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Green Buildings Are Smart Business

Since the early 1980s, American buildings have been getting environment, health and cost-smart, with the best yet to come for building across the country.

Numerous methods and guidelines exist for designing a smart building, notably the U.S. Green Building Council's Leadership in Energy and Environmental Design standards that were established in the early '90s. Another organization that sets standards for design is the American Society of Heating, Refrigerating and Air-Conditioning Engineers' (ASHRAE) which recently made its energy conservation standard easier to use. This revised guidance is intended to encourage greater energy savings and greener buildings.



BUILDING DESIGN

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One of the latest innovations to come to smart building design in the United States, particularly in Denver, is that of raised access flooring (RAF) and under-floor air.

It might be assumed that office designers have a simple, "cookie cutter" plan to follow when creating the space for mechanical systems like electrical, telecommunication, Internet and heating, ventilation and air conditioning (HVAC). However, RAF is turning all of that upside down.

RAF allows for a building's air delivery, electrical wiring and data cable to be installed in the flooring, as opposed to the ceiling. With the right approach, a cost-effective solution is possible.

The Intelligent Building Institute reports that "intelligent buildings help business owners, property managers and occupants to realize their goals in the areas of cost, comfort, convenience, safety, long-term flexibility and marketability."

COST-EFFECTIVENESS

When many people first hear about RAF, they instantly presume it will cost a fortune as opposed to the traditional in-ceiling installations. Contrarily, initial expenses are reduced. There is no cost associated with creating a false ceiling, less labor is used on concrete and floor slab preparations, wiring does not need to be installed into walls, and other construction efforts are either eliminated or reduced when compared to creating the ceiling space for mechanical systems.

RAF systems are also extremely cost-effective in the long run. With proper design and implementation, a building will see a less than two-year payback with up to 30 percent less in energy costs. Additionally, RAF systems lend themselves to fewer overall maintenance costs from the reduced plant and equipment.

RAF systems allow for a significantly greater systems capacity with fewer controls and less complex systems than the traditional installations. A major benefit here is that it allows for the unknown technological growth a company may take on or that we will see in overall technological advances.

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ENVIRONMENT

Going back to the LEED program, more and more developers are striving to achieve ratings that define their buildings as having "employed design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and occupants," according to USGBC. With improved air flow, energy efficiency, a greater ability to use outside air to cool a space and overall increased use of fresh air, RAF is as green as it gets.

HEALTH

Protecting the occupants of a building from health problems is often at the back of an owner's mind, but studies have shown that improved air quality can also improve productivity in a building.

According to Aeris, an online resource for indoor air quality information and education, hundreds of studies have "demonstrated a significant and casual correlation between improving the indoor environment and gains in productivity and health."

As is often the case, companies using a RAF system have seen early and greater pay back of their RAF expenses due to increased employee productivity.

FLEXIBILITY

It is nearly impossible to predict business growth, technological advances and the temperature in which employees desire to work. But, with RAF you don't have to have these answers when creating your office space as it will allow you to easily change along with your needs and those of your tenants.

System flexibility contributes to the value, environmental and health benefits associated with RAF. It works particular well in modern, technologically laden office spaces. With RAF, an office space can be redesigned without the need to trash a lot of office furniture or equipment that otherwise may not be compatible with an overhead system, thus creating less waste and more savings.

The number one complaint in any facility is the hot and cold calls received from end-users. This complaint is addressed head-on with the personal adjustability of diffusers that deliver air to each individual workstation. These multiple points of direct access throughout an office floor plan also allow for a quick and easy reconfiguration of partitions and system furniture, saving time and money.

In a nutshell, RAF is the ultimate solution to remaining flexible in today's modern workspace. Smart buildings are smart business and RAF is one element that can add to your building's IQ.

Since 1984, Pear Commercial Interiors has become one of the Denver region's fastest growing commercial interiors firm. Please visit www.pearcom.com for more information.

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