

Green Practice Advice

Adapted from an article by Joe Snider, LEED AP, originally published in SPP Journal, the newsletter of the AIA Small Project Practitioners Knowledge Community.

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SUMMARY

Joe Snider, LEED AP, explains six fundamentals to building a successful green project. Whether building a house with sustainability in mind or reaching for LEED (Leadership in Energy and Environmental Design) certification, these steps form the building blocks of a sustainable project.

ADJUST CONTRACTS

Current owner-architect-contractor agreements do not contain language specific to green projects. To encourage subcontractors to be conscious of sustainability goals, set penalties for spoiling or incentives for meeting LEED certification. A contractor or subcontractor can adversely affect the sustainability of a project. Unless penalties are set, there is little recourse against a subcontractor that accidentally negatively affects the health of occupants—for example, by erroneously using a high-VOC adhesive.

DECIDE SUSTAINABILITY GOALS EARLY

Decide what level of sustainability the project will try to meet as early as possible. Many of the decisions made in the beginning phases have the greatest impact on the environment. To help achieve sustainability goals, define green strategies with all project participants prior to starting.

PROVIDE TRAINING

Require all members of the project team to be adequately trained in the concepts and techniques associated with the sustainable elements of your project. I met an architect who required his consultants to attend a LEED workshop before he would sign construction contracts with them; he even offered to pay their workshop fees. If pursuing a LEED certification specifically, encourage everyone involved to have a LEED Reference Guide on hand.

EMPHASIZE COMMUNICATION AND TEAMWORK

Success depends upon the contractor's, owner's, and architect's joint commitment to teamwork. Communication breakdowns can cause setbacks. For example, on one job we struggled with on-site recycling. Eventually, the contractor and owner worked together to solve the problem: They split the cost of magnetic, bilingual recycling signs for the dumpsters.

EMBRACE IN-HOUSE GREEN

We learned that what we thought were negligible decisions on the job site could affect the sustainability of the project. Green design is not just an application or a coating applied to a building. It should be a driving force in the design and construction process—as important as, function, structure, and aesthetic.

TAKE CONTROL

Never underestimate the importance of design-phase energy modeling. Energy modeling on our project became an after-the-fact evaluation of a design we couldn't change because it was too late. Many of our general assumptions proved to be wrong based on energy modeling after the project started. For example, the type of low-e coating we chose turned out to have infinitely more impact on heat gain than increasing our wall R-value by 30 percent. Design-phase energy analysis will also help maximize cost-effectiveness of.

The LEED (Leadership in Energy and Environmental Design) Green Rating System[®] is a registered trademark of the U.S. Green Building Council (USGBC). For more information, go to <http://www.usgbc.org/>.

ABOUT THE CONTRIBUTOR

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FOR MORE INFORMATION

See also “Energy Analysis and Design” by Donald Prowler, FAIA, *The Architect’s Handbook of Professional Practice*, 13th edition, Chapter 11, page 616. Also see “Greening Your Practice” by Sandra Mender, AIA, in *The Architect’s Handbook of Professional Practice Update 2004*, page 29, and



“Selecting Environmentally Preferable Products” by Nadav Malin, LEED AP, and “LEED Certification Services” by John A. Boecker, AIA, in *The Architect’s Handbook of Professional Practice Update 2005*, pages 81 and 133, respectively.

The *Handbook*, *Update 2004*, and *Update 2005* can be ordered from the AIA Store by calling 800-242-3837 (option 4) or by sending e-mail to bookstore@aia.org.

MORE BEST PRACTICES

The following AIA Best Practices may provide additional information related to this topic:

- 18.18.01 High-Quality, Low-Tech Construction
- 18.11.04 Responsible Energy Management:
Leading By Example
- 18.11.03 Basic, No-Cost Green Building Principles