



Solar Additions

Sunwings: The Harrowsmith Guide to Solar Addition Architecture, by Marilyn Mohr. Camden East, Ontario: Camden House Publications, 1985. (Available in the U.S. from Harrowsmith USA, Charlotte, VT. 05445.) 146 pages, \$14.95 paperback.

by Paul Hanke

Harrowsmith is a fine Canadian magazine that now is venturing into the U.S. market with a south-of-the-border edition. The magazine has a well-deserved reputation for quality, but this book doesn't live up to the precedent set by the periodical.

The photos too often are murky, the drawings have an amateur quality, and the text is written primarily for home owners. Occasional terms also may need translation for those who do not regularly tune in to the Canadian Broadcasting Corporation.

Those who have kept up on the subject of sunspaces and solar additions over the past decade will find little new here. What is of interest is the book's emphasis on design for northern climates. The author surveyed sunspace owners from balmy British Columbia to the subarctic Yukon Territory in researching her subject. One example

she found is a hydroponic greenhouse in the Yukon Territory that feeds a family of seven and produces \$1,000 worth of surplus veggies per year without any supplemental heat. If they can do it there, we certainly can do it here in "temperate" New England.

The other features of the book that I found most interesting are the distinctions Ms. Mohr draws between sunspaces as buffered versus integrated spaces and as "solar collectors," greenhouses and solariums. Design requirements are significantly different for each type, and compromises often may be necessary.

Designers and builders of sunspaces need to be aware of these functional and practical differences (and the unavoidable tradeoffs involved) if the final product is to satisfy the owners' needs. This book can help you think through the options with your clients. Otherwise, however, much of the material is old hat. ■

Superinsulation Basics

Energy Efficient Home Construction: Basic Superinsulation Techniques, by the National Center for Appropriate Technology, Box 3838, Butte, Mont. 59702. 160 pages, looseleaf binder; \$40.

This 160-page, three-ring binder from the National Center for Appropriate Technology (NCAT) is a collection of nine leaflets and booklets, ranging from a simple, six-page overview ("Superinsulation: A Housing Trend for the Eighties") to more comprehensive and detailed treatments of specific topics, such as the 25-page "Infiltration Control: The Air-Vapor Barrier."

Of particular interest is the 25-page booklet on infiltration, as well as "Energy Efficient Home Building" (also 25 pages, focusing on basic superinsulation-construction techniques), "Heat Recovery Ventilation for Housing" (31 pages, focusing on air-to-air heat exchangers), and "Moisture & Home Energy Conservation" (36 pages). The last two may be ordered separately for \$5 each. Also of value is a resource guide on heating systems for super-

insulated houses.

Of less use is "Window Insulation: How to Sort Through the Options" (34 pages; \$5 if ordered separately), which was written in 1984 just as low-emissivity windows were beginning to appear on the market.

All the literature included in the binder suffers somewhat from being dated, but it nonetheless contains a wealth of detailed, practical information. It is a good—if somewhat expensive—resource for people setting out on the energy-conservation path.

A related leaflet available from NCAT (but not included in the binder) is "Introducing Supplemental Combustion Air to Gas-Fired Home Appliances," which is 27 pages long and sells for \$5. A complete literature list is available from NCAT upon request. ■

Windows & Energy Efficiency

Windows and Energy Efficiency, by J.D. Ned Nisson. Cahners Publishing Co. (1100 Massachusetts Ave., Arlington, Mass. 02174), 1985. 31 pages, \$20 softcover.

This booklet is an excerpt of the material on windows from *The Superinsulated Home Book*, by Ned Nisson, editor of *Energy Design Update (EDU)*, and Dr. Gautam Dutt of Princeton University's Center for Energy and the Environment. In addition to the basic principles—window R-values, airtightness, solar-transmission properties and installation techniques—it contains a list of available products and manufacturers and covers a number of specific topics of interest. These include the "edge

effect," optimum air space, the accuracy of R-value ratings, glazing options, the pros and cons of low-emissivity glazing and movable insulation, and the use of reflective glass for shading.

The annotated list of glass and window manufacturers undoubtedly will age quickly. Nonetheless, this is a good, reasonably detailed overview for designers and builders who want to get up to speed on window technology and energy conservation. True to *EDU* tradition, however, the cost is out of sight. ■