

Living Wall Biofilter

While working with the University of Guelph, Dr. Alan Darlington, had been investigating the uses of biofilters as an alternative means of removing volatile organic compounds (VOCs) from indoor environments.

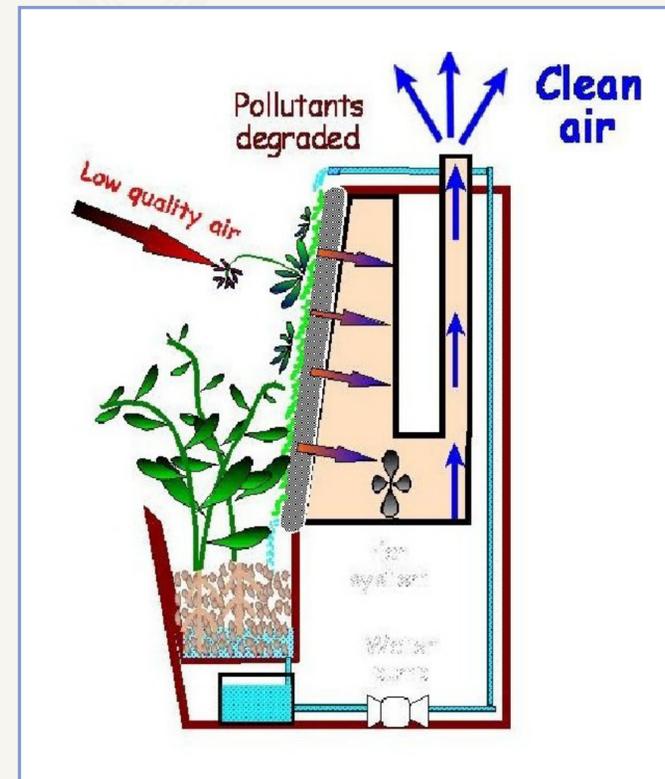
This biofilter is a hydroponic (soil-less) “green wall” of plants. As air is drawn through the green wall, plants and beneficial microbes actively break down pollutants into their benign constituents such as water and carbon dioxide.

The clean air is circulated throughout the space by a mechanical ventilation system.

The Naturaire® System is an interior “plantscape” that effectively removes contaminants and improves the living environment.

.....

Furbish Company, www.furbishco.com



Indoor air can be unhealthy!

VOCs are emitted as gases by a wide array of commonly used products. Examples include paints, paint strippers, cleaning supplies, pesticides, building materials, carpets and other furnishings, office equipment, carbonless copy paper, adhesives, and permanent markers. VOCs may have short- and long-term adverse health effects, and concentrations of many VOCs are consistently higher indoors (up to ten times higher) than outdoors.

Furbish Company

Vegetated Retaining Walls:

Hercules Modules are the superior soil retention solution...not only do they create walls that are strong and long lasting, each wall stands out as a one of a kind. Vegetate these walls and they become the most beautiful and unique in the industry. Key benefits are, of course aesthetics, storm water management, reduction of heat island effect and reduction of hardscapes.

Green Roofs:

Vegetated roof covers are layers of living vegetation installed on top of conventional flat or sloped roofs. They offer innovative approach for protecting conventional roofing systems while adding many other practical environmental benefits. Several key benefits are storm water management, extending the longevity of the roof, mitigating heat island effect and energy conservation.

Living Wall Bio-filter:

The system is a vertically hydroponic green wall containing a range of specifically selected tropical plants. Air is actively drawn through the green wall of plants and highly specialized beneficial microbes actively remove pollutants or VOC's (volatile organic compounds) such as benzene, toluene, and formaldehyde from the indoor air. The clean air is then distributed throughout the space by a mechanical ventilation system. This research was developed by investigating the use of plants in closed environments such as space vehicles (e.g., the International Space Station) applications and buildings here on Earth.

www.furbish.com