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# Marketing Modular Office Walls

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An Overlooked Sustainable Product

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An examination of marketing the sustainable benefits of modular office walls

## Introduction

Modular walls allow facilities managers the option of reconfiguring an office, much like a modern office cubicle except that modular walls are full height, floor to ceiling. There are a lot of environmental benefits with this kind of construction over conventional stud and drywall construction. But since the cost of modular construction is priced higher than stud and drywall, its adoption has not been widespread and its long-term benefits have been overlooked.

The biggest benefit of modular walls comes when a room needs to be renovated or redesigned. Instead of tearing down walls and sending material to a landfill or recycler, modular walls can be reconfigured and reused with little or no waste. This saves money, time, and natural resources. And there are many other benefits, as well. So why are modular walls still relatively unknown? The reasons are varied. This paper explores the modular wall market, identifies some of the problems, and proposes a solution.

## Segmentation

There are three fairly distinct segments in this market<sup>1</sup>. The “in-plant” office segment is an industrial market with products designed for distribution centers and manufacturing “plants” where form follows function. Steel walled panels and load bearing roofs are not uncommon in this environment. The office modular wall market is divided into two segments: the high-end corporate front-office, and the mid-range back-office. In the corporate office segment aesthetics have much greater importance. However functionality is also a factor as these walls have evolved with the cubicle by office furniture manufacturers and there are a variety of furniture options that can be integrated with these walls. The mid-range segment consists of back offices where price takes a priority over function or aesthetics. This middle market is served by both suppliers but is dominated by the office furniture manufacturers. Although this market has far more lineal feet of opportunity, it is not well developed. In this market modular walls have higher up-front costs compared to conventional construction and the benefits are not well communicated. This paper focuses on the middle segment of modular walls within the US, and how adoption of this sustainable form of construction can be improved.

## The Modular Office Wall Market

**Size:** The office modular wall market is dominated by the six largest office furniture manufacturers in the US (see endnote no. 2 for this list). The North American office furniture market is estimated to be \$11.5B. Between 1 and 5% is expected to consist of the modular wall product<sup>2</sup>. The middle market is expected to be much smaller since it is not currently being targeted by any manufacturer.

**Competition:** The office furniture market is fiercely competitive with each company copying another’s successful attempt to differentiate itself. This is evident in the expansion of the office cubicle first introduced by Herman Miller in 1968<sup>3</sup> and now copied by everyone. More recently the race to sustainability, again first explicitly introduced by Herman Miller in 1989<sup>4</sup>, is now part of every major furniture manufacturer’s marketing vernacular. However only Herman Miller and Hawthorn market modular walls prominently, and Knoll doesn’t even offer them, suggesting

that this product may not be as successful as other furniture products for these companies. It is not an insignificant market, though. Smaller privately held firms such as EWS and DIRT focus primarily on the modular wall market. Yet all of these firms, small and large alike, focus on the high-end corporate market. Except for some smaller industrial manufacturers who have budget minded products, this market appears to be quiet.

**Distribution:** The larger office furniture manufacturers distribute their products through local dealers. Each distributor uses their local contacts to sell the products they represent<sup>5</sup>. Each local market may have a few distributors that sell the same manufacturer and a few that sell competing manufacturers. Both the local distributors and the manufacturers will pepper architects and interior decorators with brochures and promotional material. Frequently purchasers will obtain competing quotes but often the relationships established will greatly influence the decision to buy<sup>6</sup>.

**Growth:** The office furniture market is in dramatic decline as the world economy suffers its worst situation in over 60 years. This is expected in the cyclic nature of the corporate world as it reacts to world and local economic conditions. The market for modular office walls will see a reduction in volume with the rest of the furniture market. Certain forward thinking purchasers may however view this product favorably with an eye towards long-term cost cutting. In addition, the demand for sustainable construction especially through the U.S. Green Building Council's LEED certification programs could contribute to reduce the negative impact seen in the rest of the furniture industry.

## **Product, Price, Place, Promotion, Planet, and People**

**Product:** The concept of today's modular office walls began in the 1960's with Robert Propst's "Action Office" from Herman Miller (Schlosser, 2006). It was a rethinking of organizational theory with the intent to model human relations rather than space optimization. This evolved into the huge market of the modern cubicle. Industrial modular walls came into being much earlier and evolved along a parallel path (Wallpro) until they came together when Herman Miller approached the Vaughan Wall company and introduced the V-Wall in 1981.

Today the modular office wall is very functional but aesthetics plays a major role. Integrated voice, data, and power, and the ability to hang desks and storage cabinets off the walls are good selling features. But appearances are marketed more than the ability to remodel a room at a very low cost. A wide variety of finishes are used in marketing materials and full-length windows are common. To a large degree, modular walls are marketed as impressive rather than sustainable products.

**Price:** The up-front cost of modular walls is more expensive than conventional "stick-built" construction. It is more expensive to have raw materials shipped to an off-site manufacturer, fabricated with markup, and sold by a local distributor with installation including an additional markup. With conventional construction raw materials are shipped to the site and built right in with only one markup by the construction contractor. However modular construction has a number of efficiencies that are not usually considered by the purchaser when comparing costs with conventional construction. These efficiencies include:

- Off-site fabrication with little or no on-site waste, debris, or dust.

- Quicker installation with less interruption to neighboring occupants and earlier occupancy in the constructed space translating into greater productivity.
- Depreciation over 7 years as equipment compared to 39 years for construction for greater tax benefits and a quicker return on investment.
- Dramatically lower remodeling costs because existing panels can be reused.

These cost savings are often overlooked when considering the price tag of each type of construction. These savings are also calculated on a case-by-case basis making them more difficult to communicate, much less calculate. Thus, these benefits are often overlooked when looking at price alone.

**Place:** The office and especially the private offices of senior executives are prominently shown in marketing materials. Back rooms like copy, mail, or break rooms are not part of the marketing of office wall partitions. However these back rooms are exactly the sort of place the industrial modular wall manufacturers are marketing to because of the diminished aesthetics of the industrial product. However the industrial product is typically over engineered for this environment and therefore costs are typically higher.

**Promotion:** Promotions are not a big part of this industry. Each sale is made on a case-by-case basis like the rest of the construction industry. Prices come down as work becomes scarce and prices rise as work becomes abundant. This is true for the greater economy and it is true for each distributor in a market. Occasionally a manufacturer of high end furniture will have a sale but matching the sale products with the end user's needs is harder in this market and overstocks are often off-loaded into secondary markets. But modular walls are a lower volume item and are typically made to order.

Promotional marketing within the office market is directed toward the corporate office interior designer with a dramatic aesthetic appeal. There is little or no information on the sound barriers, fire ratings, or structural integrity of these products. The marketing of the functionality of each product is left to the local distributor who by locking a customer into one product line ensures that all related items will also be from the same product line. This is because the integrated furniture of one product line only works with the modular walls of that product line.

**Planet:** Each of the furniture companies spends a good deal of marketing effort promoting their environmental benevolence. Herman Miller and Steelcase show the greatest commitment. Herman Miller has a long history of environmental awareness going back to 1981 when it began burning its waste for energy. Both Herman Miller and Steelcase began achieving LEED certification for their facilities in 2002 and both achieve cradle-to-cradle certification for many of their products. Haworth is not far behind. Their corporate HQ has been recognized for its innovative design and received LEED Gold certification as well as showrooms in Chicago, Dallas, and San Francisco. In 2006 it began funding research into sustainability and work environments.

The environmental benefits of modular walls are most evident during a redesign of the office wall layout. This is because the walls are reused instead of torn down and built up again. Reuse is far more environmentally sound than the next best thing, which is recycling. By reusing the wall panels little or no waste is delivered to the landfill, nor is any diverted to recycling, and no new material is harvested, processed, or shipped to the job site. If any new material is to be incorporated; only what is needed is ordered and shipped.

**People:** A large but difficult to quantify benefit of modular walls is the lack of disruption to adjacent occupants and their productivity. This is because there is little or no dust, less noise, and the speed with which they are installed. The fast turn around time also means the productive use of the space can begin sooner. These benefits are true of the initial installation and especially for remodels.

## The Problem

As suggested above, the needs of the middle market are not well communicated. The office furniture manufacturers and distributors are focused on the high end aesthetically oriented market, while the industrial market is focused on highly functional, sturdy products that are over engineered for back office needs. The problem isn't so much that a product to serve this market couldn't exist; it is because the purchasers in this market do not know about the long-term benefits.

The purchasing influencers of this market tend to be construction managers, office architects, and property managers. Each of these purchasers wins contracts and makes decisions based on perceived value and price<sup>7</sup>. Because modular construction up-front costs tend to be higher than conventional construction, this product is perceived to be a luxury that doesn't belong in the back office.

Because of this, furniture manufacturers focus on marketing to interior designers and end users who are furniture oriented and not facilities oriented. The industrial market does market to facilities managers for the back room office, but these applications are not widespread. The reasons for this failure likely include the added up-front cost of modular walls. But the real shortcoming may just be the huge hurdle to overcome unfamiliarity and achieve acceptance.

With furniture manufacturers targeting the interior decorator, the legitimate use of the modular walls for architectural structures is diminished in the eyes of developers and architects. Developers and architects are not concerned with furniture as this is the domain of the owner or end user. Thus an important target audience is not receptive to the concept of modular walls for their projects.

Similarly, the industrial manufacturers are targeting the facilities manager but not the finance officer who can see the financial benefits. The industrial market also does not target architects, developers, or property managers effectively. Some technical information is provided in the product data but it is insufficient to provide an industry standard Construction Specification Institute (CSI) specification<sup>8</sup>.

The entire construction industry is not really aware of the product or its benefits. The product turns up under several CSI divisions. It has appeared in Division 10 Specialties, Division 11, Equipment, Division 12 Furnishings, and Division 13 Specialty constructions. Worse than that, there is no consensus on what to call modular walls. It turns up under Demountable Walls, Service Walls, and numerous Metal Partition terms. Searching for the term, "modular walls", "service wall systems", and "demountable walls" for divisions 10-13 on the construction job tracking Web site, Dodge Plans (McGraw Hill) turned up only two projects in the entire state of

California from planning stage to final notice<sup>9</sup>.

## The Solution

Since this is a “new” market, all the benefits must be properly communicated and all the target decision makers must be informed. By identifying all the players and delivering information to them that addresses their concerns, acceptance of the product becomes more likely. A suggested approach for each audience is as follows:

**Architects:** Targeting architects requires a presentation that is on par with what the furniture manufacturers use to target interior decorators. They want to know that what they design will look good. But they also need to know it will function well. The sound and fire ratings that the industrial manufacturers provide are only a start. Fully developed CSI specifications are needed and information on seismic requirements would be helpful.

**Developers:** With the rush for LEED<sup>10</sup> compliance developers are looking ways to provide more sustainable buildings. Modular walls can be part of that program. Marketing the long-term benefits to developers to include the product in the effort to obtain certification is a great opportunity to get the foot in the door. However, the short installation time means the developer can turn the project over faster and this has a direct impact on the return on their investment.

**Property Managers:** Modular walls are ideal for property managers who face disruptions each time a space turns over. Often upgrades are needed or modifications are required to please prospective tenants. Showing property managers the ease with which offices can be reconfigured can be a real selling point for them to acquire new tenants with a minimal disruption to existing tenants.

**Owners:** Because modular walls depreciate as equipment over seven years instead of the 39 years of conventional construction, the return on investment can be much faster. Leasing the equipment is another alternative for cash strapped companies that need to make changes with little or no up front capital.

Each audience must be targeted individually and they all must be targeted collectively because the past has shown that the dealers who sell these products in the local markets are not effective. The manufacturer who decides to target this segment will need to develop the specifications and publish them on the Web where architects will find them. Nice brochures with the specifications and LEED information will need to be printed and distributed to the dealers with instructions on how to present the material to architects, developers, and property managers, and properly communicate the time benefits. The manufacturer should also work with the dealers to present the financial benefits to owners and help them obtain leasing. Because dealers play such a large role in making the sales happen, it may make sense to work with a select few dealers in select geographic markets and develop case studies. With a few case studies, the race will be on. As mentioned earlier, this is a competitive market place. Once one manufacturer breaks into this market and makes a success of it, others will follow.

## **Conclusion**

The middle market for modular walls is a potential gold mine for the company that taps it properly. At present this market has been underserved because the benefits have not been properly communicated. To overcome the conventional wisdom of conventional construction a multi-pronged approach should be employed to convince each decision maker in the project of the benefits to them specifically. As each audience gains knowledge about modular walls and how they can reduce costs, increase productivity, and speed up the return on investment, a tipping point will likely occur and the demand for modular walls will rise.

## END NOTES

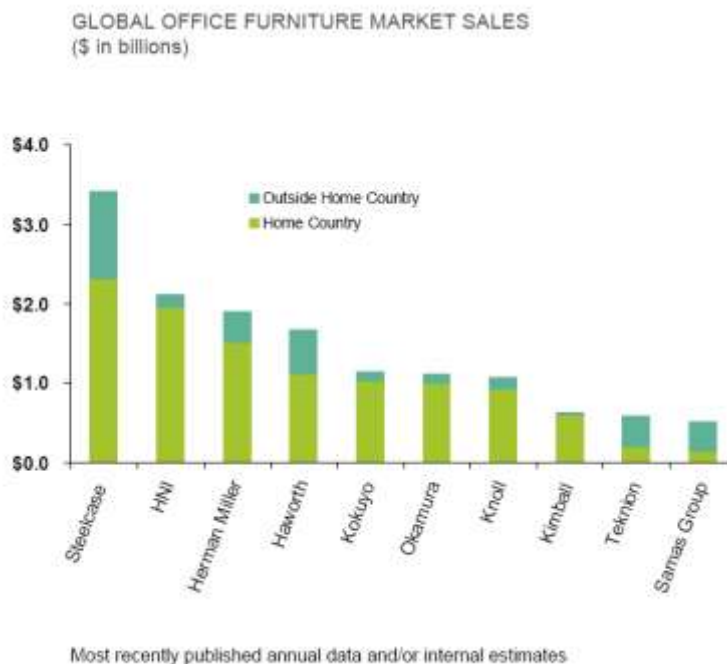
<sup>1</sup> Modular walls which unlike cubicle walls go from floor to ceiling would seem likely to have evolved from the office cubicle. However another evolutionary path came from the construction industry. Because the early designs were not very aesthetically pleasing they lent themselves to an industrial market. In this environment often offices were needed in the “plant.” These became known as in-plant offices. This breed of modular walls was highly functional including windows, doors, and electrical, but also roofs, HVAC, and structural supports to add second stories on top. However aesthetics was not a big concern and so they often had exposed connector posts and few options for decorative finishes.

<sup>2</sup> The estimated office furniture market size is based on information provided in the Steelcase 2008 Annual Report and Investor Relations report. The estimated portion of the modular wall market is based on the fact that only half the manufacturers provide the product and only Haworth features it somewhat prominently on their web site.

From Steel Case 2008 Annual Report:

In 2008, the North America segment had revenue of \$1,936.6, or 56.6% of our consolidated revenue... The North America office furniture markets are highly competitive, with a number of competitors offering similar categories of products... Our most significant competitors in the U.S. are Haworth, Inc., Herman Miller, Inc., HNI Corporation, Kimball International Inc. and Knoll, Inc. Together with Steelcase, these companies represent approximately 65% of the U.S. office furniture market...

Figure **Error! Main Document Only.**: Estimated World Market for Office Furniture, Steelcase 2008 Investor



Relations Report

<sup>3</sup> First conceived in 1964 by Herman Miller employees, Bob Propst and George Nelson, and then introduced in the market in 1968.

<sup>4</sup> Herman Miller begins burning waste as fuel in 1983, which is an environmental thing to do. But in 1989 they created an environmental quality action team to coordinate environmental programs and involve employees.

<sup>5</sup> The author has worked for dealers of office furniture and industrial modular walls for over

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fifteen years. Statements about how dealers operate and the relationships they have with manufacturers is based on this experience.

<sup>6</sup> Larger manufacturers rarely sell directly except for large national accounts as they do not benefit from disturbing their existing distribution channels. Smaller manufacturers will often sell directly until they have a successful distributor in a given market.

<sup>7</sup> Even in negotiated contracts that do not go out for general bid, the back office is a place where costs tend to be cut to drive down prices.

<sup>8</sup> A list of Construction Specification Institute (CSI) divisions is available from the state of California here:  
[http://www.cdcr.ca.gov/Divisions\\_Boards/CSA/FSO/Programs/2002ConstructionAuditGuide6thEd/docs/CSI\\_Divisions.html](http://www.cdcr.ca.gov/Divisions_Boards/CSA/FSO/Programs/2002ConstructionAuditGuide6thEd/docs/CSI_Divisions.html) . Actual specifications are proprietary and can be obtained through manufacturer's Web sites and through a membership with CSI here:  
[http://www.csinet.org/s\\_csi/index.asp](http://www.csinet.org/s_csi/index.asp).

<sup>9</sup> Search performed on 3/29/08 on the subscription only service Web site,  
<http://dodgeplans.construction.com>.

<sup>10</sup> LEED stands for Leadership in Engineering and Environmental Design. LEED is a green certification system from the U.S. Green Building Council. More information is available here:  
<http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>.

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<http://www.zimbio.com/Green+Building/articles/166/Modular+Walls+and+LEED+Credits>