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# Relocatable Partitions, Access Floors: *Smart Moves in Building Design*

*Information provided by USG Interiors, Inc.*



*Ultrawall partition system from USG Interiors, Inc. This system is based on 3/4" pre-kerfed and prefinished gypsum panels and heavy duty steel framing.*

**W**hen it comes to selecting wall and floor systems for commercial space, the final decision often comes down to two factors--cost and flexibility. In other words, which floor or wall system is going to be the most economical over the life of the building and which system will best accommodate chang-

ing office layouts and wiring patterns. Once examined, it becomes apparent that these two factors are closely linked. For this reason, more and more building owners and designers are finding out that relocatable partitions and access floors offer the most cost effective and flexible options.

"Many people object to the pos-

sible higher initial cost of both access floor and movable partition systems," explained David Stover, manager of computer aided design for USG Interiors, Inc. "However, what must be looked at is the life-cycle cost of a particular system."

To help prospective customers examine the life-cycle cost of floor and wall systems, USG Interiors offers a service called DesignAid. Explained Stover, who runs the service for USG, "DesignAid is a computer program that compares access floors and movable partitions to alternative systems to help a prospective customer choose the most costs effective systems for a particular building." To make its comparisons, the DesignAid program takes many factors into account, two of which are depreciation and relocation costs.

Depreciation is a major component of a system's life-cycle cost. For tax purposes, an asset is considered either a structural component or personal property. The distinguishing factor between the two is permanency. Structural components are considered to be permanent parts of a building and thus are depreciated over the life of the building, typically thirty-one and a half years. Permanent dry-



*Air distribution control plenum system provides upward air supply.*

wall partitions and most systems for electrical distribution, like poke-through and cellular floors, fall under the category of structural components.

On the other hand, assets such as

movable wall partitions and access floors are considered personal property and, under the modified accelerated cost recovery schedule (ACRS), are depreciated over only seven years

It is through these tax savings that building owners can make up all of the higher initial cost of movable partitions and access floors.

A second major influence on life-cycle cost is relocation costs. "The average relocation rate for offices is about 30% of the occupants per year," reported Stover. "Access floors and movable partitions can keep the cost of these relocations to a minimum. In fact, when compared to some systems, the savings from only one move would more than offset any higher initial cost of access floors or movable walls."

Movable partitions provide several money-saving advantages over permanent drywall partitions when relocating. First, unlike drywall, which requires taping, joint treatment and the application of paint or wallcovering, movable partitions are pre-finished and do not involve wet work. Therefore, movable partitions can be relocated more quickly and easily and with less mess and fewer disruptions

to office productivity.

Second, waste resulting from the relocations of walls is becoming an increasingly important issue as many of our nation's landfills near capacity. "The average recovery rate of movable wall components is 80% to 90%, and can be as high as 95% with metal faced panels," explained Lee Gardner, manager of specialty interiors for USG Interiors, Inc. "On the other hand, virtually all of the components

in a standard drywall relocation must be landfilled and new materials purchased."

Third, some movable partition systems, like USG Interiors' Donn High Performance Wall System, are point-accessible which allows for easy maintenance, rerouting and modifications of electrical and communications lines that run through the walls. Panels snap off and on so that adjacent panels and framework are not disturbed.

With a standard drywall partition, any wiring run through the wall cavity is accessible only if portions of the drywall are torn out and replaced. This again results in additional material and labor costs and disrupts office operations for a longer period of time.

Finally, the partitions are installed over carpeting or tile so that flooring is not damaged during relocation, and because ceiling runners clip directly to ceiling grid, movable partitions also can be relocated without defacing ceiling tile.

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Access floor systems offer many of the same time and money saving benefits of movable partitions when it comes to relocating. Access floors allow for total flexibility in the locations of outlets for power, lighting, electronics and communications and an unlimited capacity to change or reroute these services. Changes are made simple by removing floor panels to gain access to the floor plenum.

There are several advantages to easy access to an office's wiring system. First, when relocating a workstation or rerouting services with an access floor system, the floor below is not disturbed. With many other wire distribution systems, access must be gained from the ceiling of the floor below. This disrupts office operations

on two floors instead of one and requires overhead ladder work and more labor hours, all of which add cost to a relocation.

Second, a change in wiring is clean and simple with an access floor system. Other systems for wire distribution are inexpensive initially, but become complicated and costly when relocating. For instance, the poke-through system requires the drilling of additional holes in the concrete floor to change the location of an outlet. This adds mess, noise and additional labor hours to a relocation. With a cellular floor system, outlet locations must be preset when installing the floor to keep costs to a minimum. This requires that work stations be placed to fit the location of the outlets rather than the other way around. This limits the flexibility of relocation and requires advanced planning that is not always possible in rapidly changing office environments.

With an under floor duct system, outlets are located in raised pedestals which must be removed by an electrician when abandoned, again adding more

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## **Access floor systems offer many of the same benefits of movable partitions**

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labor hours and cost to a relocation.

Finally, the plenum space provided by an access floor installation also can be used for HVAC. Again, access to the HVAC system is simplified which

makes maintenance to the system easier. Additionally, underfloor air distributions systems, like USG Interiors' Control Plenum system installed in Donn access floor panels, provide individual control, more uniform air delivery, fewer drafts and better air quality than ceiling air distribution systems.

In conclusion, because the design of every building is different and the needs of the offices they contain are varied, there is no floor or wall system that is right for every application. However, when making a selection, it is important not to rule out a system based solely on initial cost. A system must be evaluated based on its life-cycle cost and its ability to accommodate changing technology and office layout requirements. And because things change more than they stay the same, movable partition and access floor systems are smart options that deserve a closer look