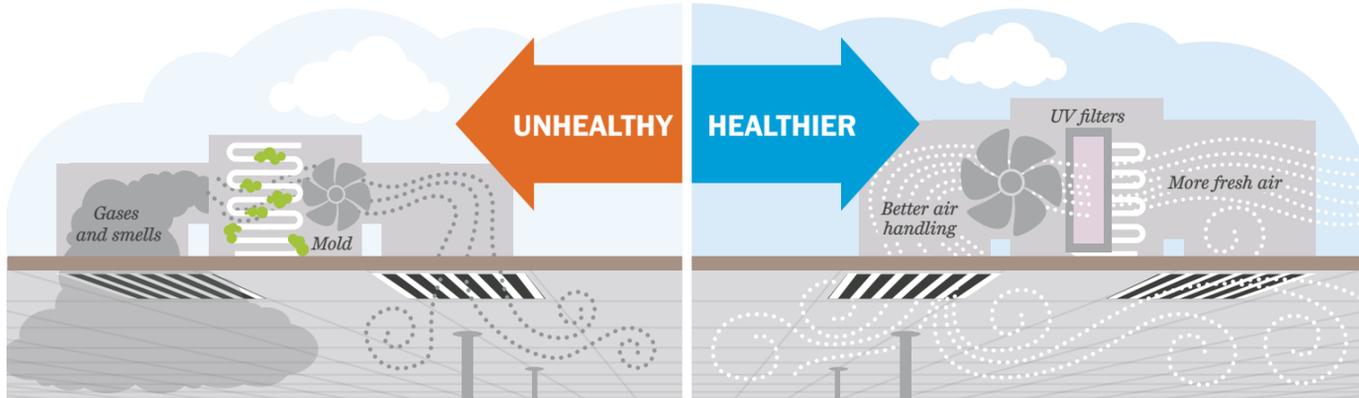


# Are you in an unhealthy office relationship?

If you spend more waking hours in your office building than with your significant other, you and your workspace had better be a good match. Studies have shown that office buildings aren't benign containers but active contributors to good — or poor — health, mood and productivity. Your office can do you right or wrong in many ways, till demolition do you part.

By Bonnie Berkowitz and Laura Stanton

**AIR QUALITY ▶**  
**Leaving you gasping:** "Sick building syndrome" is largely a relic of the 1970s and '80s, when office buildings were sealed for energy efficiency without adequate filtration and ventilation. But even now, paint, furniture, carpet, pesticides and cleaning products can emit gases that affect air quality. A 2012 report found that 9 percent of asthma cases among adults who had ever been employed were work-related.



**AIR QUALITY ▶**  
**Providing a breath of fresh air:** Modern systems circulate at least 20 cubic feet of fresh air per minute per person, four times the amount common during the sick-building era. Ultraviolet filters kill mold microbes that grow on air conditioning coils. Buildings just smell better without smoking rooms, and "green" cleaning supplies are more common. Some buildings have even gone retro, with windows that actually open.

**LIGHTING ▶**  
**Putting you in a bad light:** In many buildings, natural light gets no farther than the executive offices that monopolize the windows. Fluorescent tubes put out light that doesn't match the natural spectrum, reducing alertness, darkening mood and impairing nighttime sleep, said Kevin Kampschroer, an innovator in sustainable federal office design.



**LIGHTING ▶**  
**Letting the sunshine in:** One of Kampschroer's mantras is "Democratize daylight." Allowing sunlight to penetrate farther into work areas saves energy and enhances circadian rhythms as more people experience natural cycles in color and light quality. Shading, screens and blinds control glare and heat.

**ERGONOMICS & MOVEMENT ▶**  
**Holding you back:** Constant sitting is just one problem. A building's design can encourage people to move, or not, said environmental psychologist Judith Heerwagen. If your only options are laps around the cube farm or climbing the dank stairwell with the slimy handrail, you're probably going to stay put.



**ERGONOMICS & MOVEMENT ▶**  
**Turning you loose:** A workspace that lets you alternate between standing and sitting is a good start. Open staircases in sunny atriums encourage walking from floor to floor. Clever designers may hide the elevators, or program some to disallow short trips, Kampschroer said. Rooftop gardens make people want to get up and go.

**HYGIENE ▶**  
**Making you sick:** A 2011 Danish study found that people who worked in open spaces took 62 percent more sick days than those in offices or high-walled cubicles. Additional studies have shown that people who show up to work ill drain company resources because they are less productive and pass along germs to others.



**HYGIENE ▶**  
**Leaving you alone:** Most germs are passed through the air, a downside to those low partitions. Telecommuting can reduce this problem by letting people stay home when they're just a little ill, experts said. Common sense applies, too. Wash your hands often and reconsider that dip into the communal candy dish.

**TEMPERATURE ▶**  
**Running hot or cold:** Heerwagen said that in tests of ambient temperature, half of all workers said they were too hot and the other half said they were too cold. Personal preference varies too much for a one-temperature-fits-all approach, especially in Washington, where some people still wear wool suits in summer.



**TEMPERATURE ▶**  
**Staying just right:** Cutting-edge offices are finding ways to allow every person to control the microclimate at his or her desk. Solutions can be simple, such as air diffusers that mitigate drafts and tiny fans and heaters, or as complex as wiring climate controls into every workspace.

**ACOUSTICS ▶**  
**Bringing in the noise:** If a co-worker's phone rant or the copier's whir puts you on edge, you are not alone. A 2010 study of white-collar workers found that background noise contributed to a measurable rise in stress as shown by heart rates, cortisol levels and an impaired ability to concentrate. Some of the most distracting sounds can come from high-walled cubicles that give inhabitants a false sense of privacy.



**ACOUSTICS ▶**  
**Keeping quiet:** Kampschroer said good office design allows people to escape noise while also giving them space to collaborate. Closed rooms should be available for private phone calls or meetings, and laptops let people pick up and move together — or apart. Offices with low partitions tend to be quieter, because people know they can be heard. But those wide-open plans that provide great light and airflow need ways to dampen noise.

**VISUAL ▶**  
**Stuck in shades of gray:** Monotone is bad decor. Even worse is a jarring jumble that rises to visual toxicity. (Yep, that's a thing.) One building Heerwagen visited had so many clashing colors and abstract patterns that workers became physically ill.

**VISUAL ▶**  
**Coloring your world:** Some variety in color, pattern and texture is ideal, without descending into chaos. Heerwagen advocates biophilic design, using colors and patterns that are found in nature to reduce stress.

Sources: Kevin Kampschroer, director of federal high-performance green buildings for the General Services Administration; environmental psychologist Judith Heerwagen of the GSA; National Institute of Building Sciences' Whole Building Design Guide; Center for the Built Environment at Berkeley; Centers for Disease Control and Prevention; Scandinavian Journal of Work, Environment and Health; Environmental Protection Agency; "Effects of the physical work environment on physiological measures of stress" by Julian F. Thayer, et al., for the GSA and National Institutes of Health