

EarthCraft House

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EarthCraft House Program

- Partnership between Greater Atlanta Home Builders Association and Southface Energy Institute
- Training and certification program targeting building professionals



History



- Developed in late 1990s as a partnership between Southface Energy Institute, and the Greater Atlanta Homebuilders Association, with the assistance of Hedgewood Properties
- First certified homes in 1999
- Have currently certified over 1000 homes in metro Atlanta

Environmental Impact

915 EarthCraft Homes prevent:

- 4300 tons of CO₂
- 25,000 tons of SO₂
- 9100 tons of NO_x
- 600 tons of wood
- 230 tons of drywall

From going into the air

From going to the landfill



Building EarthCraft Houses

- Builders attend a day-long training session
 - Learn about energy and resource efficiency, site planning, water conservation, indoor air quality, and the certification process
- Houses are built
- EarthCraft technicians check features and test components before finally certifying each house
- Houses are certified
- Training and support is also available for marketing EarthCraft houses
- Case studies have determined that EarthCraft construction and certification typically adds less than 1% to the cost of the house

Certification

- Uses a point system, assigning each efficient or sustainable feature a point value
- Each house must have a total of 150 points

	POINTS	SCORE	DOCUMENTATION
SITE PLANNING			
Prerequisites: Must comply with all federal, state, and local government erosion control and tree protection measures.			
erosion control site plan	2		site plan
workshop on erosion and sediment control	2		certificate
excavated topsoil protected from erosion	5		
use of redundant mulch, compost, or straw bales for erosion control	3		
grind stumps and limbs for mulch	2		
mill cleaned logs	2		
registered Building With Trees (NABE Program) development	15		confirmation letter
tree preservation plan	3		tree plan
utilities in tree root zones tunneled or hand dug (1 point per tree, max 5 trees)	1 per tree		
individual trees fenced at drip line (1 point per tree, max 5 trees)	1 per tree		
protected tree save area (min 25% of development or lot)	2		
tree planting (min 12 trees per acre of developed land)	4		
wildlife habitat registered with Georgia Wildlife Federation	2		confirmation letter
SITE PLANNING TOTAL			
ENERGY EFFICIENT BUILDING ENVELOPE AND SYSTEMS			
Prerequisites: Must meet or exceed the Georgia Energy Code (MEC 95 with Georgia Amendments)			
ENERGY STAR			
Builder may choose to certify house as ENERGY STAR OR earn a minimum of 75 points from Energy Measures	90		certificate or computer print-out
Energy Measures: Must earn a minimum of 75 points. No more than 85 points under Energy Measures can be applied toward total score. Houses must meet or exceed the Georgia Energy Code.			
AIR LEAKAGE TEST			
Certify maximum 0.35 air changes/hour OR earn points for air sealing measures	35		test results
AIR SEALING MEASURES: maximum of 26 points			
bottom plate of exterior walls	1		
floor penetrations between unconditioned and conditioned space	2		
bath tub and shower drain	2		
cantilevered floors sealed above supporting walls	2		
drywell sealed to bottom plate of exterior walls	1		
fireplace air sealing package (all units)	2		
drywell penetrations in exterior walls	1		
exterior wall sheathing sealed at plates, seams, and openings	4		
housewrap (tursealed at seams and openings)	1		
housewrap (sealed at plates, seams, and openings)	6		
window and door rough openings	2		
airtight IC recessed lights or no recessed lights in insulated ceilings	3		
attic access opening (pulldown stairs / scuttle hole)	1		
attic kneewall doors (weatherstripped with latch)	1		
attic kneewall has sealed exterior sheathing	3		
chases sealed and insulated	3		
ceiling drywell sealed to top plate	2		
ceiling penetrations sealed between conditioned and unconditioned space	2		
band joint between conditioned floors sealed	3		
AIR SEALING MEASURES (max of 26 applied to Air Sealing Subtotal)			
AIR SEALING SUBTOTAL			
INSULATION *Homes with multiple foundation types must use foundation type of greatest area for points			
*slab insulation (min R4)	2		

Points

- Site Planning
- Energy Efficient Building Envelope and Systems
 - Air sealing
 - Insulation
 - Windows
 - Heating and Cooling Equipment
 - Ductwork
- Energy Efficient Lighting and Appliances
- Resource Efficient Design
- Resource Efficient Building Materials
- Waste Management
- Indoor Air Quality
- Water – Indoor and Outdoor
- Homebuyer Education
- Builder Operations
- Bonus Points

The Future

- Bigger and Better
 - Habitat for Humanity
 - Expansion throughout Georgia: Macon, Savannah, Pine Mountain
 - EarthCraft Renovation
 - EarthCraft Multi-Family
 - EarthCraft Communities
- South's fastest-growing Green Building Program



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