

# Passive Solar Architecture

*Passive Solar Architecture: Heating, Cooling, Ventilation, Daylighting, and More Using Natural Flows* by David A. Bainbridge and Ken Haggard. 2011. Chelsea Green Publishing. 294 pp.

When many people think of solar design, photovoltaic modules come to mind. As marvelous as these high-tech wonders are, there is a whole other aspect to the subject—designing homes to capture the sun's energy to both heat and cool buildings *without* mechanical equipment.

Ancient cultures knew the importance of siting their homes for good solar exposure, but much of this knowledge was lost with the discovery of cheap energy. The ancient Greek author Aeschylus observed that the first Barbarians “lacked the knowledge of houses turned to the sun.” As do most American architects. The modern convenience of brute-force heating and cooling with fossil fuels has allowed several generations of architects to ignore the sun.



Courtesy Chelsea Green Publishing

These authors want to bring passive solar back into the consciousness of architects, builders, and the general public with their new book, which sets forth in easy-to-understand text and useful images their vast knowledge gained from two lifetimes of professional work in harnessing the sun's free energy. As the book's subtitle suggests, it covers more than just passive solar design—including integrated sustainable design that considers the local site, local materials, and both ancient and modern building designs, as well as integrating modern technological devices and systems. Besides PV and solar hot water systems, one can install rainwater collection and greywater systems.

Full-color photos, drawings, maps, graphs, and tables allow the reader to wade in as deeply or as lightly as they want. References and recommendations for further inquiry abound. If you are a homeowner pondering creating your own more sustainable home, a designer, or an architect, you'll get a lot of value from this book.

—Andy Kerr

## Deka Solar Saves The Day

**The proven, reliable solar battery choice for off-grid power needs in harsh conditions... and just about everywhere else!** From the South Pole to the Serengeti, the Earth's harshest environments are a perfect match for Deka Solar Batteries. Offered in advanced Gel/AGM and flooded technologies, Deka Solar Batteries are the proven choice for all your renewable energy applications.\*



\* Deka Solar Batteries are available through MK Battery distribution centers across North America, Europe and the Asia Pacific region. Proven Products In Demanding Photovoltaic Applications  
• U.L. Recognized Components • Competitive Warranty • Made In USA • ISO9001 Quality System Certified

**MK Battery** An East Penn Manufacturing Co., Inc. Subsidiary [www.mkbattery.com](http://www.mkbattery.com)

