

Marking & Dividing
(image courtesy of
Indoor Garden Design)

Why bother with office planting?

by Colleen Smith, Plants for People

When it comes to business belt-tightening, plants are usually the first to go – or not arrive! But there is much evidence to suggest that if you want a healthy, motivated and creative workforce, this is the last thing that should happen.

Just to put plants and our relationship to them, into perspective, we have developed side by side with plants. More than that we lived in perfect symbiosis, with plants emitting oxygen for us to breathe – plants are sometimes described as the lungs of the earth!

And there's more: in the last 10,000 years since we lived and worked in the great outdoors, our genes have barely changed but our living and working environments have to an unbelievable degree. If we had told the working man of 10,000 years ago that he wouldn't need to hunt for his supper, that his job and much of his leisure time would be spent indoors – some winter days at work, he might barely see daylight - I suspect he would have laughed hysterically at the joke. But nowadays we spend less than 30 minutes per day outdoors and in offices, workers are likely to spend 70%+ of their time in front of a computer screen.

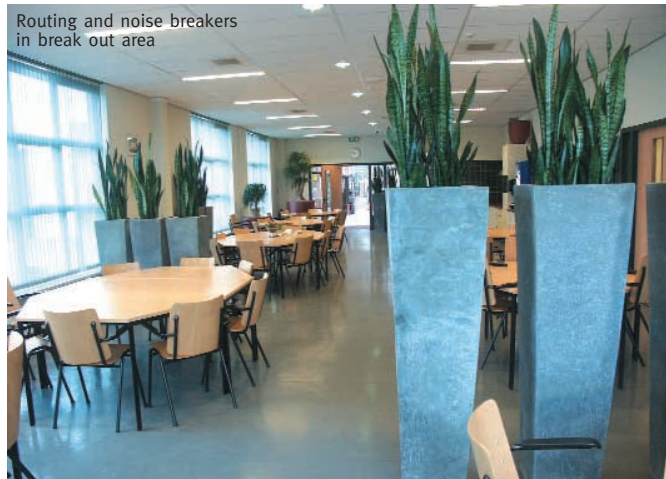
If you consider the changes we have asked our bodies to accept, it would not be inconsiderate to ask for a little time for them to catch up!

And even in the last twenty years or so our offices have transformed the way we work. Again we work differently but most offices environments haven't changed significantly to accommodate the changes for our best interests.

And if this all sounds like mumbo jumbo, then think again. Research has shown that we reap the benefits when we live and work amongst plants!

Not only do they clean the air and help to reduced minor ailments with a knock-on effect of reducing absenteeism, but they also humidify our workspaces making them feel more comfortable.

Routing and noise breakers in break out area



BMW Munich

At the BMW headquarters in Munich, computer workers were complaining of minor symptoms such as respiratory disorders, dry eyes, dry skin and other general symptoms often linked to Sick Building Syndrome, but noticed that these symptoms disappeared once they left work.

Their HR department had heard about research undertaken that suggested interior planting would help reduce these symptoms and give the workforce some relief.

Management were loathe to invest but agreed to a little experiment to see if the plants really could make a difference.

Plants were installed on and between desks.

Extensive data was gathered, comparing planted 'green' and unplanted 'non-green' work areas. The results were studied by both technical and management departments of other professional groups as well as

internally within BMW – the results caused some surprises.

The initial scepticism disappeared when the well-being of the work force clearly improved in the planted areas.

93% of employees working in these areas felt healthier and more motivated to work

Reduction in noise levels made the 'green' workplace the favourite space

Most absences (30%) had been due to respiratory illness but once the plants were introduced these figures fell showing that the improved air quality in the planted offices generally reduced illness

Planted offices were also more comfortable due to better humidity levels and consequently less airborne waste particles too

A motivational tool

Need more convincing? They are known stress busters. In the States and here in the UK, studies have shown that plants help to lower stress levels and in the process make us more productive. What employer won't cheer that outcome?

Surveys from established and well-thought of organisations (CABE & BCO) show that investment in the workplace offers a good return to employers – quite simply an increase in productivity.

A recent employee survey by landscaping company Ambius says that their workforce recognise the importance of plants – 40% felt a plant on the desk helps to enliven the office; 2/3 of the workforce would prefer a plant on the desk to subsidised snacks.

Productivity boosts

With 12.8 million days lost to stress each year and over 40 million workers complaining they are effected by stress (HSE), then anything that can help would be welcomed by both employers and employees, I'm sure.

Cue plants! Yes, plants actually reduce the physical symptoms of stress by reducing blood pressure and pulse rates in work-stressful situations – as a result concentration and therefore productivity are also improved.

Virginia Lohr's (Washington State University) research suggests that a less stressed workforce could be as much as 12% more productive i.e. make 8 people less stressed and at these rates they are inputting the same work as one extra person - almost!

Creativity

Plants also get our creative juices flowing. Roger Ulrich, well known in academic circles for his studies which showed how plants could have a positive effect on recovery from surgery, recently conducted a study into the creative powers of plants and flowers.

His study in 2006 took 101 people and offered them a choice of 3 locations: a bare office, one with art works and one with flowers and plants.



Improved concentration

At (John Berge's) engineering firm DHV AIB in Amersfoort, the workforce was dissatisfied with their workplace. The atmosphere was not very comfortable.

When planting was brought in they found that the humidity

levels improved making it a more comfortable place to work.

Concentration improved for computer workers spending more than 4 hours in front of a computer screen, who had a plant on or near their desk.

In the planted/flowered office the delegates were more creative or found more flexible solutions to problems. In detail: men were 15% more creative and women were more flexible in problem solving.

Ulrich commented, "Virtually any kind of job in a modern economy rests heavily on good ideas. The implication of the research is that by helping an accountant or a teacher or a scientist or an administrator generate better ideas – it may help them be more successful. And in the case of businesses, it might actually help to increase the bottom line."

Good for the environment

It is not unknown or even unusual in forward thinking new builds or refurbishments for exterior landscaping to be used for cooling but of course the same can happen indoors!

Dieter Schempp employed these techniques in many of his glass builds in Germany in the 1990s. (See Herten case study)

Peter Costa an Australian environmental engineer, has also found that interior planting can not only be used for shading but also to reduce the necessary size of air conditioning plants. Again the cleaning and refreshing of air at Herten shows how effective plants can be.

As plants cool, clean and refresh the air, they work effectively to improve the air we breathe indoors.

VT Aerospace

At VT Aerospace in Dorset planting was introduced as a direct result of research to improve working conditions in the copying room. Workers in this area suffered from headaches and fatigue and symptoms again disappeared when they left the building.

The introduction of plants proved effective with reduced headaches and improved general well-being.

However, when management removed the plants, symptoms recurred and it wasn't long before the planting was re-installed.

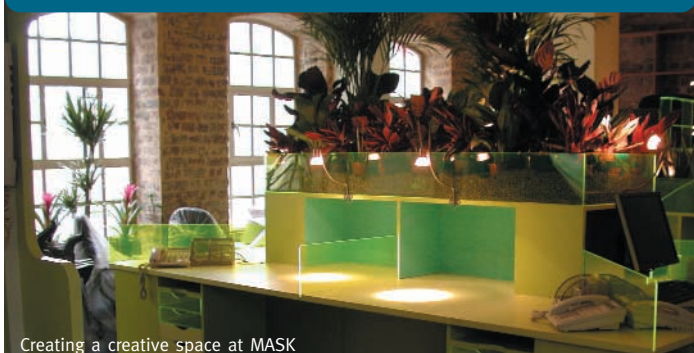
Planting for creativity

Event Design and Production company, MASK included plants as part of their relocation plans when they moved offices.

The interior plant-scapers were given a brief to make the offices a pleasant, healthy, calming and creative space. She specifically did not want the plants to appear to be "an afterthought" so Amanda Menage designed the space and

the office furniture around the plants.

MASK's ultra modern offices are a haven – a green space in the city - where Arthur's team of eleven are healthier and also more creative and productive as research shows that plants reduce stress and aid concentration.



Creating a creative space at MASK

And it goes on

The air in centrally heated or air conditioned rooms can often be dry. Plants can help to humidify the atmosphere and make it generally more comfortable. Plants give 97% of the water we give them back into the atmosphere so water-loving plants are best for this.

Noise is a big problem in some open plan work spaces but again, plants can come to the rescue. As desk dividers or in surrounding areas, plants deflect and absorb the noise. They work best in hard surface areas but aren't so effective in carpeted areas.

Why bother?

All in all the case for interior landscaping is extremely positive and well worth the investment. Saving on absenteeism whether from minor physical ailments or work-stress or to improving concentration, productivity and creativity are all good reasons for management to make the investment.

For the workforce, pleasanter working conditions, improved general wellbeing and a more comfortable atmosphere are just three of the positive effects that they will enjoy.

Did you know?

Amongst the most common office complaints are temperature, air quality, noise (IFMA)

We breathe in 5-6 litres of air per minute; that's 15,000 litres per day (Wood, University of Sydney)

Plants absorb toxins in the air and use them as food (Wolverton)

Toxins in the air mostly come from man-made materials but

also from what we exhale or use for personal hygiene i.e. deodorants, perfumes, dry cleaning

To clean a room measuring 12m² occupied by one person, you need 3 large (specimen) plants or 6 table top plants (Wood)

Much more information at www.plantsforpeople.org

Why bother with office planting?

Surely you can't afford not to.

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Herten (Germany) Cultural Centre & Library

The air inside the round glass cultural centre and library in Herten is fresh and humid. Instinctively you want to take a deep breath, absorbing its purity!

Planting makes perfect

The difference in Herten's cultural centre is the planting, which was planned from the outset. Plants were used not only for decoration, but more importantly to improve the air quality.

The air from the adjoining library is filtered into the centre of the atrium, where the plants

absorb it and produce oxygenated air, which is then filtered back into the reading rooms. No wonder the air seems pure!

The intention, according to architect Deiter Schempp, was to create a building in which people felt comfortable.

The concept for the glasshouse was based on an ecological idea - a recognised system which uses plants, sunlight and localised heating - through which energy costs were reduced by 50 per cent.



A German call centre uses plants as a breaker to improve humidity, reduce stress and absorb noise