A Wall By Any Other Name Is Moveable

By Lloyd Henry and D. Rucker

Floor to ceiling walls can perform like fixed wall construction to create private offices with hang-on capability.

Fixed drywall construction versus moveable walls: the virtues of each can be argued sufficiently to confuse any prospective buyer. Mostly this argument could be defined as a smoke screen to cover up other motivation. The tug of war on this issue could come from the commitment of drywall contractors, electricians and painters. Or maybe it comes from the attitude of conventionalism, “Why change now when we’ve done things the same way for years?”

Of course if this argument is never played out before the decisions are made to plan a commercial facility, one of our industries “wins” by default. What a tragedy in any case. Why? Let’s say we make an analogy between a doctor and an architect. Both of these professional people are sought out by their clients because they are presumed to be highly skilled counselors, trained to provide unique and personalized services. If a doctor constantly prescribed one method of treatment for all of his patients, like some architects specify fixed drywall construction, this doctors competency would be severely questioned. This doctor’s motives should be examined and so should his fee. Why should you pay for unique personalized counseling if you can predict that your own treatment will probably be that of your neighbors? It is irresponsible to specify any building material these days without considering the bigger picture, the future of modular interiors and the long term costs of your decisions.

The Big Picture

The issues of recycling need to be addressed. Environmental issues are vital to our respective drywall and moveable wall industries. Being “environmentally conscious” is not a buzz word; it’s a way of doing business. It’s a way of life. From a marketing standpoint, it’s smart to be proactive, too. Whatever side of the wall you are on, you may want to ask yourselves how you can defend the products and byproducts that are created as a result of your company’s involvement. By doing this analysis from a personal perspective, it forces the environmental impact issue home. Notice the operative word here is defend.

For example, we can cut open one of my laminated gypsum board panels. The aorta of my wall system, Moveable Wall by Lloyd Henry, is the product and byproduct of my company’s efforts. My 2¼ in. thick moveable wall panel is made of two pieces of 5/8 in. type X gypsum board face panels laminated to two 1 in. thick x 4 in. wide full height gypsum board ribs. The main material in my panel system is gypsum, and my ceiling and floor tracks are aluminum. As a company, we are
anxious to find out what our associated manufacturers are doing and in what time frame to recycle these materials.

My concern with recycling focuses on two separate levels of recycling. The first level is the issue of recycling from the manufacturing “in house” perspective. By this I mean dealing with the waste produced during the manufacturing process. The second level is the issue of recyclability for the product that has been constructed and is now in the buyer’s care. Contractors that construct fixed drywalls or construct moveable walls must deal with proactively pursuing methods of waste or demolition disposal on behalf of their end-users. We should keep in mind the ever increasing cost of waste disposal and the diminishing landfill sites available to us. Some landfills do not even allow gypsum board to be dumped at all.

Ironically, I suppose you could say the whole issue of recycling to any industry is a euphemism for that age old adage that philosophizes that ultimately and individually the consequences of bad behaviors must be accounted for, as in, “What goes around comes around.”

It is good business for us to ask ourselves, “How will our industry be held accountable for the environment, and how will this affect the costs of doing business in the future?”

**What Should Happen First**

When tenants or building owners decide that a moveable floor to ceiling wall system would be of benefit to their company, they would begin by asking for a plan from their architect for either the new construction or the remodeling to be done in the existing area. This helps everyone determine if the building’s construction components have been or could be more efficiently designed or modified to meet the intent of a movable wall systems—maximum flexibility.

The building components should be flexibility friendly. For example, light fixtures, switches etc. could be a conflict. We often look at how the building’s electrical system (new or existing) will interact with the moveable walls and how it may impair the wall’s ability to be moved in the future. Will the light fixtures, switches, and duplex outlets be conventionally hardwired, or could they be a soft wiring system? Can hardwiring be converted to a soft wiring system? What will be the projected ratio of change to the tenant space (just one of many considerations we suggest taking into account in the design)? Of course, either method of wiring will work, but if there is a chance to be proactive to flexibility issues, you or your wall supplier should be. The “plug-in” soft wiring light fixture methodology will make the tenant’s life a lot easier and accessible to change.

We can help the tenant or building owner ask questions he might not otherwise ask. The system’s interior will change as it’s designed to, at less cost and waste of materials. We will all be friends at the end of a project.

**Modular Interiors**

If you are tasked with working with an interior moveable wall system, you may naively assume nothing changes in how you run the job or in the construction sequence to build the walls. Wrong. Moveable walls should be treated like fine finished pieces of furniture. You can expect the walls that you will be responsible for as a contractor to perform like conventional walls, but instead of conceiving them through the conventional construction schedule process, you will put them in your finish schedule program.

Instead of constructing the fixed wall and installing the ceiling grid and carpet to those fixed walls, the contractor will complete the ceiling and the carpeting, and then the moveable walls will arrive, factory-finished and ready for installation on top of carpet and to the finished ceiling (not permanently attached).

Moveable wall systems can be turnkey. The wall would include wallcoverings, electrical, glass, and doors as well as the required labors. Some wall system contractors may need to subcontract out these items or services. This is important to know. The issue of a moveable wall company being turnkey will be another question to consider when a moveable wall system is being selected or has been selected by an owner to be part of your contract.

For floor to ceiling partition contractors out there who have not yet worked with this modular, moveable concept, there is nothing to fear. Quite often a floor to ceiling moveable wall system will be chosen to be compatible with modular furniture componentry being used in that same project. That is, the walls will be designed to work with the dimensions of a piece of modular furniture, and that piece of furniture will then attach or cantilever off of that moveable wall.

Let’s look at this modular idea a little closer so we can draw a comparison of fixed drywall to moveable walls from a structural stand point. Gypsum of itself is a mineral and is not recognized for its structural properties, particularly in California. The strength of a fixed wall comes from gypsum being attached to metal studs. Modular furniture cantilevered off of drywall alone would be risky unless that modular component and wall strip is positioned to be anchored to a stud. This
will not do. To try and hang modular furniture on a wall that dictates placement of steel studs voids the concept of furniture modularity...flexibility.

What needs to be done, of course, is to reinforce the drywall with 4 in. x 20 gauge steel straps running horizontally and up vertically every 16 in. inside the entire wall. This puts the concept of modularity and flexibility back in business. A modular component is then hung with wall strips on the face of the wall and fastened to the reinforcing. However, this extra reinforcement is costly.

A moveable wall such as laminated gypsum board incorporates an aluminum direct reach spline into the panel flanks. This gives the panel the ability to hang a modular component without additional reinforcement. By using the optional “soft wiring” modular electrical horizontally in the base of the wall panel, this would offer wonderful compatibility and flexibility to the low wall modular furniture systems to the floor to ceiling wall system. You can virtually eliminate the need to concern yourself with powerpoles.

**Selection**

Within the moveable wall industry you will find dozens of wall systems and a spectrum of qualities and price ranges from which to choose. A moveable wall can structurally compete with a fixed partition made of drywall and studs, or it can be as inferior structurally as a cardboard screed. Your selection depends on what it is you want that moveable wall to do. A moveable wall manufacturer should be able to provide testing documentation to support his claims. Furthermore, you should find out if the wall of your choice is approved by your local building department. After all, there is no sense in choosing a moveable wall that does not have seismic approval within the City of Los Angeles, for example, when that city is mandated to look at the effects of earthquakes.

Specifically, our moveable wall system has the maximum features for flexibility designed into the system. The panels come pre-finished to the specifications desired. By pre-finished I mean the panels are covered on both sides in either vinyl or...
in a fabric (weave subject to approval). Designated duplex outlets or switches with flex are built into individual panels at the factory. (We also offer six or eight wire modular electrical capability for the base as an option when using modular furniture with our wall.) When the panels arrive at the jobsite, a space plan is used to install the appropriate panel into its designated location.

Our panels are pre-manufactured to your location and finish schedule specification. Most modular wall systems have standard panel finishes and widths. We can provide panels from a 4 in. to 36 in. wide as our standard and all within the same response time. These panel widths are completely compatible to all modular furniture systems. Our wall meets all uniform codes and can even be specified to effectively create one-hour rated corridors.

**Personal Property Advantage**

If working with moveable walls leaves you feeling somewhat anxious, you may want to consider that one of the strongest reasons a moveable partition system may be specified over fixed is the tax advantage of moveable walls. Moveable walls and modular electrical fall into the category of personal property because they are not permanently attached to the building and can be moved and reused at another location.

Fixed walls and hardwiring are not considered personal property. Fixed walls and hardwiring are just that, fixed. Traditionally, fixed walls and hardwiring come out of capital improvement budgets and these dollars get depreciated back to the company only in 15 to 31½ year depreciation cycles. This is a disadvantage to cash poor companies that need to regenerate their dollars and to building owners that have a high rate of change for their tenants.

A building owner can take his capital improvement budget and reappropriate part of capital expenses to personal property (typically the interior furnishing category) to now include the gypsum wall, the wall covering, all of the electrical and doors, hardware, glass and base and depreciate all of these expenses over five to seven years instead of 31½ years. Furthermore, should the building owner decide to lease his personal property (including walls), he may be eligible to even further accelerate his tax depreciation since a lease payment usually has been considered 100% deductible. Before making any decisions on personal property vs. fixed, you should consult a licensed CPA for updates on our ever changing tax regulations.

**About the Authors:**

Mr. Lloyd Henry is a noted authority on moveable walls and is a general contractor in California. Mr. Henry, then Vice President of Vaughn Walls, Inc. collaborated with Mr. Wayne Vaughn to improve and develop the original Vaughn Wall moveable wall system to its advanced capability. Mr. Henry has independently continued to improve on this original moveable wall concept to make his own version called, *Moveable Wall by Lloyd Henry*. Mr. Henry is influential in establishing standards for building codes and construction requirements.

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