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“Two peas in one green pod”

Florida’s Green Building Program and Building Energy Rating System

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Florida Solar Energy Center

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www.baihp.org



Florida Building Energy Rating System

- ✍ Instituted in 1995.
- ✍ Approximately 1500 homes rated.
- ✍ Approximately 550 certified raters operating throughout the state (not all currently active).



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Florida Green Building Coalition

- ✍ 501C-3 non-profit incorporated in May of 2000.
- ✍ Governed by a Board of Directors and populated by individual and organizational members that contribute to standard development.

Builders

Architects

Landscape Architects

Realtors

Home Builder Associations

Product Suppliers

Utilities

Researchers

Energy and Green Building Consultants

City and County Governments

State and Local Regulatory Agencies

Universities

Public Interest





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Florida Green Building Coalition

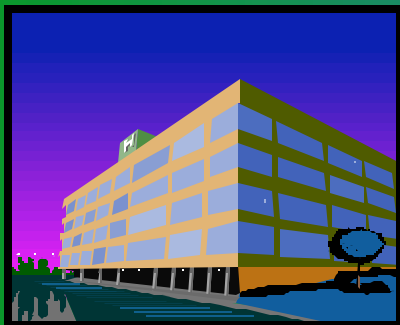
Green Homes



Green Developments



Green Commercial Buildings



Green Communities & Municipalities





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Florida Green Home Standard

- ✍ Released in July 2001.
- ✍ Point based system.
- ✍ Both new and existing homes can qualify.
- ✍ Currently 2 homes certified but many under construction and in planning stages.



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Green Building Priorities / Opportunities for Florida

- ✍ Energy Conservation.
- ✍ Water Conservation / Landscape Design.
- ✍ Proper Site Treatment.
- ✍ Indoor Air Quality
- ✍ Resource Efficient Materials / Minimize Construction Waste.
- ✍ Disaster Mitigation



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FGBC Philosophy: Don't reinvent the wheel

- ✍ Avoid confusion and competition in the marketplace.
- ✍ Create partners thereby increasing promotion and advertising.
- ✍ Facilitate qualification for multiple designations.
- ✍ Freedom to embellish existing standards.
- ✍ Florida Yards and Neighborhoods
Florida Windstorm Underwriters Association
Florida Building Code

☐ Swimming pool/spa free house

☐ Home site does not border natural water body

Category 1: Energy (Building Envelope/Systems)

Points Achieved	Points Possible	Criteria
_____	100	Meet Florida Energy Code (HERS=80)
_____	5-50	Confirmed Florida HERS Rating (attach) 5 pts for every HERS pt above 80
HERS rated homes are given credit for features including:		
<ul style="list-style-type: none"> • Efficient a/c and heat • Proper orientation • Efficient windows • Radiant barrier • Solar or efficient water heating • Ducts sealed or in conditioned space • Insulation quantity and type • Envelope sealing 		
For complete explanation of HERS Rating, see Ref. Guide		
_____	1	Document proper sizing of HVAC system
_____	1	Adequate return air transfer paths
_____	1	Cross vent and ceiling fans code credits
_____	1	Min 100ft ² roofed porch min 3 sides open
_____	1	Passive solar space heat system
_____	1	Passive solar day-lighting
_____	1-4	House shaded on east and west by trees
_____	1	Washer and dryer outside of cond space
_____	1	Light colored roof
_____	1	Light colored exterior walls
_____	1	South roof area for future solar use
_____	1	Pre-plumb for solar hot water
_____	1	Centrally locate hot water heater
_____	1	Insulate all hot water pipes
_____	1	Efficient envelope volume
_____	1	Dwelling unit attached, zero lot-line, row house
Total points for Category 1 (100 min/150 max)		

Code/Ratings

Points Achieved	Points Possible	Criteria
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Design

Category 2: Energy (Appliances, Lights, Amenities)

Points Achieved	Points Possible	Criteria
_____	2	Energy Star® refrigerator
_____	2	Energy Star® clothes washer
_____	1	Energy Star® dishwasher
_____	1	Energy-efficient clothes dryer
_____	1	Energy-efficient oven/range
_____	1	Buyer given info if none installed
_____	1	Efficient or no well pumping
Energy-efficient lighting		
_____	10	Indoor lights are fluorescent
_____	2	Recessed, sealed IC fixtures
_____	2	Max installed lighting wattage < 0.5 W/ft ²
_____	2	Light colored interior walls, ceilings, carpet/floors
_____	1	Single bulb fixtures in bathrooms
_____	2	Outdoor lights are fluorescent/elec ballast, pv, low voltage, or have motion detector
Total points for Category 2 (10 min/25 max)		

Energy-efficient appliances/amenities

Energy-efficient lighting

Florida Green Building Coalition, Inc.

"To provide a Florida green building designation resulting in environmental and economic benefits."

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Raters Can Benefit from the Green Building Program

- ✍ Networking within the coalition.
- ✍ Learn to use the program as a tool to make their service even more invaluable.
- ✍ Program can advance the function of a rating to the next step:
 - From: “A rating professional can determine whether you qualify for a particular designation.”
 - To: “A rating professional can help you assess and achieve your goals.”



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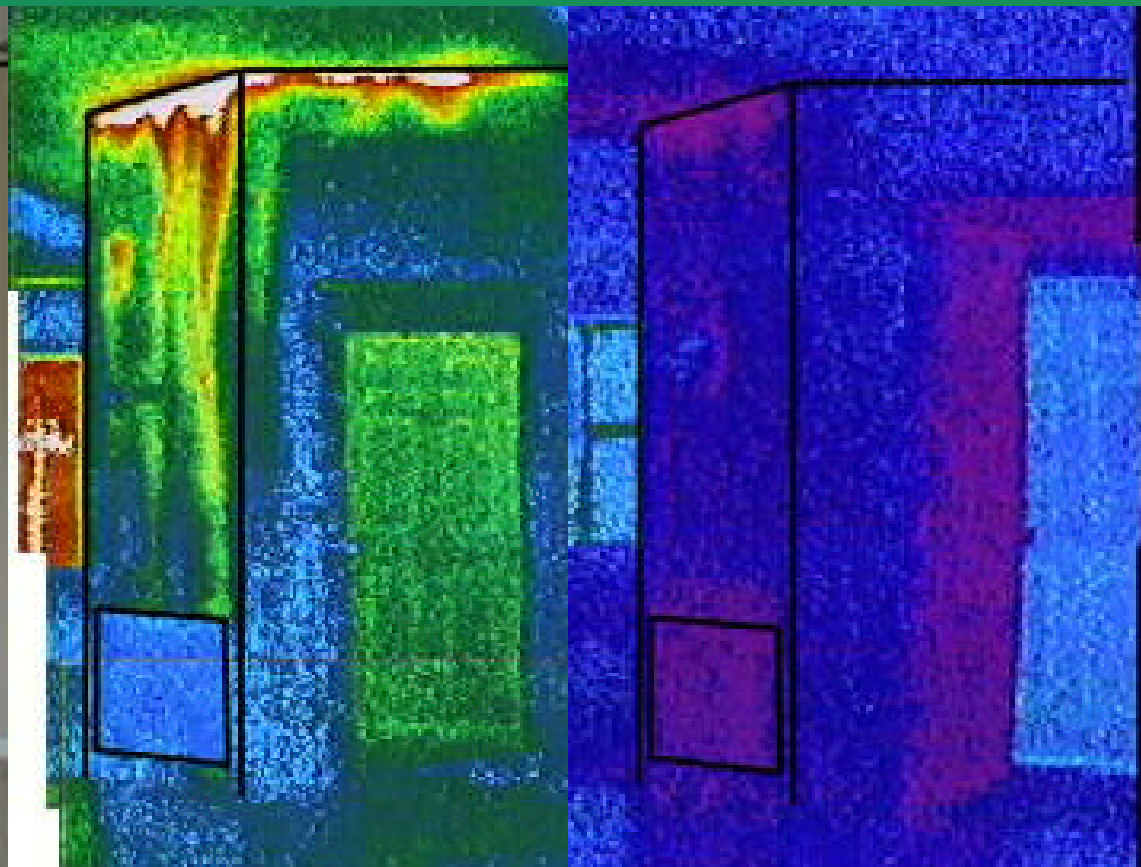
Feedback from BAHIP

- ✍ Builder goals – Build homes that are:
 - ✍ Healthy
 - ✍ Durable / Reduce Callbacks / Low Maintenance
 - ✍ Affordable / Energy Efficient / Comfortable
 - ✍ Profitable / Marketable

- ✍ Accomplish goals by using a systems approach that extends the system boundaries beyond the building envelope, which is where an Energy Rating generally stops.



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The Green Building Program Can Benefit from Raters

- ✍ Certified raters are ideal candidates for Certifying Agents.
- ✍ Raters are already working with builders and can expose them to the green building program.
- ✍ Raters can provide valuable input to the process of standard development to make the program attractive, user friendly, and marketable.



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Thank You

www.floridagreenbuilding.org

www.fsec.ucf.edu/ratings

www.baihp.org

