

# Compost Aeration Systems

**Firstgrade design and manufacture compost aeration systems including Stainless Steel Fans, Duct, and mixing valves.**



## Aerated Static Piles

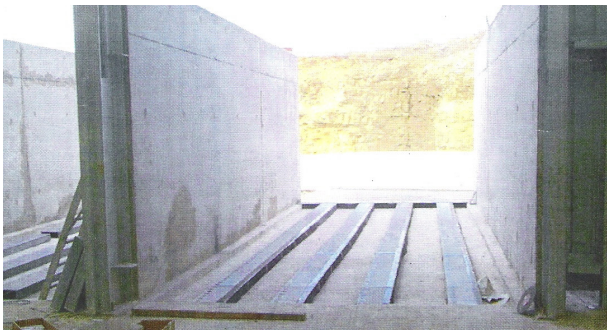
Aerated static pile composting eliminates the need for compost turning, and the subsequent odour problems.

Air is sucked through the compost by a high pressure fan. The exhaust air is passed through a bio-filter to eliminate any remaining odours.

## Air Ducting

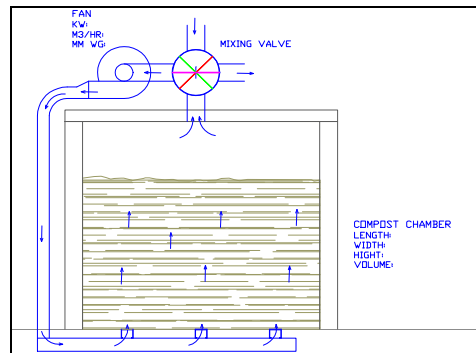
Firstgrade provide a number of different ventilation systems. The above photograph shows above ground air ducts, which are covered in a layer of woodchips, and then Compost.

The photograph below shows permanent stainless steel air ducts being placed in the ground. These are then concreted in to leave a flush surface, which can be driven over by a loading shovel.



## Fan and Air valve

Firstgrade produce special stainless steel fans for the very harsh conditions found in composting systems. Air valves, moisture traps, and ducting are manufactured in stainless steel to suit.



## Re-circulating Air System

The above diagram shows a re-circulating air system. Here, the chamber is sealed, and the same air is re-circulated through the compost via the fan and mixing valve. Temperature and Oxygen levels are monitored, and the air mixing valve is used to control the air conditions. External heat can also be added to increase temperature if required.

