



Building Anatomy

Building Structures by James Ambrose. Wiley-Interscience, 605 Third Avenue, New York, NY 10158-0012; 835 pages; 1988; \$69.95, hardcover.

Building Structures consists of eight hundred and thirty-five comprehensive pages covering the breadth and depth of structural design, arranged in nine sections. Part One addresses basic concepts for beginners – providing a general orientation to structures, safety, economy, architectural considerations, loads, reactions, materials, and systems before delving into the actual investigation of structures. Part Two runs the gamut from static forces and beam behavior to harmonic motion and space frames, including applied mathematics and computational methods. Parts Three through Six expand further on the specifics of wood, steel, concrete, and masonry design. The remainder of the book covers foundations, lateral and seismic forces, and examples of overall structural design. This book is abundantly illustrated and includes sample exercises (with solutions), and an extensive glossary. In addition to being a classroom text, the author intends the book to be used as a "self-study reference."

Math (in the latter section) is at a "generally simple" hand-computation level to keep the book accessible to a very broad audience. This is about as close as you could hope to come to a single-volume reference on structural mechanics, and worth the price to anyone with more than a passing interest in the subject.

Framing It Right

Wood Frame House Construction by Gerald Sherwood and Rob Stroh, eds. NAHB, 15th & M. Sts., NW, Washington, D.C. 20005; 276 pages; 1988; \$21.00, hardcover.

A revised update of USDA Handbook No. 73, published by the Forest Products from 1955 awards. This edition reflects recent advances in building technology and practice, from batter boards to pressure-treated wood. Some advice – such as chemically treating soil against termites – is too abbreviated to be in accord with the latest environmental concerns, but you'll also find information on topics like retaining walls not found in most other housebuilding books. Right up to date on truss handling, plywood H-clips, ice-dam prevention, and vapor barriers.

This book includes details for arcane problems like deck attachment, stain/paint suitability criteria, noise control, and seismic loading. Clearly written, lackluster but informative drawings, and an extensive glossary complete the picture. Looks good.

No-Frills Details

Standard Structural Details For Building Construction by Morton Newman. McGraw-Hill, 1221 Ave. of the Americas, New York, NY 10020; 358 pages; 1968; \$63.50, hardcover.

A compendium of generic construction details for wood, concrete, masonry and steel (sometimes overlapping). A short text introduces each chapter, and captions accompany every detail (two or three per page). Wimpy (but adequate) drawings, although you'll have to refer often to the table of contents and/or index to find what you want due to the lack of organizational identification among the pictures.

Useful for students or as an alternative to amassing your own detail file (which is how the author came to create the book). Pricey, though.

- Paul Hanke

Free & Cheap

Wood Panels: *The APA Panel Handbook & Grade Glossary* is a 44-page alphabetical guide to structural wood panel products and terminology. From A to Z illustrations accompany definitions on everything from siding, frame construction, and glue to paneling, sheathing, and underlayment. Send for this free guide by requesting form X505N from the American Plywood Association, P.O. Box 11700, Tacoma, WA 98411; 206/565-6600.

And More Wood Panels: *The 28-page APA Product Guide: Grades & Specifications* provides an overview of wood panels, grades, surface textures and patterns, and a guide to specifications. This color-illustrated guide is free and available upon request of form J20D from the American Plywood Association, P.O. Box 11700, Tacoma, WA 98411; 206/565-6600.

How-To, How-To: A free, 36-page booklet titled *Housebuilding Basics* is published by the American Plywood Association. This guide spans the wood frame construction of a single story house, from laying out the foundation to finishing exterior siding. Illustrations show basic steps such as the framing of floor, roof, ceiling, and walls. The booklet contains an alphabetical glossary and information on construction panel products. To order, request form X461H from the APA, P.O. Box 11700, Tacoma, WA 98411; 206/565-6600.

Fighting Fire With Gypsum: *Gold Bond Area Separation Walls* is a 12-page illustrated brochure published by Gold Bond Building Products. It describes three cavity drywall fire barrier systems for use between adjacent wood frame building units. Product characteristics and limitations, in-depth installation procedures, and tables of ratings are given for the I-Stud, Screw Stud, and H-Stud systems. Free from Gold Bond Building Products, Area Separation Walls Inquiry Dept., P.O. Box 667850, Charlotte, NC 28266-9961; 704/365-7300.

Studs of Steel: Another 12-page publication from Gold Bond Products is titled *Curtainwall Systems*. Also free, this brochure consists most-

ly of tables listing technical information on curtainwall studs; framing and facing, maximum span height, fastener spacing, and insulation values. A construction index is included. To request a copy, write to Gold Bond Products, Curtainwall Inquiry Dept., P.O. Box 667850, Charlotte, NC 28266-9961; 704/365-7300.

Why Wood is Good: Three case studies of engineered wood systems are found in *Business and Mercantile Buildings*, a four-page illustrated brochure from the Southern Pine Marketing Council. The Council's view of the advantages of using wood versus steel or concrete materials for framing, sheathing, trusses, and wall panels is put forth using the examples of three retail and office centers. Free via the Southern Forest Products Association, Box 52468, New Orleans, LA 70152; 504/443-4464.

Resisting the Elements: The 28-page APA *Design/Construction Guide: Diaphragms*, is a free booklet that describes what a structural diaphragm is, why and how it is used in building design to resist horizontal load, and design methods. Detailed design examples of structural panel diaphragms used for different types of buildings are included, as well as a resource list. Available from the American Plywood Association, Dept. L350B, P.O. Box 11700, Tacoma, WA 98411; 206/565-6600.

Reference for Remodelors: *The 1989 NAHB Remodelors Council Catalog* is a 6-page compilation of information resources such as brochures, videotapes, packets and kits, and reprints and collections of magazine articles pertinent to remodeling. Covered are nine categories from business management and government programs/regulations to member services. The catalog also includes a flyer on NAHB Bookstores publications. To order a free copy, contact National Association of Home Builders, Remodelors Council, 15th & M Streets, N.W., Washington, DC 20005; 202/822-0216.

Details, Details...: McGraw-Hill publishes four guides by Morton Newman, all derived from his book, *Standard Structural Details for Building Construction*, (reviewed this issue) and all for under \$25.00. The first, *Structural Details for Concrete Construction*, covers categories such as footings; grade beams; walls; caissons; column, slab, and precast wall sections; and pile caps. *Structural Details for Masonry Construction* contains specifics on hollow-unit construction, brick construction, and concrete block retaining walls. *Structural Details for Wood Construction* spans elements of wood building, including post and footing connections; structural diaphragms; stairs; stud wall, beam, roof framing, and floor connections and sections; and heavy timber details. Finally, *Structural Details for Steel Construction* "presents...the various alternative methods of connecting the component members of a building's structural steel frame."

All four of the guides follow workbook format, and are illustrated, spiral-bound paperback. They range in length from 122 to 209 pages. To order, write to McGraw-Hill Book Company, 11 West 19th St., New York, NY 10011; 212/337-5945 or 212/337-5951. ■