CENTREX 3000 Electric Installation

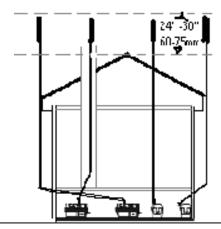
Space Required and other Installation Considerations

- 1) To facilitate maintenance and compost removal, ensure that there is at least 17" in front of the CENTREX 3000, for removal of the drawer and access panel.
- 2) The safety drain is required in ALL installations. Install the unit in a location where the safety drain can be connected. This drain exits from the left side of the unit and must slope downward at all points.
- 3) Install in a location where the vent pipe can be attached as per the instructions listed below.
- 4) Install in a location that is not air tight. The toilet must be able to vent to ensure odor free operation.
- 5) Ensure that the CENTREX 3000 is accessible for ongoing maintenance.
- 6) Ensure that the installation area is a minimum height of 28". WE DO NOT RECOMMEND DIGGING BELOW GROUND TO FACILITATE THE INSTALLATION OF THE CENTREX 3000.
- 7) Ensure the CENTREX 3000 is protected from precipitation.
- 8) Ensure that the unit is installed on a level surface or sloping slightly towards the safety drain.

Vent Pipe Location

- 1) If running a vent through a wall, it should be done at a 45° angle to prevent condensation from accumulating in the vent pipe, causing a constriction. **NO HORIZONTAL SECTIONS OF VENT.** Venting should be installed vertically.
- All vent pipe that is exposed to the outside or in a non-heated space should be insulated if using the unit during cold weather.
- 3) INSTALL VENT SO THAT IT TERMINATES 24" 30" ABOVE HIGHEST PEAK OF THE ROOF.
- 4) If you will be installing venting on a steeply pitched roof where snow shear may occur; Install a heavier pipe through the roof and feed the enclosed vent through the heavier pipe. Seal between the pipes with expandable foam or other such water-tight substance. The heavier pipe should be able to withstand the weight of sliding snow.
- 5) If there is more than 36" of vent needed above the roof line to reach 24-30" above the highest peak of the roof (diffusor included in measurement), use guy wires to secure the vent above the roof.
- 6) Limit bends in the vent stack to no more than 4 that have a combined total of 180 °.
- 7) The vent must be installed separately from ALL other household vents. Venting cannot be merged with other venting. Doing so will prevent the unit from operating in an odorless fashion.
- 8) All connectors in the vent pipe should be sealed. Use silicone caulking to seal the connection between the vent and the fan. PVC cement may be used on all other vent connections.
- 9) The diffusor should be glued vertically on to the top of the vent pipe. This assembly helps draw air up the vent pipe.

Possible venting configurations for the 2" electric vent pipe.



Electrical Considerations

The fan will run continuously 24 hours per day. A ground fault interrupter (GFI) circuit is recommended for any unit installed in an environment where it will be exposed to moisture. This may be installed directly on the wall socket or at the circuit breaker. If you are in an area where you experience power fluctuations, you may wish to install a surge protector.

Some 230V models may have an over current fuse protection on the heating element circuit which is located on the electric box.

CENTREX 3000 NE (Non-Electric) Installation

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Space Required and other Installation Considerations	 To facilitate maintenance and compost removal, ensure that there is at least 17" in front of the CENTREX 3000, for removal of the drawer and access panel. The safety drain is necessary for ALL installations. Install the unit in a location where the safety drain can be connected. This drain exits from the left side of the unit and must slope downward at all points. Install in a location where the vent pipe can be attached as per the instructions listed below. Install in a location that is not air tight. The toilet must be able to vent to ensure odor free operation. Ensure that the CENTREX 3000 NE is accessible for ongoing maintenance. Ensure that the installation area is a minimum of 28" in height. WE DO NOT RECOMMEND DIGGING BELOW GROUND TO FACILITATE THE INSTALLATION OF THE CENTREX 3000. Bends in the vent, installation near hills or over hanging trees may cause down draft. A 12 volt fan may be necessary. Competing appliances (ie. wood stove) may require an air intake installed from the outdoors if the unit is installed in an enclosed basement. A 12 volt fan may be required. Ensure that the unit is installed on a level surface or sloping slightly towards the safety drain.
Vent Pipe Location	 All vent should be vertically installed. Limit bends in the vent stack to no more than 2 - 45 ° bends. NO HORIZONTAL SECTIONS OF VENT. INSTALL VENT SO THAT IT TERMINATES 24" - 30" ABOVE HIGHEST PEAK OF THE ROOF. If the vent is being installed on a steeply pitched roof where snow shear may occur; Install a heavier pipe through the roof and feed the enclosed vent through the heavier pipe. Seal between the pipes with expanding foam or other such water-tight material. The heavier pipe should be able to withstand the weight of sliding snow. If there is more than 36" of vent needed above the roof line to reach 24-30" above the highest peak of the roof (diffusor included in measurement), use guy wires to secure the vent above the roof. The vent must be installed separately from ALL other household vents. Venting cannot be merged with other venting. Doing so will prevent the unit from operating odorlessly. All connectors in the vent pipe should be sealed. Use silicone caulking to seal the connections. The diffusor should be glued vertically on to the top of the vent pipe. This assembly helps draw air up the vent pipe.
Vent Inlet Coupling	Place the vent inlet coupling into the hole on the top of the unit for the 4" vent and so that the 1" of smaller diameter pipe is protruding into the hole. This is the first piece of the venting. Once you have finished assembling the vent, run a bead of silicone around where the inlet coupling meets the top of the composting unit to prevent odor from escaping.
12 Volt Fan	Install the 12 volt fan on the inlet coupling with the large side with the wires protruding facing upwards (as shown in the picture at right). When the 12 volt fan is turned off, it forms an obstruction in the vent, and should therefore run continuously while the cottage or home is occupied. An optional switch (as small as 1 amp) may be installed, and the fan turned off when the toilet will not be used for several weeks. The red wire should be connected to the positive (+) terminal on your battery or DC system, and the blue wire to the negative terminal (-). The 12 volt fan may be powered with a battery that is connected to a generator, solar panel, or other alternative energy system.

Installation Common To Electric and NE Units

Leading the vent through the roof	The vent stack (shown in diagram) should end approximately 30" above the peak of the roof so that it is less subject to downdraft. Where the pipe is taken through the roof, a roof flashing may be required to seal the installation. If you are in an area where snow shear is a danger, you may wish to install a heavier pipe around the vent pipe where it exits from the roof. If you do choose to do this, ensure that you seal the area between the pipes with a waterproof substance to prevent leaks.	To office company to the company to
Leading the vent through the wall	When it is necessary to lead the vent through a wall, connect one 45° elbow on the vent outlet on the unit. Using a hole saw or other appropriate tool, cut a hole through the wall board behind the unit so that the vent pipe can be inserted into the 45° elbow. Cut a similar hole on the other side of the wall that is slightly higher than the inner hole so that the vent pipe will be angled upward at 45°. If installing through an exterior wall, waterproof sealant will be required around the vent pipe where it emerges from the building.	45° Angle
The Diffusor	The diffusor provided with the unit is a simple device to be installed at the top of the vent stack with the larger pipe protruding above the smaller. To install, simply glue the diffusor vertically on the topmost section of vent pipe. The diffusor design encourages updraft, and discourages wind and weather from going down the vent stack. We do not recommend installing anything else on the top of the vent as it could impede the venting. Unlike wind turbines, diffusors are less likely to freeze in winter, and are more effective in calm weather.	HOW YOUR DIFFUSOR WORKS
Drain Installation	The safety drain MUST be connected as it will be required in all Centrex 3000 NE installations or Centrex 3000 electric with ultra-low flush toilets. Remove the orange cap from one side of the overflow drain assembly. Place a 1" hose clamp over the end of the drain hose that will be connected to the overflow drain assembly. Push the drain hose over the ribbed end of the over-flow drain and clamp with the 1" SS hose clamp. Connect the 1" hose to an approved drainage facility. The safety drain is gravity fed. The drain hose must be below the level of the safety drain in order to function.	
Handling Effluent	The following are possible options to take care of the liquid: - Feed into a lined pit filled with gravel and sand. Such a recycling bed also ensures a closed loop system. - Feed into a small cesspit or "French drain". - Plumb into an existing septic or holding tank line. Installation should be in accordance with applicable local regulations. 2t. OF LOOSE MATERIAL (French Drain) All Installations should conform to local regulations.	

Positioning The Collection Chamber

Line the bottom of the collection chamber with the plastic bag (provided). Place the collection chamber base on the right side of the CENTREX 3000 so that the base rests under the opening in the patented bio-drum. Place the top of the collection chamber on the base. SUN-MAR Autoflow® technology allows compost to automatically deposit into the collection chamber.

Installing the waste pipe

When installing the waste pipe from the toilet to the unit, the following should be considered:-

- 1) The pipe should be either 45 ° or vertical (if composting unit is directly below toilet), or at a 2-3 ° angle (1/8"-1/4" or 3-13mm drop per foot maximum) so that the waste travels with the liquid.
- 2) Pipe should not slope upwards at any point.
- 3) Connections should be snug so that waste does not cause blockage.
- 4) It is recommended that the waste pipe be no longer than 15 feet (460cm) without installing a clear out port(a Y fitting with screw on end cap) near the toilet to provide easy access should it be required.
- 5) Use a soft sealant, such as silicone for the connection of the waste pipe to the unit so that the unit can be moved for servicing or other reasons should this ever be required.
- 6) Insulate pipe if unit is to be used during the winter.
- 7) For longer installations of waste pipe, ensure the waste pipe is supported to prevent sagging.

Installing the **Ultra Low Flush Toilet**

closes as shown.

- 1) Make sure the center of the floor flange is at least 11 inches (280mm) from the back wall.
- 2) When Installing a new floor flange, ensure that the toilet mounting bolts align properly with ultra low flush toilet mounting pattern.
- 3) Secure flange to floor using flat head screws through counter-sunk holes in flange. Insert bolts into slotted holes in flange(Fig. A)
- 4) Position floor seal by pressing the floor bolts up through the holes in the seal.
- 5) Set toilet in place with bolts protruding up through mounting holes in base (Fig C).
- 6) Install washers and hex nuts provided with toilet. Tighten nuts down equally with standard 7/16" (12mm) open end wrench.
- 7) Connect water supply line to water valve (1/2" or 13mm MPT) inlet using appropriate fittings (Fig D)
- 8) Turn on water supply and flush toilet to test for leaks.
- 9) Attach pedestal and pedal covers to toilet base. See instructions below.

Back Wall -11" Left Floor Side Flange Right Wall Side Illall 280mm 280mm Fig. A Fig. B Fig.C

Fig.D

PEDESTAL AND PEDAL COVER INSTALLATION

