

## By Tom Walsh: Green wall systems: Possibilities are endless

November 23, 2011 - Green Buildings

Green walls, vegetative walls, living walls and bio walls. What do these words mean? These are some of the common names you might hear when someone is talking about living plants growing on a vertical surface (wall).

These living green wall systems have many of the same benefits as green roof systems. The benefits are: reduces the urban heat island effect, reduces power consumption, improves air quality, increases property values, improves aesthetics and reduces noise levels.

Green wall systems are becoming increasing popular across the U.S. These systems can be seen in malls, corporate offices, lobbies, building facades, homes, schools, etc. These green wall systems can be designed to become works of art by carefully planning the planting design to create a mosaic on the vertical wall surface. Other walls are designed with logos or single species. The design possibilities are endless.

There are several green wall systems on the market today. Some of these systems are soil-based, coco-husk based (soilless), Styrofoam based (soilless) or tray systems with potted foliage. These systems typically are attached to a wall with hardware. Most of these systems require growing time for the plants to root into the media prior to installation.

Another system on the market, bio walls, is a vertical hydroponic green wall system containing a range of plants chosen specifically for use in the system. The system is an active biofilter that removes common indoor contaminants and improves air quality. Indoor air is actively drawn through the green wall of plants, activating highly specialized biological components to break down pollutants into their benign components of water and carbon dioxide. Clean air is then distributed throughout the space.

Each of these systems is uniquely designed and will add "life" to any vertical surface. Some of these systems can be used indoors or outdoors while others can only be used indoors. The common bond between all of these systems is the need for water and appropriate light levels to be sustainable. These systems can also be used to acquire LEED points. The points are typically awarded in the category of innovation in design.

Tom Walsh is the business development director at Parker Urban Greenscapes, Scotch Plains, N.Y.

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540