors for local regulations governing composting toilets prior to the installation of your MullToa.

What Comes in the Box

- 1 Composting Toilet
- 1 Starter Mulch (20L Bag)
- 1 Winterizing Plug
- 1 Manual Mixing Rake
- 5 2' sections 54mm white vent pipe, belled 1 end
- 1 2' white vent pipe, no bell (Reducing Coupling attached)
- 1 2' section 108mm black vent pipe, belled 1 end
- 1 2' section 108mm black vent pipe, no bell
- 2 2' Styrofoam insulation
- 1 Roof flashing
- 1 Insect Netting

Accessories (available separately)

• 45° Vent Pipe Elbows • Insulation • Interior/Attic/Exterior Pipe • Starter Mulch •

Tools You Will Need

- Standard & Phillips screwdrivers
- Dril
- 2 1/4" Hole Saw, Jig Saw or Keyhole Saw
- Hammer

- Roofing nails
- Level
- 100% adhesive silicon caulking (do not use latex silicon)
- Plumb bob or weighted string
- Pencil

Before You Begin

- ✓ Make sure there is adequate airflow into the bathroom. This should preferably be from the living area. A 1" gap under the bathroom door or a vent in the bottom of the door or wall will ensure sufficient airflow to the toilet. Overhead vent fans and open windows should be used with caution as they may cause negative air pressure and promote a back draft through the toilet causing the presence of unpleasant odours. You are installing a chimney.
- ✓ In some cases it may be necessary to install a 3" wall vent in the bathroom in order to ensure enough airflow to the toilet (see diagram below).
- ✓ Ensure there is adequate floor space in front of toilet to accommodate removal of the tray.
- ✓ The temperature in the room where the toilet is to be installed must be maintained above 18°C (64°F) during periods while the toilet is being used.
- ✓ Make sure the floor under the toilet is level and insulated.
- ✓ The vent pipe must be able to extend at least 50cm (19.5") above your roof peak. Or anything within 10' (additional vent pipe may be ordered separately).
- ✓ If you cannot install the vent pipe straight up from your toilet, Make sure your installation can be achieved with the installation of no more than 2 x 45° angles (available separately).
- ✓ Make sure the vent pipe is less than 30' in a straight up installation or 27' if 2 x 45° angles are required. Consult with EcoEthic Inc. technical support if a longer run is required.

INSTALLATION

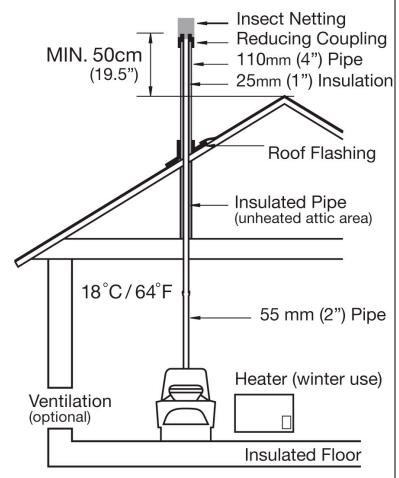
Straight Vent Pipe (through ceiling and roof)

Use only MullToa Vent Pipe. Installing other vent pipe can cause venting problems and odours.

- 1. Position the toilet against the wall.
- 2. Drill a 2 1/4" (55mm) hole in the ceiling above the vent connection in the toilet (use Plumb Bob to align vent pipe with toilet).
- 3. Drill a 2 1/4" (55mm) hole in the roof above the hole in the ceiling.
- 4. Insert 1 length of white pipe (belled end up) into the rubber vent opening on the back of the toilet.
- 5. Continue adding white ventilation pipe, belled end up, through the holes and seal with silicone around the hole and roof to avoid any leakage.
- 6. The white pipe must extend through the roof, by approximately 2".

IMPORTANT: All pipe from ceiling through any unheated area (i.e. attic space) it must be insulated. Ensure there are no gaps in insulation. Use Only MullToa Attic Pipe & Insulation (additional pieces sold separately).

- Insulate the pipe in the area between the ceiling and the roof. Insulate the pipe above the roof.
- 8. Cut the non-belled black pipe and insulation to match the angle of the roof.
- Slide roof flashing over non-belled black pipe.
- 10. Outline the Flashing on the roof. Raise Flashing and apply silicone inside the outline of the flashing.
- 11. Slide the Flashing back down, sliding the flange under the shingles along the top edge and press it firmly into the silicone. When flashing is properly placed, the top part of the flashing should be under the shingles and the lower portion should be on top so water sheds easily.



- Secure the top of the flashing with corrosion resistant nails or staples at each corner and along the sides at 4" 6" intervals. Exposed nails or staples should be sealed with silicone.
- 13. Attach additional pieces of black pipe, insulation and white pipe.
- 14. The end of the last pipe must extend at least 50cm (19.5") above the peak of the roof or anything within 10 feet.
- 15. Fit the Reducing Coupling down onto the last black pipe.
- 16. Attach Insect Netting.