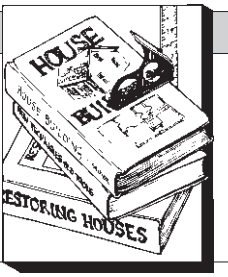
Nailing Down Commercial Work



Carpentry in Commercial Construction by Byron Maguire. Craftsman Book Co., Box 6500, Carlsbad, CA 92008; 1988; 262 pages; $19 paperback.

Carpentry in Commercial Construction is unique. In many years of reading books about building, I"ve never seen one that organized and presented material in quite this way. This book is written for the builder who has been doing single-family residential work and who wants to branch out to commercial. It attempts to inform the reader about the many differences between these two related construction fields. Seven chapters cover different tasks, from form work to installing cabinets. But the uniqueness of the book lies in the way each of its chapters is written.

Each one opens with a list of selected definitions, ranging from time-line plan and procuring to rabbet and straight edge. These terms should already be familiar to readers with previous building experience. Next comes a discussion of how to organize all the tasks involved in the job at hand, supplemented by a chart outlining responsibilities.

The core of each chapter is a technical description of the work to be done, which is followed by a brief overview of what kind of training program you might establish for your workers for roofing, interior finish, or whatever. This is backed up with a detailed list of tasks and training exercises. Review questions close each chapter.

Sometimes the technical information is detailed and helpful. At other times I question the author's competence. The chapters on form work and framing, for instance, contain a wealth of engineering-type data on the pressure exerted by wet concrete, the sizing and spacing of form components, beam deflection, "f" and "E" ratings for lumber, span tables, savings attainable with "MOD-24" construction, and sound resistance values for various structural sections. On the other hand, the material on metal framing is much too brief to be of real use to inexperienced workers. For instance, I don't think you could cut jack rafters based solely on the explanation offered in the book.

Similarly you'll find better advice on handling trusses in some quality trade publications than you will in *Commercial Carpentry*. Ditto for production carpentry techniques, which I have seen better described elsewhere.

Other parts of the book left me scratching my head, such as the author's statement that applying both siding and sheathing to a building (as opposed to single layer walls) helps prevent the *foundation* (my emphasis) from racking and settling. Mr. Maguire also claims that collar ties set 18 inches from the ridge act to reduce outward thrust on walls below. (This is an error that I learned about the hard way.) He also says that double wall siding (i.e. sheathing and siding combined) is nailed to the *sheathing* (page 139), while a few pages later he says it is nailed to the *studs* (page 143). Which is it? And I've never seen subflooring cut away to install an exterior door as illustrated in the detail on page 152. I suppose this method may be used somewhere, but I don't know why.

The foregoing comments should give you the gist of my quarrels with *Carpentry in Commercial Construction*. But, as I said, you'll also find good and helpful advice that will probably aid you in making a transition into commercial work, organizing your jobs and crews, and establishing training programs. The problem is that some aspects of commercial work that are substantially different from residential (i.e. steel framing) weren't given adequate attention in spite of the excellent coverage devoted to other topics.

Free & Cheap

Analyzing Appliances: The American Council for an Energy-Efficient Economy publishes *The Most Energy-Efficient Appliances*, a 28-page listing of efficiency information for various brand names and models of residential equipment. The energy efficiency, and in some cases the annual energy cost in dollars, is given for each appliance based on how many units of energy it uses. Minimum efficiency standards are described as well as what changes will take effect in the future and when. An appliance lifecycle cost worksheet concludes the booklet. Send $3 to ACEEE, Suite 535, 1001 Connecticut Ave. N.W., Washington, DC 20036; 202/429-8873.

Which Dip?: *Hot Dip Galvanizing Costs Less and Lasts Longer* according to the title of a new booklet from the American Hot Dip Galvanizers Association, Inc. This free, 7-page brochure puts forth the results of a study which compared hot dip galvanizing to inorganic zinc-rich paint in the coating of structural steel. Performance (coating life) and lifecycle costs of each are provided in bar graph and chart form. To order, write to the American Hot Dip Galvanizers Association, Inc., P.O. Box 80, Clarendon Hills, IL 60514; 312/352-6884.

Picking Panels: Available from the American Plywood Association is the *Residential & Commercial Construction Guide*. This 56-page booklet includes sections on selecting and specifying APA panels; construction of panel floors, walls, and roofs; building requirements for fire resistance, wind resistance, noise transmission, energy conservation, and condensation; and related panel systems. For a free copy, write to APA, Dept. E30K, P.O. Box 11700, Tacoma, WA 98411; 206/565-6600.

The Old, The New, and The Unusual: Twenty-nine pages of old, new, and unusual books are listed in *Architectural Books & Books On Related Fields*, a free catalog from F.P. Elwert Architectural Books. Listings are alphabetical by authors' names and include brief descriptions and prices. To order, write to F.P. Elwert Architectural Books, P.O. Box 254, Rutland, VT 05702; 802/773-3417.

Building with (S)Tile: For $2 you can order the 1989 American Olean Catalog, a 56-page listing of American Olean's complete line of ceramic tile and installation products. Glazed tile, porcelain ceramic, and quarry products are described and illustrated, as well as natural stone products and specialty tiles. Installation products include grouts, additives, mortars, sealants, and tools such as trowels and cutters. Architectural specifications for each type of tile are given, and a listing of all national sales representatives concludes the brochure. To order, write to American Olean, 1000 Cannon Ave., Lansdale, PA 19446; 215/855-1111.

Index of Cabinet Suppliers: The National Kitchen Cabinet Association publishes an annual *Directory of Certified Cabinet Manufacturers*. The 1989 directory lists cabinet manufacturers who are certified by the NKCA by state, and a more complete listing with addresses, locations, and certified cabinet lines is in alphabetical form. The introduction explains the NKCA certification program and its construction standards which include requirements for door operation, drawer quality, finish endurance and appearance, and structural integrity. To order a free copy, contact NKCA, PO Box 6830, Falls Church, VA 22046; 703/237-7580.

K&B Cornucopia: Kohler Company has a six-book series of product brochures outlining *Toilets and Bidets; Faucets; Lavatories; Console Tables & Vanities; Baths and Whirlpools; Showers; and Kitchens and Bar Sinks*. The brochures run between 14 and 40 pages in length, and include color photographs and complete descriptions of each product such as dimensions, type of material, and available colors. All six brochures can be ordered for $8 and come with a 68-page idea book. Individual brochures are available for 40 cents each. Write to: Kohler Company, Attn: Advertising, Kohler, WI 53044; 414/457-4441.

–Josie Masterson

What Buildings Feel Like

What It Feels Like To Be a Building, by Forrest Wilson. National Trust for Historic Preservation, 1785 Massachusetts Ave., NW, Washington, DC 20036; 1988; 74 pages; 8-1/2x11; $10.95 paperback.

Because December is also our holiday issue I like to include a book for younger builders and architects. In *What It Feels Like To Be a Building* Forrest Wilson uses analogies to the human body to explain how and why buildings stand up. As he says, "Buildings feel the same stresses and strains that people do." For this reason, he adds, you can put yourself in a building's place and understand its "body language."

In his inimitable drawing style and very simple language, Wilson describes the forces on buildings and how they resist them. Gravity, he says, feels like "glue," which keeps stones from flying upwards. Similarly columns feel like "squash" because they are squashed between a building and the ground. Pyramids get wider near the base so they can "carry more weight over their heads." A butting ram – complete with wings – illustrates the principle of "flying buttresses." An arched window is built of people standing on each other's shoulders. Fun and informative at the same time.

– Paul Hanke