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# A Checklist for Building an Energy Efficient Home in Florida

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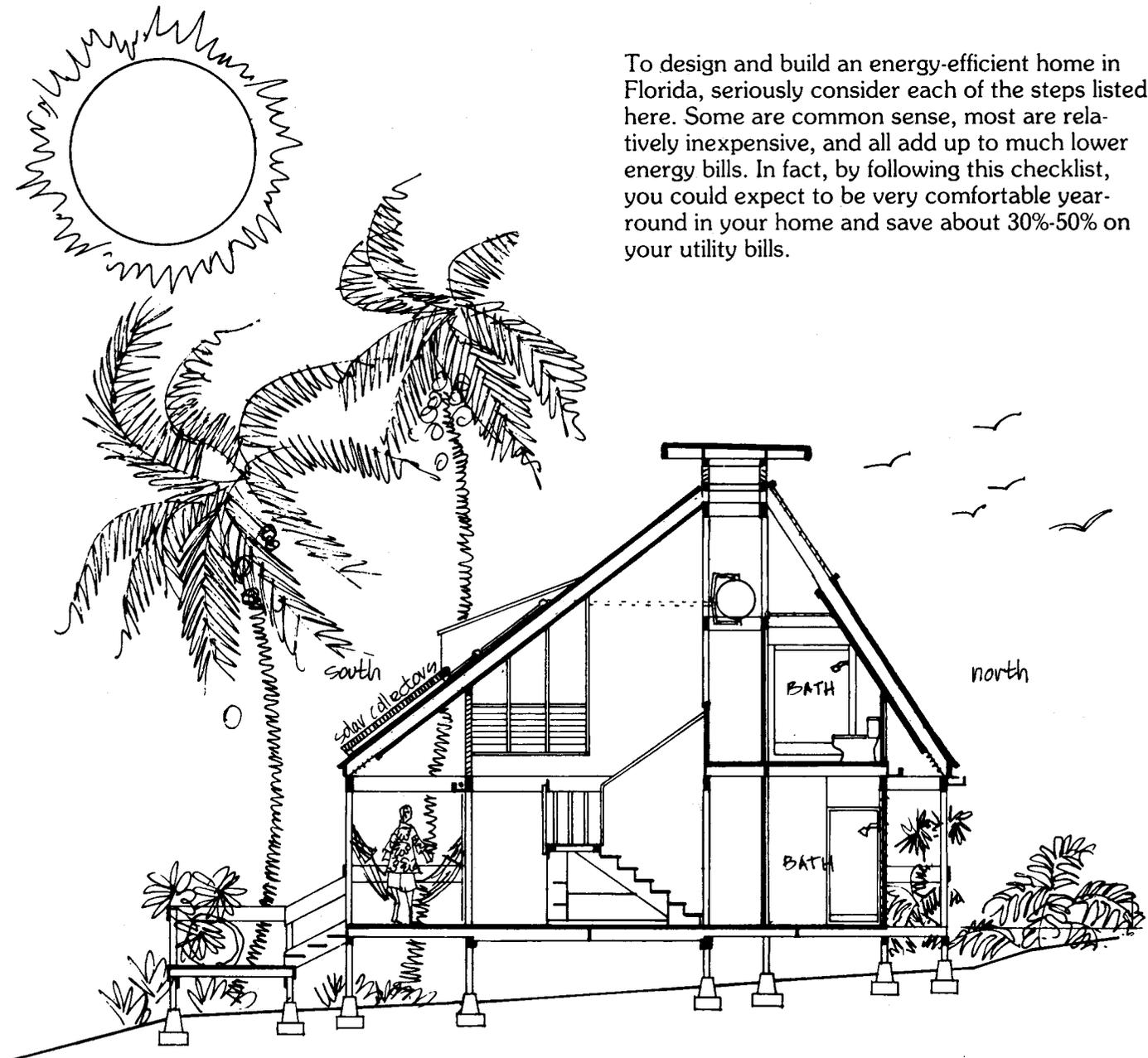


# A checklist for building an energy efficient home in Florida

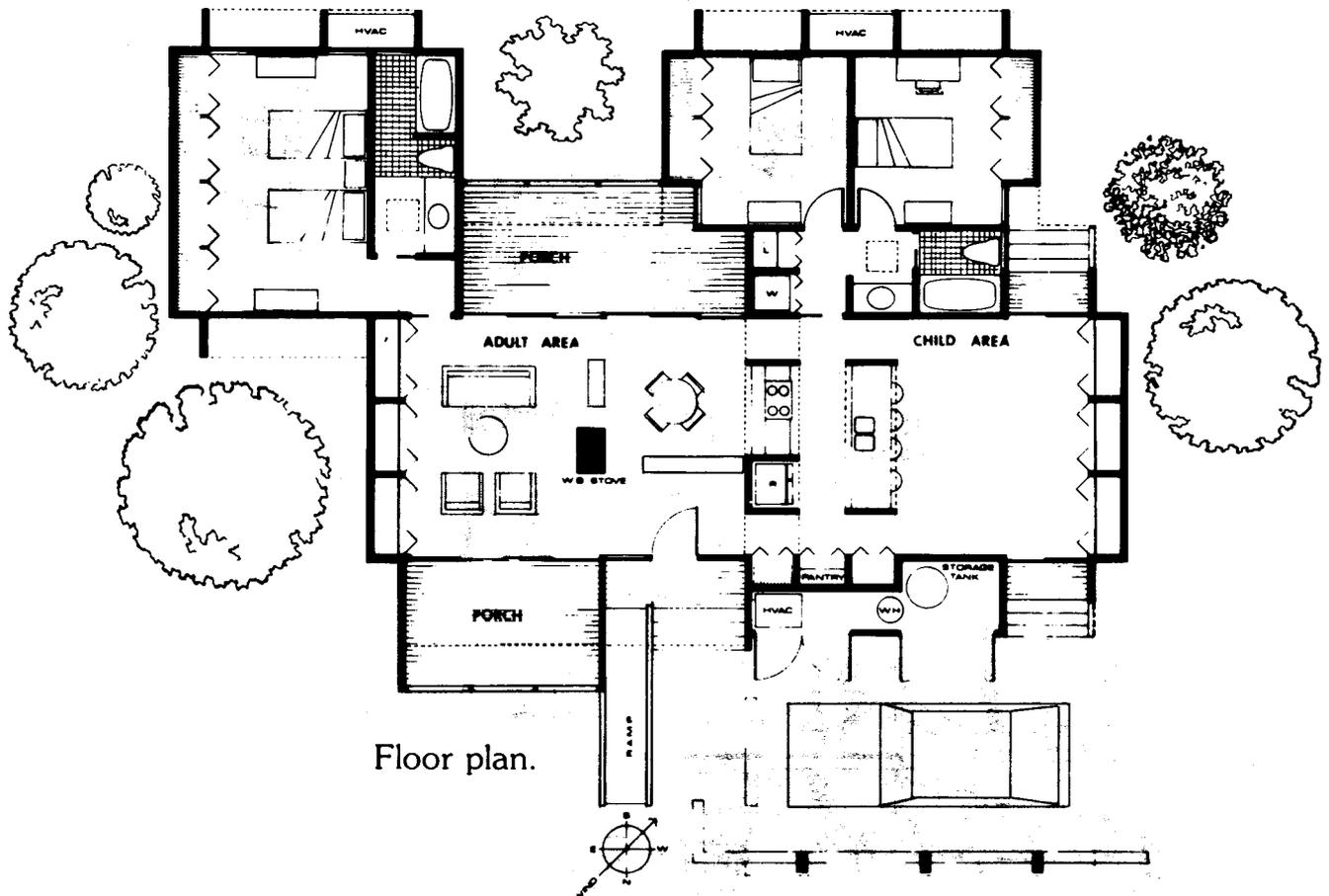
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To design and build an energy-efficient home in Florida, seriously consider each of the steps listed here. Some are common sense, most are relatively inexpensive, and all add up to much lower energy bills. In fact, by following this checklist, you could expect to be very comfortable year-round in your home and save about 30%-50% on your utility bills.



- 1 Choose a site that allows the house to be oriented so that its long axis runs from east to west. The site should have as many trees as possible on east and west (plant some if necessary) and access to summer breezes.
- 2 Use the east and west ends of the building as buffer zones: place closets, stairs, utility rooms, bathrooms, garages and screen porches at these locations.
- 3 Locate the major living/eating/sleeping areas according to the time of day they are normally used. Late afternoon and nighttime activity rooms should be on the east side and early morning activity rooms towards the west side of the building.
- 4 Provide a means by which unused areas can be closed off from the rest of the house. This should be done in conjunction with "zoned" mechanical systems.
- 5 Ideally put equal amounts of windows on the north and south sides of the building, not on the east and west. If windows are necessary on the east and west walls, shade them with dense plants or exterior shading devices.
- 6 Allow for cross ventilation by installing operable windows opposite each other on the north and south walls. The operable windows should be wider than they are high. A whole-house fan may be a good alternative for areas with insufficient natural ventilation.
- 7 Use overhangs to completely shade the south wall and windows during the summer (see DN-1), but not during the winter. Overhangs can also help shade north, east and west windows and walls from the midday sun.
- 8 Externally shade south-facing windows if overhangs are not feasible.



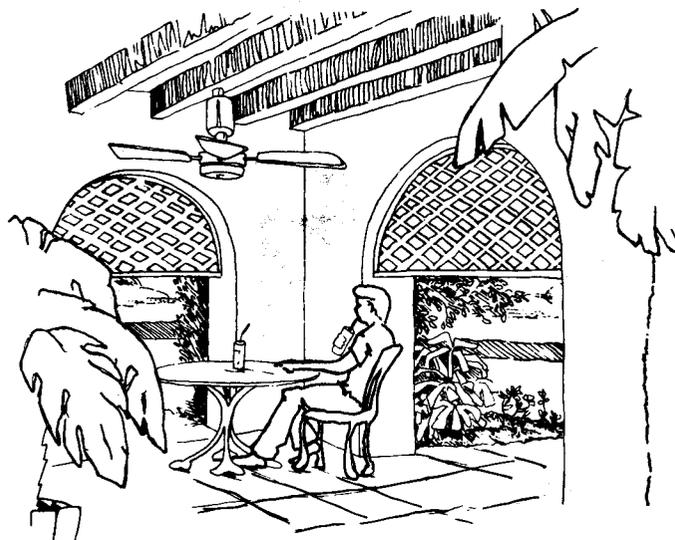
The Florida Solar Energy Center distributes several free and low-cost publications that offer more information on the building techniques discussed here. They include:

- **Designing and Installing Radiant Barrier Systems**, by P. W. Fairey. A companion document to DN-6, this publication gives basic instruction on the installation of wall and roof systems that stop radiant heat from penetrating a building. Free. Order No. DN-7.
- **Devices for East and West Shading**, by W. R. McCluney. This publication describes the effects and benefits of residential shading techniques. Free. Order No. DN-2.
- **Passive Cooling and Human Comfort**, by P. W. Fairey. Intended for architects and engineers. This publication discusses the effects in buildings of temperature, humidity and airflow relative to human comfort. Free. Order No. DN-5.
- **Passive Cooling Ideas for the Southeast**, by C. A. Beck. General descriptions of passive cooling techniques are offered in this publication. Free. Order No. EN-2.
- **Principles of Low Energy Building Design in Warm, Humid Climates**, by the FSEC staff. Price on request. Contact the Public Information Office. 532 pp. Order No. GP-21-83.
- **Radiant Energy Transfer and Radiant Barrier Systems in Buildings**, by P. W. Fairey. This booklet explains methods of radiant heat transfer and describes how radiant barriers stop that transfer. Free. Order DN-6.
- **Roof Overhangs**, by P. W. Fairey. This publication provides a calculation and relevant data for sizing roof overhangs in Florida. Free. Order No. DN-1.
- **Sources of Foil Radiant Barriers**. This Fact Sheet lists names and addresses of dealers that can provide foil radiant barrier materials. Product descriptions and sizes are also given. Free. Order No. FS-23.
- **Sun Paths in Florida**, by W. R. McCluney. Information in this publication can be used to calculate a Florida home's exposure to the sun. Free. Order No. DN-4.
- **Window Treatments for Energy Conservation**, by W. R. McCluney. This publication offers information on window design, retrofit options, and shading techniques. Free. Order No. En-4.

You may order these publications through Document Sales, Public Information Office, FSEC, 300 State Road 401, Cape Canaveral, FL 32920.

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