

The Workplace Biome

Biophilic Design Strategies for a Productive and Healthy Office Ecosystem

A rigid ethic of industrialized standardization has dissociated most offices from natural processes and elements. Biophilic design engenders a philosophy for connecting humans back to nature in artificial environments such as buildings and cities.

Research on the impact of biophilic design demonstrates the overwhelming benefits of incorporating natural elements on employee health and productivity. Investment in biophilic design elements can save a company money through improved employee performance and reduced absenteeism. This report looks specifically at six common elements of biophilic design: water, air, light, material, form and flora and how each can be incorporated into office design.

COMPONENTS OF BIOPHILIC OFFICE DESIGN

AIR

Air quality and temperature settings influence worker productivity.

In Practice

- Adjusting thermostat
- Natural ventilation
- Modern air filters

FORM

Biomorphic forms can be used to create aesthetically pleasing architectural elements.

In Practice

- Reproducing images of flowing water in curved features
- Reproduction of a forest using columns and light

MATERIAL

Natural materials can decrease employee stress and natural color palettes can increase creativity and performance.

In Practice

- Natural materials - wood
- Natural color schemes - greens and blues

LIGHT

Sunlight is linked to increased employee health and happiness, which increases productivity.

In Practice

- Windows, skylights, etc.
- Intelligent artificial lighting systems

WATER

The presence of water in an office setting has benefits including better moods and self-esteem.

In Practice

- Natural views of water
- Artificial water features
- Indoor: water walls, aquariums

FLORA

Green space can help diminish employee stress and improve social cohesion and coworker camaraderie.

In Practice

- Green roofs
- Green walls
- Gardens
- Desk plants

Authors: Leigh Anna Johnson (B.S.' 19), Willem Swârt (M. Arch. '18)