Building Green

by Dave Holbrook

remember hearing the observation, "If you want to get rich, start a new religion." I didn't start scribbling hot new scripture then, and haven't since, but the thought is provocative. I wonder if some of that same cynicism doesn't underlie the "green" concept of manufacturing and marketing. A recent TV ad shows an Energy Star-rated dishwasher grazing in a lush field under a cloud-flecked blue sky. Using that dishwasher makes the sky a little bluer, according to the announcer. It's a stretch, for sure, but basically, you're either a believer or a skeptic.

The desire to make amends for the harm we do exploiting the planet's resources is a good and proper one, but "How?" heads a long list of questions. What does it mean to be "Green," and how much do we as builders have to change, technologically and philosophically, to embrace it? What's in it for us? A Gallup poll showed that nearly two-thirds of Americans think of themselves as environmentally aware, although it's doubtful the same number of people put it into practice. Nonetheless, these figures play to a market that caters to consumers' self-perceptions. In fact, seen in this light, working green becomes a competitive advantage and a way to increase profits through resource efficiency. Green can be good for business.

To learn more, I checked out a few of the books that carry the resource-friendly torch for building's future.

Getting the Green Light

Green isn't for everyone, or is it? Those among us who prefer to deny or disguise their sensitive "tree-hugger" side have



less need to hide nowadays. New regulations that demand energy conservation and sustainable development force a response from builders and developers. Thermopane windows, R-13 insulation, high-efficiency boilers, fluorescent lighting, engineered lumber, and construction waste separation are all components of green awareness.

According to *Green Development: Integrating Ecology and Real Estate* by Alex Wilson, Jennifer L. Uncapher, Lisa McManigal, L. Hunter Lovins, Maureen Cureton, and William D. Browning (1998; John Wiley & Sons, One Wiley Dr., Somerset, NJ 08875; 732/469-4400; www.wiley.com; \$70), stepping beyond the

mandated approach and exploring alternative methods of development allow the practitioner to do well while doing good.

Aware that contractors and developers are inherently concerned with the bottom line, this book presents over 70 case histories of real estate development that took a fresh and profitable look at their approach to resource efficiency. In many instances, the application of green technology yields better economic results than the standard practice, doing away with the notion that going green costs more. While these are invariably tales of large commercial and industrial projects, the examples suggest that there's much to like about thinking green.

Some solutions smack a little of the idealistic "shiny, happy people" syndrome: for example, the case of the San Francisco affordable housing complex where people of diverse races share a common entry to their separate cluster abodes and live in idyllic harmony — well, I hope so. This book may not present a direct application to single residence construction, but the reader's awareness undergoes a shift. Green isn't just for New Age earth-first sentimentalists; it appears to go hand-in-hand with our cultural and technological evolution.

Hallmarks of the green approach include working with, rather than against, natural configurations and the elements, reusing existing sites and materials, and employing natural light, shade, heat, cooling, and shelter. There's nothing radically different from ancient building practices in this. Green can be defined as *working with* nature, as opposed to *going back to* nature. If anything from these examples makes sense to you, maybe you'll find a profitable way to apply it to the way you build.

Turning Green

Building Green in a Black and White World by David Johnston (2000; Home Builder Press, 1201 15th St. NW, Washington, DC 20005; 800/223-2665; www.builderbooks.com; \$45) is written by a person with the jaws of the building bug firmly clamped on his psyche. Unhappy with building conventional structures, the author combined his degree in environmental systems design with



a desire to build energy-efficient, high-quality, environmentally responsible homes. After restructuring his company to pursue this direction, he discovered a large, receptive, and well-informed market waiting for green building methods and materials.

Builders contemplating the green market will find much useful information in this book; Section One aptly answers the question of why to build green. If you're giving serious thought to testing the waters, Johnston's experience in the home construction market offers a wealth of experience. His suggestion to "start where you are" and wade in gradually includes ideas for offering an energy conservation package, an indoor air quality package, or a resource conservation package as upgrade options to the way you currently build. You may, in fact, already be working with green products, like engineered lumber, or incorporating energy-efficient design and high-efficiency HVAC. Appendix A provides checklists from six regional home builder associations' "green builder programs" against which to compare your company. By experimenting with single concepts, you can test your market and find out what works for you and your customers.

The next step is understanding how to market what you do. As the blurb on the jacket reads, "You can build green, but home buyers will never know unless you tell them." The builder-practitioners consulted in this book unanimously attest to the marketing edge that green-oriented building provides them. Johnston provides strategies, and gives examples of methods he and others use to promote their companies' green-ness. For example, clients who react unfavorably to the use of OSB in their home may change their minds when informed that it's produced from young, fast-growing trees, as opposed to plywood, which requires the harvesting of larger, often old-growth trees to produce the veneers.

Many concepts, small and large, are presented to help you make equivalent adjustments to the way you perform and promote your work. As a greenhorn, I'd want to check out other sources, attend seminars, and learn as much as I could about the concept of green, but this book is definitely worth reading.

Green Acres

The *Green Building Advisor* — version 1.0, a collaboration of the Center for Renewable Energy and Sustainable Technology, Design Harmony, and BuildingGreen (1998; BuildingGreen, 122 Birge St., Suite 30, Brattleboro, VT 05301; 800/861-0954; www.buildinggreen.com; \$179) — covers a lot of turf, with mixed results, on a single CD for either Windows or Mac. One gripe is that, after loading, the

Adobe Acrobat-based program didn't fill my screen, but left a wide border of Windows desktop and a little frame of eyestraining text to read.

Program features include "716 green building design strategies, 18 detailed green building case studies, 1,291 green building product listings, 286 bibliographic green building information references," and more. To use the "building design strategies" function, you select from a series of multiple-choice dialog boxes, describing the project you want to evaluate in terms of geographical location, project type, building type, and history (in the case of a remodel). The program

then presents five main design strategy categories: site & ecosystems, energy use, water use, resources & materials, and indoor environment.

Design options are then

"moderately recommended" or "strongly recommended," based on the project description. Clicking on any single line of recommedation subtext takes you to an expanded description and a

selection tab for an evaluation of merit based on the building phase, cost, and level of difficulty (relative to conventional practice). Building phases include pre-design, design, construction, and occupancy.

If you're beginning to think that this is a lot more information than the average builder asks for, you're right. However, you can filter the output to some extent by unselecting some reporting capabilities and, as you become more familiar with the program, limiting the information that you review. You have to click on individual folder "tabs" to open a category, so it's easy to skip areas of non-interest. You can print and edit personalized reports that include your company name, project notes, and recommended strategies. You can also print the detail screens for inclusion in project documents, design team handouts, or discussions with your client.

The case studies are of commercial and industrial sites, but the product listings and bibliographic references included in the package are both worthwhile. Unless you're a serious design/build outfit, you probably can't justify acquiring the program as an offhand purchase, but if you've got a client who wants to pay for detailed green planning, the CD organizes a lot of information and resources into a fairly easy-to-use package.

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THE GREEN SCENE More Resources

The Alternative Building Sourcebook: Traditional,
Natural and Sustainable Building Products and Services,
edited by Steve Chappell (1998, Fox Maple Press, P.O.
Box 249, Brownfield, ME 04010; 800/369-4005;
www.nxi.com/www/joinersquarterly; \$20). A non-evaluative compilation of more than 900 green products from
over 400 manufacturers and suppliers.

Healthy House for the New Millennium: A Design and Construction Guide by John Bower (2000, The Healthy House Institute, 430 N. Sewell Rd., Bloomington, IN 47408; 812/332-5073; www.hhinst.com; \$22). A look at indoor air quality, with a component-by-component evaluation of appropriate materials in a "healthy" building system.

GreenSpec Binder: EBN Product Directory with
Manufacturers' Literature (1999; BuildingGreen, 122
Birge St., Suite 30, Brattleboro, VT 05301; 800/8610954; www.greenspec.com; \$99). Environmental Building
News' 300-page directory organizes more than 1,200
"carefully screened" products, along with guideline specification language, in the industry-standard 16-division CSI
MasterSpec system. The directory alone costs \$79; the 3ring binder, including manufacturers' literature, adds \$20
to the price.

A Guide to Developing Green Builder Programs (1999; NAHB Research Center, 400 Prince George's Blvd., Upper Marlboro, MD 20774; 800/638-8556; www.nahbrc.org; \$25). Developed for home builder associations, and for individual builders, this book and CD set provide a guide to working with HBAs on green marketing and awareness programs.

Green Building Resource Guide by John Hermannsson, AIA (1997; Taunton Press, P.O. Box 5506, Newtown, CT 06470; 800/888-8286; www.taunton.com; \$38). A subjective listing of green, resource-efficient, and durable building materials, with a handy price index and cost comparison with the commonly used materials they replace.

The Green Home Product Guide: toxicity, performance, cost savings, resource management by Dru Meadows, AIA, and Charles Bell, AIA (1998; the GreenTeam, 1504 S. Norfolk Ave., Tulsa, OK 74120; 918/599-0011; http://home.earthlink.net/~arcvet; \$35. "Fast and easy ratings and room-by-room references for the green builder."

