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Creating Green Interiors

Greening concerns more than just the building




As sustainable building becomes increasingly popular and necessary, indoor air quality likewise takes on new importance. And, although architects are now routinely specifying low-VOC paints, adhesives, casework, carpeting, and other materials, one area that still is often overlooked is the environmental benefits provided by indoor plants. According to Plants at Work, an organization committed to

raising awareness of the benefits of interior plants, research consistently shows that indoor plants increase worker productivity and workplace satisfaction. Interior plants also have been shown to reduce air quality-related absenteeism by 14 percent.

In today's airtight, ultra-efficient buildings, inhabitants often are exposed to greater numbers and concentrations of toxins. A study conducted by researchers William J. Fisk and Arthur H. Rosenfeld of the Lawrence and Berkeley National Laboratory in Berkeley, Calif., estimates that savings of \$58 billion could be realized each year by preventing sick building

syndrome, and that organizations could yield an additional \$200 billion in worker performance improvement by creating offices with better indoor air quality. The same study provided evidence that an astonishing 40 percent of all sick days are related to poor indoor air quality. In a separate, two-year study in Oslo, Norway, Professor Tove Fjeld of the Agricultural University recorded significant reductions in employee ailments after indoor plants were introduced into the workplace: fatigue was reduced by 20 percent, headaches by 45, coughs by 40, sore/dry throats by 30, and dry facial



Plants at Work and Plants have recently as AIA/Continuing System (CES) provide information on CES programs, visit the Education section of site. 

skin by 25 percent.



Indoor plants also naturally maintain the relative humidity comfort range of 30 to 60 percent by the processes of transpiration and evaporation. Many buildings do not have adequate systems to maintain humidity within the desired range. Often, systems that do contain humidifiers become clogged with microorganisms, aiding in the transmission of diseases. When humidity

levels are too low, inhabitants are more prone to developing a cold or the flu. When levels are too high, people are more vulnerable to a wide range of diseases and illnesses.

Further research studies have shown that people are less stressed and more productive around plants, willing to pay more in retail areas that include trees, and are more innovative and creative when surrounded by leafy plants and flowers. Plants at Work estimates the cost of one professionally maintained plant per employee at \$1.64 per month. It calculates the return on investment at a whopping \$14.51 per month for each employee.

To create a healthier and more productive workplace, Plants at Work outlines seven steps.

1. Create support from senior management by highlighting the importance of plants in the workplace with appropriate examples, research, and support materials. Involve those responsible for implementing health policies (HR or OSHA representatives, for example) in the plan to introduce plants in the office.
2. Establish an organizational structure to develop and implement a live plants policy and determine key players.
3. Identify needs by creating an inventory of the number of plants in the company and the plant types used. Be sure to give special consideration to employees already exhibiting sick-building related illnesses as well as to workstations that are close to sources of harmful substances, such as printers.
4. Develop a plan for implementation. Use information from Step 3 to identify priorities and create a timetable.
5. Implement the plan. Pay attention to the start of the activities and provide regular updates on activities and interim results.
6. Evaluate the effectiveness of the plant policy. Track information such as how many plants were added, whether plants are being well cared for, how many people received updates, and staff motivation. Eventually, information on absenteeism due to illness can be included to track costs and benefits of the project.
7. Modify and fine tune the plan as necessary. Any good health policy will be periodically reviewed. Monitor the results and, when needed, modify the plan so that it continues to enhance the performance and well-being of your

employees.

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