Passive Solar Energy Book

A complete guide to passive solar home, greenhouse and building design

By Edward Mazria

DOWNLOAD EBOOK
**Synopsis**

Book by Mazria, Edward

**Book Information**

Hardcover: 435 pages  
Publisher: Rodale Press; 1st edition (August 1979)  
Language: English  
ISBN-10: 0878572600  
Product Dimensions: 9.1 x 7.4 x 1.6 inches  
Shipping Weight: 1.8 pounds  
Average Customer Review: 4.7 out of 5 stars  
Best Sellers Rank: #504,970 in Books (See Top 100 in Books)  #86 in Books > Crafts, Hobbies & Home > Gardening & Landscape Design > Greenhouses

**Customer Reviews**

From a number of books I have been reading on passive energy topics, Mazria’s small book is the most concrete, understandable and organized. I designed my home using the book and the forecasted energy consumption matched the calculations!

A seminal reference on the fundamentals of solar design. Easily used, yet thorough and quantitative. Should be required reading for everyone in the architecture & building design fields. Sunfall info given here is relevant to every structure ever designed -- and if you actually use it, the info *will* improve your design!!

Many years ago I found Edward Mazria’s 1979 "Passive Solar Energy Book" in a used book store and bought it on a whim. For years it sat waiting in my reference library. Now as a retired Engineer interested in designing an energy independent house -- it is by far, a most useful Bible. The book’s self-limitation to "passive" (rather than "active") systems -- only affects the architectural design philosophy and patterns (rules of thumb). Russel Ball’s sketches illustrate basic concepts extremely well. Charts and tables of solar insolation on surfaces at various latitudes and tilt-angles (from his computer analysis in the 70s) are extensive, detailed and applicable anywhere, for ANY solar design. My "Professional Edition" (687 pages) includes 14 Appendices filled with reference charts and tables -- and clear plastic chart overlays for latitude and panel orientation. I only wish Mazria’s
underlying formulas for calculations were provided (as many now on the Internet are dangerously poorly documented.) The book is written in a friendly and understandable format, while also filled with hard-data -- as relevant today as when written. I can't believe it hasn't been continuously re-published. If you are designing solar and find a copy, grab it without hesitation.

When I designed our first house this book was invaluable. We are now designing our second home and looked to see if there is an update. Unfortunately it has not been revised but then little has changed with the sun and mass and the book will once again be a valued resource.

As everyone else has indicated, this is by far the best passive solar design book in our library. It contains all the information necessary to properly design a solar passive house. The only negative is that it is 1979 Copyright, out of print, and may therefore be hard to acquire. The best current book that we have is by Daniel D. Chiras, "The Solar House". James Kachadorian’s "The Passive Solar House" is also an excellent current book in terms of the excellent engineering information provided although some of the slab construction recommendations may be somewhat dated and not in line with current best practice. The worst book we have encountered was Debra Coleman’s "Sun Inspired House". This book is merely an advertisement of the plans she sells and we would definitely advise applying due diligence if considering to do business with her. For those interested in doing passive solar design, we added some calculators to our website that you can find by Googling Borst Engineering & Construction LLC.

I’ve been planning a project for a greenhouse, and passive solar house for a few years. I’ve read many books on green building and passive solar designs, as well as greenhouse construction. This book by far is the best hands down that I’ve came across. Written over 20 years ago Mr. Mazria with his team of experts has put together a well informative guideline to successfully construct any solar building. This book is a must have for anyone in the design or construction industry, or anyone who wants a real understanding of how to design and build a passive solar building. Mr. Mazria has made this book vary easy to read, and understand. Anyone with common understanding of the English language will easily read and comprehend all the subject matter.

I paid about $10 for mine used. This book has everything you need to know about passive solar. It’s well organized. It has detailed examples and illustrations (all black and white, but easy to read). 99% of the material is still relevant today, 30 years after the publishing date. Its amazing to me this
information has been around for 30 years and still not put to use. If you are building a green house, you need this book. If you want to lower your heating bill, you need this book. If you want to build a green building you need this book. This book does not have actual building code though, like how many 2x4’s you need for a sod roof, but it has detailed sun charts, latitudes, longitudes, thermal conduction of various materials, insulation rating of various materials, real world examples, and much more.

Passive solar technology has changed little since the first edition of this book was published in the 70’s and Mazria is the man. You can, and should, design your next house using the principles and calculations in this book. Everything you need to know is explained, and anyone who got a C or better in high School algebra can do the math. It’s an empowering book, and a great dream piece. It’s testimony to the folly of our age that, 30+ years after the publication of this book, we’re not all living in houses designed according to its principles. you still have time.

Download to continue reading...
