

What to Buy for Business

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The Air We Breathe

No one likes to work in an unpleasant atmosphere. Lorraine Gourlay takes a look at some easy ways to improve the office environment.

One of the most important aspects of keeping a company running smoothly is a happy employee. If your employees are not happy in their working environment, this can lead to poor performance, a decrease in productivity and an increase in days off sick. One of the reasons for this can be Sick Building Syndrome.

Sick Building Syndrome

Toxins in an office environment cause Sick Building Syndrome. New or recently renovated buildings have a higher risk due to the large amounts of chemicals produced from paint, carpets and furniture - these can be detected for up to a year afterwards. New "energy efficient" buildings are also a risk, as these recirculate fumes.

All offices create toxins by using the very products we need to keep our businesses running smoothly - copiers, printers, PCs. All these products give off some form of toxins and pollutants. Workers are not even safe from the products used to clean offices - these too are a cause for concern.

All these pollutants start to play havoc on immune systems, causing sore heads, runny noses, sneezing and breathing problems which can all lead to poorer performance in the workplace and more time off sick.

How can we prevent this?

Unfortunately, until manufacturers can create entirely environmentally-friendly materials, this cannot be avoided. However, it is possible to combat the effects these toxins have in the environment by using plants. As simple as this sounds, plants have been proven to help "clean the air" of toxins. Dr. Wolverton, a researcher at NASA, has carried out intensive research into the subject involving the three major indoor pollutants:

- Trichloroethylene
- Benzene
- Formaldehyde

Wolverton found that most indoor plants remove at least one type of toxin, although most of them are not able to absorb high levels of all three. The toxins that are absorbed do not damage the plants. The toxins are absorbed into the root zone of the plants where they are turned into nutrients. By increasing the soil volume, this in turn improves the plant's rate of absorption.

The findings also discovered that spider plants were the most productive at improving air quality in rooms. Ivy, dragon trees and rubber plants were also effective. The research findings recommended the following:

- At least one plant per 9.29 square metres
- Combine plants to combat a range of toxins
- Select leafy plants - the more surface area a plant has, the more air it can clean

Working plants

How a green approach to the office can help reduce Sick Building Syndrome
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- Each worker should have a plant on his or her desk, within the "personal breathing space" - an area of six to eight cubic feet (sqm) where most of the working day is spent.

Plants have also been shown to relieve stress. Research carried out by Surrey University environmental scientist Helen Russell showed that plants helped to create a more relaxed atmosphere and eventually led to a 60 percent drop in absenteeism.

In other tests, carried out by Professor Virginia Lohr of Washington State University, those people with a plant on their desk showed 12 percent faster reactions and their stress levels were reduced dramatically.

Where to start?

Before you start looking at plants and suppliers, there are a number of points to consider:

- What is your budget?
- Do you want to buy the plants yourself or outsource this task?
- Who will maintain the plants (i.e. will it be done internally or by a contractor?)
- What sort of plants do you want?
- Where will plants be located?

Once you have considered these points, you may decide you have enough information to obtain and care for the plants yourself. Alternatively, the project can be outsourced to an interior landscape company.

Outsourcing

Interior landscaping companies will carry out a survey of your premises and discuss

what benefits you wish to gain from having plants in the office. As well as reducing the toxins in the air, the proper placement of plants can lower heating and cooling costs and reduce noise in open plan areas.

It is possible to rent plants from a landscaping company instead of buying them. The benefits are that the plants can be changed either seasonally or annually, and the landscaping company will maintain the plants. Most will offer a maintenance/replacement service, with no additional cost for replacement plants. However, it is worth researching a few companies and comparing what services are available and what costs are involved.

Many companies also offer artificial landscaping services. This will not give the health benefits, although it will brighten up the office and make the surroundings more attractive for both visitors and employees.

WHICH PLANT?

Pollutant	Source	Plant Solution
Formaldehyde	Foam insulation	Azalea
	Plywood	Dieffenbachia
	Particle board	Philodendron
	Clothes	Spider plant
	Carpet	Golden pathos
	Furniture	Bamboo palm
	Paper goods	Corn plant
	Household cleaners	Chrysanthemum
	Water repellents	Poinsettia
	Benzene	Tobacco smoke
Gasoline		Marginata
Synthetic fibers		Jenny Craig
Plastics		Chrysanthemum
Inks		Gerbera daisy
Oils		Warneckei
Detergents		Peace lily
Trichloroethylene		Dry cleaning
	Inks	Chrysanthemum
	Paints	Peace lily
	Varnishes	Warneckei
	Lacquers	Marginata
	Adhesives	Marginata

Source: MJ Gilhooley, Plants at Work
www.plantsatwork.org

OFFICE ENVIRONMENT

A two-year study in an office, conducted by Professor Tove Fjeld of the Agricultural University in Oslo, found the following reductions in ailments after the introduction of plants:

Ailment	%Reduction
Fatigue	20
Headache	45
Sore/dry throats	30
Coughs	40
Dry facial skin	25

Fjeld also carried out studies in a school and an x-ray department with similar results, concluding that plants reduce minor ailments associated with Sick Building Syndrome.

Source: www.plants-for-people.org

HOW TO CHOOSE THE RIGHT PLANTS

Select indoor plants that require lots of watering, says Dr. Ronald Wood. These are the best for improving humidity levels and tend to have an active metabolism that is helpful in breaking down pollutants.

Also, use plant varieties with a high leaf area per size of pot. The bigger the surface area, the more it can absorb pollutants and chemicals.

Source: www.plants-for-people.org

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