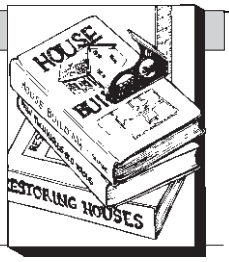
Building Philosophy



The Apple Corps Guide to the Well-Built House by Jim Locke; Houghton-Mifflin Co., Boston, Mass.; 267 pages; $9.95, paperback.

Readers of this column may remember author Jim Locke as one of the ultra-conscientious Apple Corps builders in Tracy Kidder's book *House* (reviewed October, 1985). With this in mind I looked forward to digging into *The Well-Built House* when a proof copy arrived. Having finished reading, I still respect Locke and the Apple Corps' philosophy of building, but I was disappointed by the book.

Despite the title, the *Apple Corps Guide* is written exclusively by Locke, and is not a collective "Apple Corps" effort. Although the *Guide* presents a comprehensive view of house building—from initial planning and paperwork to the final punchlist—it is all filtered through Locke's experience and strong personal preferences. The strength of Locke's opinions—first noted in Tracy Kidder's preface—gives the book its character and flavor. On the other hand, methods, materials, or practices that the author frowns upon received little attention, and the book suffered as a result.

For instance, the Apple Corps prefers vertical-grain red-cedar clapboards for siding its buildings. Locke devotes several pages to discussing its merits and proper application. In presenting alternative sidings he admits that because of various difficulties, "I just don't like vertical-board siding on a house." He recommends the (fairly obvious) necessity of installing horizontal blocks between studs for nailing purposes, and warns that board-and-batten (b&b) siding may react "violently" to changes in weather. He neglects to inform his readers about proper material selection and nailing technique to minimize cupping, allow for natural movement, and keep joints closed. These exact topics were addressed in detail with respect to clapboards, so I was left wondering whether Locke was unaware of how to do b&b siding, simply overlooked the matter, or chose not to address it because of his dislike of the material.

Locke says Apple Corps nails through two clapboards (not one) into plywood sheathing (not studs) in order to avoid splitting the siding—this is contrary to industry-recommended practice. Even though Locke says it has worked, I question the wisdom of nailing into plywood alone when applying clapboards over foam sheathing.

Shingles receive a scant two paragraphs; brick, stone, and stucco get one; while vinyl and aluminum are dismissed with a firm but pithy: "In fifteen years of building we've never installed [them] and we hope never to." This treatment may be defensible in that Locke wishes to address what he considers to be quality construction, but breadth and depth are lost in the process.

Locke makes it clear in the very first pages that he wants his readers to build "a certain *kind* of house"—one that is built for longevity and to the highest affordable standards of quality and craftsmanship. From this, the intended readership seems to be homeowners interested in commissioning a custom house. As the book developed I became confused about who exactly Locke was speaking to. In many places Locke presents rather exhaustive detail on some particular technique (e.g., nailing clapboards) or issue (e.g., whether to hang doors before or after installing hardwood flooring), which went far beyond the technical needs of all but the most inquisitive homeowner. Though Locke advises that custom (as opposed to stock) doors may vary immensely in quality, he does not tell homeowners how to judge the difference. Often I felt Locke was writing for other builders (a legitimate pursuit, but not his initial one), but then dropping the ball in details that could have been educational.

Some other points where I found Locke's coverage to be hit-and-miss include the following:

When illustrations would have been a great asset, he gives a purely verbal description of typical working drawings.

Commenting on scheduling subs in the busy season Locke says, "In desperation some (builders) resort to using block foundations, a poor idea." Locke doesn't tell me ***why*** he thinks block is a poor choice.

Locke's discussion of site and subsurface drainage is excellent, and will save everyone much grief if his recommendations are followed. At the same time, he recommends 3/4-inch plywood for subflooring over 16-inch-on-center joists when 5/8-inch is adequate. This leaves me wondering what he uses for 24-inch spacing—a subject not discussed. Is this not "quality" construction?

At other times I found Locke to be literally in error and even maddeningly unsupportive of his own convictions. For instance, he describes concrete as "porous," when if properly mixed and cured, the stuff is almost watertight. He faults "construction films" (e.g., Tyvek) for being "heavy" when a 10-foot roll can easily be carried with one hand. And what does he mean when he says extruded polystyrene insulating board costs "$600 per square inch of thickness?"

Locke says the Apple Corps uses crossbridging between joists to "increase the solidity of the structure"—seeming unaware that tests have shown that bridging or blocking contribute little or nothing to solidity.

When Locke tackles environmental hazards, more serious omissions arise. He claims that plywood is "thought to emit dangerous fumes even after it is installed." What are these fumes? How dangerous are they? How do they threaten the homeowner from *outside* the vapor barrier? What is the source of this claim?

Similarly he criticizes foam sheathing for emitting ''deadly fumes" when burning (true enough), but he provides no direct evidence for the statement: "...three-quarters of all deaths in building fires...said to come from smoke inhalation...[are] aggravated by burning plastics." He alludes to a link between ozone layer depletion and chlorofluorocarbon (CFC) foaming agents without documenting whether there is really is any causal link to building insulations. He also seems unaware that extruded polystyrene is foamed with CFCs. While he recognizes a potential exterior vapor-dam problem in plywood sheathing, he ignores the issue when discussing foam panels.

Finally I note that Locke believes that "heavy" rafters (2x12-inch) will control outward thrust—an idea that readers of my April 1988 "Case in Point" article will realize simply doesn't work. Experienced builders may catch this snafu. Despite the fact that Locke undoubtedly believes his own advice, homeowners are getting a dangerous disservice here.

The other theme that emerges is etiquette—or how to get along with your builder. Locke advises the reader to pick a builder first, even before selecting plans or hiring an architect. He values being hired at the beginning, noting that he's "all for competition, but I like trust more." He discourages owners from doing any work themselves, citing difficulties introduced by "class distinctions" (to say nothing of problems due to owner incompetence or inaction).

Delays he says are "a Bad Thing"—to be avoided at almost any cost after construction begins. His urgency here seems somewhat overstated, and might actually defeat the goal of quality construction. Locke constantly reminds readers to be cautious and stay out of the builder's way as much as possible: "Early on...ask when a good time to show up (at the jobsite) would be." Make decisions immediately and don't "waffle." Helpful and well-intentioned as this advice may be, I was left with the feeling that Locke's message verged on "don't get uppity."

Locke is ostensibly writing to educate clients, and for that purpose, you might consider offering this book to your clients. However, Locke is so opinionated and his presentation so spotty that this strategy might backfire. You could find yourself spending valuable time explaining why you do things differently or why you disagree with the author. On the other hand, builders with some degree of sophistication and experience might enjoy comparing notes with Locke and the Apple Corps, and pick up some pointers along the way. Unless the final version of the book is substantially different from the one I reviewed, I recommend *The Well-Built House* only with many reservations.

—Paul Hanke

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All About Zinc Coatings: A 12-page booklet from the American Hot Dip Galvanizers Association , *Zinc Coatings*, describes the methods used to coat iron and steel with zinc for corrosion protection. A chart lists the applications appropriate for each method. For a free copy, and other free materials, contact the American Hot Dip Galvanizers Association Inc., P.O. Box 80, Clarendon Hills, IL 60514; 312/352-6884

Wood Panels: Four "Builder Tips" leaflets on the proper use of structural wood panels are available from the American Plywood Association. Form M300C, *Cut Callbacks with Proper Spacing and Nailing*, describes the correct spacing between panel edge and end-joints for APA-rated sheathing, Sturd-I-floor, and 303 siding; Form N330, APA *Panels for Soffit Applications*, gives information on panels for both open and closed soffits, and construction of roof overcharges: Form K310C, *How to Minimize Buckling of Asphalt Shingles*, tells how to prevent roof problems by using correct ventilation, storing sheathing and shingles before construction, and proper panel, felt, and shingle installation; Form N335, *Proper Installation of APA-Rated Sheathing for Roof Applications*, covers prevention of roof problems with techniques such as proper nailing, fastening, and ventilation. For free single copies, write the American Plywood Association, P.O. Box 11700, Tacoma WA 98411 and request the leaflets by form number.

More Wood Ideas: The many applications and uses of High and Medium Density Overlay (HDO & MDO) plywood are covered in a new 12-page brochure available from the American Plywood Association: *APA Product Guide: HDO/MDO Plywood*. For a free single copy write the American Plywood Association, P.O. Box 11700, Tacoma, WA 98411, and request Form B360F.

Seismic Safety: The Building Seismic Safety Council (BSSC) has just released a new series of "Seismic Considerations" handbooks. Their purpose is to encourage consideration of earthquake-resistant design and construction in seismic risk areas throughout the U.S. The three separate volumes—*Elementary and Secondary Schools, Health Care Facilities, and Hotels and Motels* — are 100 pages each and divided into two parts. Part One outlines the risk to each type of facility and the cost-benefits of seismic design: Part Two covers the particular earthquake design problems for each building type. Copies are available free of charge in limited quantities. Contact: Building Seismic Safety Council, 1015 Fifteenth St, NW, Suite 700, Washington DC 20005; 202/347-5710.

Closet Door Hardware: A 24-page catalog describing Stanley Hardware's complete line of FasTrack Closet door hardware is now available. Included are drawings and photographs of FasTrack hardware for bi-fold, by-passing, and pocket doors. For a free copy. write Stanley Hardware Co., The Stanley Works, 195 Lake Street, New Britain, CT 06050.

Outdoor Lighting: *Why Lighting?* is a 15-page booklet from the Toro Company on the subject of low-voltage outdoor lighting. Aimed at do-it-yourselfers, the booklet provides step-by-step instructions and photcgraphs. For a free copy, contact: The Toro Company. Home Improvement Division, 5300 Shoreline Blvd., Mound, MN 55364; 612/472-8300

Commercial Skylights: Wasco Products' latest 16-page full-color catalog promotes the use of standard commercial skylights as a more economical alternative to custom installations For a free catalog contact Wasco Products, Inc., Commercial Skylight Division, P.O. Box 351, Sanford, Maine 04073; 1-800/522-1181.

Ways To Weatherize: *A Comparison of Two Weatherization Techniques: Nu Seal-Up Vs. The Air Sealing Specialist*, is a 95-page report on a study conducted by Northeast Utilities's Market Research Group. The goal was to determine which of two approaches to weatherizing homes was most cost-effective, and would most reduce electric hearing, consumers' usage and demand. The report also touches on how these methods affect indoor air pollution. For a free copy contact Russell K. Johnson, P.O. Box 270, Hartford, CT 06141-0270; 203/665-4664.

Hardwood Advice: Two guides have been published which will help those working which hardwood interiors: *Hardwood Floors: Handling Complaints and Troubleshooting* has been released by the National Oak Flooring Manufacturers Association (NOFMA) and the National Wood Flooring Association (NWFA). The 20-page manual deals with ¾-inch solid hardwood flooring, and discusses the causes of problems that develop with such floors—such as cupping, buckling, and sqeaking—and how they can be solved. Copies are available for $5, ($2.50 for members of NOFMA or NWFA) from NOFMA, P.O. Box 3009, Memphis, TN 38173; or NWFA, 11046 Manchester Rd., Kirkwood, MO 63122. For design ideas when working with hardwood, see *Imagination Within*, recently released by the Hardwood Institute. The full-color booklet illustrates over 60 examples of custom hardwood flooring, ceilings, wall paneling, millwork, staircases, and cabinetry. The 44-page idea book is free, but make your request on your company letterhead: from the Hardwood Institute, 45 Union Ave., Dept. PT, Memphis, TN 38103.