



LEED: A Standard for Future Generations

A conversation with HOK

One of a series of collaborations between Herman Miller, Inc., and leading architecture and design firms

All of a sudden, it seems, the architecture and design world grows greener by the day. Enthusiasm for environmental programs and practices is sprouting up everywhere. No one would want it any other way, though, of course, we all hope that doers outnumber talkers. One program designed to recognize the doers is rapidly catching on—the Leadership in Energy & Environmental Design (LEED) rating system devised by the U.S. Green Building Council.

Founded in 1991 (Herman Miller is a founding member and HOK an early supporter), the USGBC, a coalition of building industry leaders, educators, and government agencies, has continued to revise and expand the LEED system to include new construction and major renovations (LEED-NC), existing building operations (LEED-EB), commercial interiors (LEED-CI), core and shell (LEED-CS), and homes (LEED-H). The LEED process rates the site, water efficiency, energy and atmosphere treatment, materials and resources used, the indoor environment, and innovation and design. As of June 2004, some 108 projects across the country have received a LEED certification.

www.usgbc.org

Recently ranked among the most-admired design firms in the country, HOK has been a pioneer regarding LEED and environmental building practices. The firm actively pursues LEED accreditation among its design professionals; more than 140 HOK professionals have already been accredited. In this conversation between Herman Miller and four HOK architects (including Bill Odell, co-author of an influential guidebook to sustainable design and an early participant in the USGBC and the LEED process), you will hear a frank discussion of LEED, its present and future prospects. You will also find references to other resources for sustainable building design. To echo Walter Gropius, the “ethical necessity” of sustainable design is beyond doubt. Designing for the environment, whether in regard to furniture or buildings, should be at the top of all of our agendas.

Herman Miller: What’s the appeal of LEED, and how did HOK become so deeply involved?

Bill Odell, Sustainable Design Principal, HOK: LEED appeals to many people and organizations on many levels—educational, as an incentive, as a requirement—and it’s extremely nonthreatening. With an early version of LEED,

Paul Hawken and Amory Lovins,
Natural Capitalism, Little Brown
and Company, 1999

when we rated a project for SC Johnson and found we would probably be awarded a high Silver, the CFO looked at the project manager and said, “Why don’t we see what it would take to get a Gold?” It has that effect on many clients.

Interest at HOK in environmental practices began in the late 1980s and early 1990s as an informal network of people. This led to monthly telephone calls to share information, materials, and so on. Then we went to an environmental conference in Santa Barbara—it was the first time I had heard Bill McDonough and Paul Hawken speak.

Ray Kohl, a Canadian, spoke about a wonderful system he and others had devised to measure the impact of every factor of a building on the environment. Everything, every piece of material, related to environmental impact. It was enormously complicated, even for people who truly wanted to use it.

So we were looking for some groups connected to buildings and architecture to work with, and Sandy Mendler suggested we look at the U.S. Green Building Council—a consensus-building organization with an avowed mission to avoid the extremes on both sides of the environmental debate. We helped start the first ratings committee to set up the basic framework for rating—site, water, and materials.

Now LEED is fairly well known. The fact that LEED is doing so well is evidence that it’s nonpolitical, a pragmatic solution. There are some heavy players involved in LEED. When you get the biggest developer in the country, major governmental agencies, cities, states, and major corporations behind something, you get action. GSA now requires LEED, as do the cities of Dallas, Santa Monica, Chicago, and Kansas City.

Herman Miller: Is there much discussion among your peers and colleagues as to whether LEED is the right thing to do? Is there some alternative?

Tom Nelson, Senior Designer, HOK: Yes, there is a lot of debate about whether it’s the right thing, the right format. Some of the biggest debate is about regionalism of building, since LEED is written in a general sense and doesn’t really reflect regional differences. There’s a lot of debate related to the competition to get a high rating—the lengths to which people will go. You sometimes hear of “buying points” just to get a higher LEED rating. Does it really benefit the building to do that? For example, does it make sense to put a cistern for rainwater in the Southwest where it rains very seldom only to get LEED points?

Kristen Childs, “Critique: Progress Not
Perfection,” *Contractmagazine.com*,
April 1, 2004

Just yesterday we were talking about these issues as we were putting together a proposal for a LEED platinum building.

Herman Miller: How do you present the case for LEED to clients?

Nelson: There are many benefits to LEED. We do have some good, hard evidence of the financial benefits of incorporating sustainable procedures and materials into buildings. The payback can be short. The investment in sustainable building systems will be paid back in energy savings alone. The nebulous aspects of the costs have become more finite. The big question is always, how much is this going to cost? The owners’ sense has been that this is going to cost a lot more, but that number was hard to quantify.

Herman Miller: Does it cost a lot more?

Nelson: I don't think it has to, and our experience is showing that some things don't cost any more. A certified building doesn't have to cost any more than a conventional building. Hopefully, it can cost less.

Odell: If you have a team that knows what it's doing and you have the right attitude, not only should it cost no more to get a Silver LEED, it should cost less. If the team has been through the process before, you start to realize the things you can strip away, the synergy you get by truly integrating sustainable goals into a building program. If the team is new or tentative about sustainable goals, it often becomes tentative.

Nelson: The early buildings that used the additive approach to get a LEED rating often were more expensive. They were unfortunate examples, because they were very expensive buildings. They're much less typical these days.

Herman Miller: Do you ever have to convince a client that sustainable design is the right thing to do?

Nelson: Oh, yeah. Our biggest challenge is to get advocacy on both sides. If the owner doesn't have an advocate, somebody who strongly believes that LEED will happen, it won't happen. We used to just include environmental goals in the program and try not to say anything about them. It used to be a losing battle. You'd start your green speech, and their eyes would roll back in their heads. There are many things you can do that don't affect the price of the building or schedule or anything else. But they are the right things to do.

Tim Gaidis, Project Designer, HOK: I agree. A fitting analogy is the difference between pulling a rope and pushing a rope. If a client is leading, everything follows nicely. When we have to push the sustainable rope, things tend to get bunched up between us and the client.

To get a LEED Gold, you have to have a team that knows what it's doing and a willing and informed client. We have begun to educate consultants, especially engineers, who can sometimes be obstacles, so that they can advocate. In some fast-track projects, there is less time to educate people about LEED, and you cross a line where sustainable goals become cost-add instead of cost-neutral.

Nelson: It used to be extremely difficult to find knowledgeable, committed engineering firms that will support sustainable building practices. Today, many of them do.

Herman Miller: How do clients find engineers or consultants who will willingly help them build a LEED building?

Mary Ann Lazarus, Firm-wide Sustainable Design Coordinator, HOK: They can go to their architects. We are developing an informal network of consultants and engineers whom we know and respect and work well with on LEED projects.

Herman Miller: What do you do when there isn't an advocate on the client's side?

Odell: Punt!

Gaidis: But you can sometimes slip something under the radar. For instance, we don't use the phrase "high-performance" with clients who aren't convinced about environmental design because they equate that with high cost. We say "best-practice" approach. Ultimately, that's what it is: we're trying to do the best and most responsible thing.

Herman Miller: And if there is a client advocate?

Gaidis: Then it's easy. We can save them time and money, get them good PR, and do the right thing.

Odell: In a large laboratory project, the client had no interest in LEED. We were already several floors out of the ground, when one of the higher-ups in the client organization went to a conference, heard about LEED, and decided that was where he wanted to go. I got the call from the project team asking for help and thought there was no way to get a rating—the project was too far along. We went through the checklist and started to work. When all was said and done, the project got a Silver rating and we took costs out of the project!

That happened because the project team had made smart decisions all the way along; they picked the right materials and so on. They had built a tank to take the storm surge, and that became a great way to capture rainwater simply by lowering the base of this tank. They could then store enough water to serve the needs of the site and also avoid storm-water charges downstream altogether.

Lazarus: In fact we have set a LEED rating as a goal for every project, just to spread the ideas around HOK—whether the client really backs it or not.

Herman Miller: What does a client need to ask an architect to find out whether he or she is considering LEED—or at least considering sustainable practices?

Odell: I have heard variations on that question a good deal. My suggestion is that when you issue your RFP for the project you ask a few questions about the architecture firm's LEED experience and what their thoughts are. I guarantee if a client shows an interest, the architect will learn all about LEED fast. I remember a story about a firm that got some questions about LEED, and they were completely ignorant about it. But they educated themselves about LEED, and the process of completing this project transformed their firm. They only do LEED buildings now.

Herman Miller: What can a client expect by way of major steps in having a building LEED certified?

Nelson: First, at HOK, we have an eco-charrette to introduce a client to what's possible for the building project we're talking about. This is a daylong meeting for the client and the design team to understand what's possible—technology and materials available. We set goals and then distill the conversation so that the whole team is on the same page regarding outcomes and aims.

We would probably do a first pass at the LEED checklist. We would tell our client what we could shoot for on this project. The important thing is to begin talking about LEED from the very start. We also find out whether the client has a LEED documentation consultant or whether we will do that. The person who will actually record all the documentation should be involved as soon as possible. It's a big job. I try to make all these discussions a natural part of the design process.

If a client is interested, they will help get whatever information you need and set the direction. It usually doesn't take much more than a couple of meetings to discover what the client wants and get the mindset right. It doesn't take any additional coaching throughout the project. Once a client understands that LEED continues throughout the project, we can deal with it.

I have also taken clients on field trips to see new technologies they might not be familiar with. It gives everybody confidence. Nobody wants to be a guinea pig, and we can show them other projects already completed. Seeing what's already been done really helps.

The client and architect actually document the rating and submit the documentation to the USGBC at the end of the project. They review it—and usually ask for revisions. Then you get your plaque. Or you don't.

Now of course there are a variety of LEED products—certifying your building operations (LEED-EB), or the interiors of a building (LEED-CI). In fact, one of the highest LEED-rated buildings is the National Resources Defense Council building in Santa Monica, an existing building that the owners totally rehabilitated, really took it down to the ground.

Herman Miller: Is there a residential rating in the works?

Odell: It's in the works—one for residential, one for labs, one for healthcare, one for neighborhood developments or campuses. EB and CI are furthest along and are actually being issued. The format is also under examination—making the various categories consistent with the original intent—so that all decisions around a building project reflect the science behind environmental efforts. We will also probably see some sort of regional variation.

Lazarus: How to do all that without getting too complicated will be the trick. We've seen enormous interest at the institutional level. We just had a workshop in St. Louis on campus ecology programs. MIT, Dartmouth, University of North Carolina, and Harvard attended; Washington University was the sponsor. People sat around and discussed why they are involved in sustainable design on their campuses. It's incredible the changes we've seen in just the last six months.

Odell: The USGBC mission on its Web page says they will work at “transforming the market.” The question is, how? One problem is, as I just saw at a recent conference, how to move from doing green literature to designing green products!

Herman Miller: Do you have a good conversion experience story where a client came in unaware of LEED and left totally convinced?

Nelson: Not exactly, but I can tell you something similar. One client had a good deal of green language in the RFP—they wanted a green architect. We poured it on in the interview, and we got the job. What we didn't know was that they were extremely inexperienced and had included the sustainable language in the proposal only because a higher up insisted on considering it. This left the team not knowing much about sustainability.

We were pretty aggressive in proposing sustainable goals, and they were pretty accepting. Now that the project is designed and is actually under construction, I was doing a panel discussion with the client, and for the first time I found out the truth: that most of the selection committee knew nothing about sustainability when I made our presentation—even though they asked for an aggressively sustainable project!

Odell: An earlier project in Minneapolis serves as a good lesson. We had been meeting every Friday with the senior management crew about the project. One Friday I put environmental issues on the agenda and explained what we were doing and the steps we were going to take—this is before LEED began. Mostly there were blank stares around the table. The president told me that he had too much to worry about, that this project was extremely political, and that I should

Sandra Mendler, “HOK Reexamines the Future for Sustainable Design,” Design Intelligence (di.net), Vol. 8 No. 8, August 2002

do what I thought was right. He wanted me to bring any new or risky technology back to the team, or ask if there were to be any significant cost premium.

I realized that up until that point we were asking permission to do something we all knew was right—and we shouldn't have been. We should just have done it.

Herman Miller: Should clients take the same stance?

Odell: Yes, they should argue from strength instead of asking for permission. Today—or shortly in the future—there will be a tipping point where if you do a building and do not take LEED and sustainability into account, you will be putting yourself and your organization at risk.

Lazarus: Particularly regarding health issues. For years, Carnegie-Mellon University has been looking at workplace issues, and the past few years they have been looking at sustainable issues and their relationship to good health. Their studies are convincing evidence that sustainable ways of building are directly related to healthier buildings—materials, air circulation, daylighting, and so on.

Herman Miller: Should a client insist on a LEED-accredited architect?

Nelson: I think it goes beyond that. Not only should an architect have accredited professionals on staff, they should have a track record and serious experience at working on sustainable buildings. There are many accredited people these days, but it means a great deal more once you have really done a building and really come to grips with what the LEED rating system is all about.

Odell: Would you really want to have a doctor who had passed all the exams but had never done the surgery before? It's still true that the overwhelming majority of architects don't know much about LEED. Still, a clueless client and a clueless architect, if they are committed to a sustainable building project, can do a great deal.

Gaidis: Actually, I can tell you about a project where a client had gotten clues from several directions that they should be taking sustainable issues into account. They wanted to use LEED as a guide but not as a driver. They didn't want to commit to it in the event that the effort failed. During the project-alignment sessions, we had discussions about sustainability. We had this huge team to get onto the same page and had great success in stirring up enthusiasm for sustainability, whether or not the strategies were directly related to LEED. Everything was going fine until the first cost estimates came in. The pressures to cut costs were tremendous. The budget was cut almost in half, and because sustainability was a “new” thing, it was perceived as dispensable.

At that point, they asked us to reduce our sustainable efforts. We had proposed many strategies but were, in most cases, unable to meet newly imposed limits of \$1,500 capital cost add and five-year payback limits per strategy, and we never got back to the motivational energy we had before the cost cuts. On one hand, we got to struggle with sustainable goals, though we didn't achieve all of them. On the other hand, we did get this client to take some small steps toward sustainable buildings. And this will influence their next project, and the next.

Herman Miller: Has your work in sustainable or green architecture changed your view of design or the process of architecture in general? Has it added just another dimension?

Odell: It has changed my view.

Sandra Mendler and Bill Odell,
*The HOK Guidebook to Sustainable
Design*, John Wiley & Sons, Inc., 2000

Nelson: It has revolutionized the way I think about buildings. Now I think about the building more comprehensively—that the building can be the mechanical system, that you can make a building do more than just be enclosure. At the same time, you can still make a building do all the things we were taught a building should do. But you can make the building produce energy or move air or all those things that sustainability wants to do. It has completely changed the way I look at the design process.

Gaidis: I think architects are always looking for rules—both to celebrate and break. Sustainability has given designers a reason to look at opportunities other than formal aesthetics. You can celebrate the function of a building as part of a work-wide solution. You now think more holistically, more inclusively about every system that goes into a building. It's how a building relates to an entire environmental context.

Nelson: Thinking about sustainability brings me back to fundamentals about buildings. Sometimes we forget a basic question: What is a building supposed to do? Sustainability forces you to think hard about the basics. How do I site this building so that you get the best advantage from daylight, because I'm going to use natural light and ventilation.

I don't want a building necessarily to look green. I don't want to increase the cliché potential—you know, that someday someone will look at this building and say, that was done at the turn of the century and they were trying to be green.

Herman Miller: Does having a building meet LEED requirements ever limit your aesthetic choices?

Nelson: I think it does the opposite.

Odell: It gives you a reason to reach out.

Lazarus: Bill does a slide show of green buildings around the world, and I remember how striking some of them were. Unfortunately, some of them were not so beautiful either. In this year's AIA Committee on the Environment top-ten LEED projects, some are beautiful, beautiful buildings. It's very exciting. It's a different world when you think comprehensively—in the way LEED helps you to do.

Odell: In the slide show Mary Ann mentioned, I put up a list of things—limited daylight, poor air quality, unhealthy materials—and then another list—lots of daylight, lots of fresh air, healthy materials. Nobody comes in and says I want that first list. No one.

Herman Miller: What resources can you direct clients to for education about LEED?

Lazarus: The USGBC has a PowerPoint presentation that you can download and use with clients. We've used it as an educational tool. Part of the problem is knowing which site on the Internet is worth going to. We respect the information made available by BuildingGreen, an unbiased group that has several products, including a good newsletter called Environmental Building News. All of this is available online. They also have a GreenSpec, a product listing reviewed for environmental reasons. The third piece of their offering is a case study database. They take the LEED buildings and describe the projects.

www.aia.org

www.greenbuilding.com

Environmental Design + Construction
magazine

"Spotlight on LEED," *Environmental
News*, December, 2003.

Herman Miller: Do you think 20 years from now LEED will be a new school of design?

Nelson: I hope it will mainstream, just become a standard part of the way architects design. I think at some point the USGBC will raise the bar, but that, too, will become standard practice. And you will start seeing people going beyond LEED—restorative buildings. Make them give something back. Architects are competitive and smart people, and pretty soon they will find ways to outdo LEED.

Gaidis: I get the feeling that with LEED the world of architects is now in the flare of light you get when you first strike a match. Soon we will be in a steady burn. This happened with ADA. When it began, there was a lot of scurrying around. Now universal design is simply part of our practice.

Architects are most often the link between the built environment and society, and a huge responsibility for pushing sustainability falls on architects, on our shoulders here at HOK. We need to have the right information, become educated about the possibilities and procedures and follow through with our intuitions.

Odell: At a meeting recently of HOK design directors, where we present current projects and talk about them, every presenter but one mentioned LEED and environmental aspects of their projects. Quite a change from a few years ago.

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