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Plants - They Lower Operating Costs, Cure Sick Building Syndrome and Increase Job Satisfaction

Living plants are hard at work in offices throughout America. Until recently we lacked the research necessary to investigate and quantify the economics between plants, employees and bottom-line corporate America.

However, recent studies by NASA, the Horticulture Research Institute and various universities around the world have provided access to credible data that is shifting the way businesses think about living plants in the workplace.

The U.S. Department of Agriculture notes that plant transpiration decreases air temperature in offices by 10% in summer, while moist air requires less energy to heat in winter. According to the literature, proper selection and placement of live plant materials can lower heating and cooling costs by as much as 20%. These statistics have become an important tool for today's environmentally efficient corporate designers and facility managers concerned with affordable and sustainable "green building" solutions.

Living indoor plants can help with bottom-line savings in mounting sick leave expenses. Many facilities can't afford to maintain a system to control humidity and/or are forced to operate contaminated systems which emit disease-causing microorganisms. The result is a notable increase in employee absenteeism due to illness (generally eyes, lung and upper respiratory problems as well as allergies, colds and viruses). In addition, employee health and productivity are at risk due to common but dangerous toxins often found in the fibers and solvents used in many of today's building products and materials.

"Sick building syndrome" develops into a serious and expensive liability when toxins become concentrated inside sealed office buildings. NASA reports that the syndrome is widespread in these "energy efficient" buildings.

As energy efficient construction becomes absolutely essential, architects, engineers, facility managers and owners have become justifiably concerned about this indoor air quality dilemma. Bio-Safe Incorporated reports that energy efficient, sealed office structures can be 10 times more polluted than the air outside.

Live plants have proven to be an economical way to manage the growing risks and liabilities associated with poor indoor air quality and sick building syndrome.

For over 20 years, NASA's Dr. William Wolverton and his staff at the Environmental Research Laboratory of the John C. Stennis Space Center have been conducting innovative research employing natural biological processes for air purification by growing fresh air.

Dr. Wolverton has shown that plants have been proven to suck toxic chemicals out of the air. After some study, they have unraveled the mystery of how plants can act as the lungs and kidneys of these sick buildings.

The plants clean contaminated office air by absorbing pollutants into their leaves and transmitting the toxins to their roots, where they are transformed into a source of food for the plant. The plants also emit water vapors that create a pumping action to pull "dirty air" down around the roots, where it is converted to plant nutrients. Wolverton has found that plants are especially needed in office buildings where sick building syndrome is common.

If such a large body of credible research didn't exist, it would be hard to believe that a solution as simple and economical as indoor planting can address a problem as menacing and expensive as indoor air quality while promoting employee health and energizing the work force at the same time.

Plants also help reduce distractions due to office noise. The positive contribution of interior plants to sound absorption has been well documented in numerous studies including work done at Oxford University, England. Although it would be difficult to measure the cost of productivity loss due to office noise pollution, plant groupings can significantly reduce the costly "decibel distraction factor" resulting in a quieter, more focused and productive workplace.

Copious studies such as those conducted at Oxford University verify the positive effects plant have on employee perception, job satisfaction and morale. Plantscapes are dramatically improving recruitment and retention of selective and qualified top employees in today's tight, mobile job market. Interior plantings increase aesthetic appeal, enhancing client, employee or tenant perception of the property and the workplace. The office environment tells employees and clients how the company values them and the importance of their work.

Gallop poll date indicates that two-thirds of the American work force cites gardening as their favorite hobby. Perhaps this "green thumb" passion explains why humanizing the workplace with green plants is a highly effective method of promoting

employee job satisfaction and retention, resulting in lower hiring an training costs.

Reliance on dependable, renewable resources is fundamental to successful business practice, its people, products and profits.