

An open letter to the U.S. Green Building Council

From the manufacturers of modular wall systems: DIRTT, KI and Haworth

Dear Mr. Horst,

For the first time in the history of our industry, modular wall manufacturers are joining in one voice to address the impact from these products on LEED attainment. This is a testament to the importance of modular wall systems to the LEED rating system and sustainability of space over time.

The U.S. Green Building Council and all concerned with the environment know the most effective R's of sustainability are Reduce and Reuse. Yet, the LEED-CI rating system continues to emphasize recycling and recycled content and focuses on materiality rather than behaviors. The new LEED 2009 version continues this direction which we feel needs to be altered.

We implore the USGBC to consider rewarding strategies for ongoing, long-term sustainability. Projects that initially create less waste, have smaller carbon and real estate footprints to begin with – and just as important – stop the cycle of build, demolish, dispose, re-purchase, rebuild, demolish...

In your request for input for LEED 2009 you asked contributors to limit their comments to one of the points being altered in the Rating System scorecard. Modular, movable walls could certainly be regarded in *Construction Waste Management*, *Interior Air Quality*, *Tenant Space Long Term Commitment*, and of course *Design Innovation* – with or without recycled content. To this point, only once, and it was a hard fought fight, was an Innovation credit ever handed out for the use of movable walls on a project. Consequently, **Scorecard Change** is the area in which we wish to speak.

Construction Waste Management 2.1 & 2.2 gives point consideration to the diverting of waste, but no such credit consideration is given when waste isn't created in the first place by having pre-manufactured elements installed. According to Cornell University an average of one pound of drywall ends up in a landfill site for each square foot of drywall built in initial construction. Even if this goes to a recycler, it creates added transportation pollution, requires conversion energy and it still only refers to virgin drywall – not demolished.

A space made with studs and drywall may have diverted waste during initial construction, but is in no way responsive to the needs of the living, breathing business working inside it. Building out interior spaces using drywall is not sustainable. The EPA estimates changes in these inflexible spaces result in 155 pounds of material waste for every square foot. Electrical components, paint, screws, vinyl and adhesives make all that drywall difficult, if not impossible to safely recycle.

Granted, finding a way to quantify the creation of zero waste versus the diversion of tons of waste may be too subjective for the Scorecard. Therefore, we ask that you look to your 'Vision and Executive Summary' where "...remaining relevant in a rapidly changing market..." is vital to LEED 2009. Modular, flexible building interiors are not only environmentally sustainable for the long-term but also create an initially environmentally friendly space. It is to this end, we feel modular, flexible, pre-manufactured elements like wall systems should be considered as part of a new category supporting and recognizing modular construction. At the very least, we ask that it become easier for LEED projects using modular behaviors to obtain *Innovation in Design* credits. Other elements to consider would be; plug & play power/data, removable access floors, modular carpet tiles, sound masking, and indirect lights, all elements manufactured in a controlled factory setting and open to removal and reuse in new locations.

Modular, movable walls can impact the whole project, by shortening the construction schedule, thereby lowering transportation pollution and fossil fuel use, eliminating off-gassing, and dramatically reducing drywall dust with the resulting duct clean-out and disposal.

By choosing modular, flexible elements that create little or no waste initially and in the future, environmental sustainability becomes a business strategy rather than a reactive cost for business.

According to the *2030 Blueprint*, each year in the U.S. we build approximately 5 billion square feet (sq. ft.) of new building, renovate approximately 5 billion sq. ft. and demolish approximately 1.75 billion sq. ft. of existing buildings. By the year 2038, three-quarters of the built-environment in the U.S. will be either new or renovated. To that end, serious consideration should be given to awarding LEED credits to those projects that choose completely flexible interiors from cabling, to lights, to carpet, to walls and furniture. These are behavior-changing tools.

We are all working toward the same goal. In fact, the November 2007 draft of *LEED for Healthcare Rating System* includes a credit for implementing movable walls. We look to you for recognition in every built interior, so all our clients who choose to create responsive spaces that stop them from filling their local landfills and destroying their indoor air quality will be rewarded for their environmental actions now and in the future.