

Energy Efficiency Contest

Sponsored by: The APPLE Center for Sustainable Living, Balance Point Home Performance, DeMaranville Construction, Real Graphics Source

Background

The concept of residential energy efficiency remains a mystery to most homeowners. This contest is designed to educate the public concerning best practices in reducing dependency on unsustainable energy, exceed the goals of Title 24 and dramatically improve health and comfort within the home.

The Energy Efficiency Contest will educate homeowners, contractors and government agencies concerning vital issues such as hidden drafts, oversized furnaces, stratification of home temperatures, loss of energy through poor functioning delivery systems and increased potential ozone poisoning through whole house exhaust systems.

The Energy Efficiency Contest will help to cultivate a much-needed understanding of return on investments. Overall indoor air quality health, occupant comfort, and long-term savings are to be addressed and demystified.

Contest Description

All projects will be judged equally based upon contest criteria. (See next page) Contestants must submit an application, including entry fee of \$30, for review by the contest review committee. The review committee may choose to validate the project by visiting the site and conducting basic tests.

Qualified projects will then move on to part 2 of the application process; submitting detailed information and digital photos for a 30"x42" color display board describing the project, and Part 2 entry fee \$70 for discounted printing costs. All display boards will be formatted uniformly, printed, laminated and mounted on ridged PVC board, at Real Graphic Source in Grass Valley. The board displays will be presented for public viewing & media attention at the GreenLife Eco Festival at the Nevada Co. Fair Grounds & other events TBD.

Winner and Prizes Announced at the GreenLife Eco Festival Event May 21st

The project display boards will be showcased at the GreenLife Eco Festival. The winner will be announced during the event on May 21st, 2011. The winning prize includes **\$500.00**, as well as feature articles in regional newspapers and the national magazine, *HomePower*.

Time Line

Contest Application Deadline- March 31, 2011

Qualified Contestants Notification- April 15, 2011

Part 2 of Application Due- April 30, 2011

GreenLife Eco Festival Awards – May 21-22, 2011

Contest Entry Criteria

Eligibility:

Architects, contractors or homeowners in Northern California may submit their projects. All eligible entries will provide the building performance test results as defined below.

Application Categories:

All entries **must** include #1.

A **minimum** of 3 more categories must be included. If you need help measuring the following tests, contact us. We may be able to bring testing equipment to your site and help you test.

Energy Bills

1. Lowest total annual energy bill (electrical and gas) including administration fees per sq. footage of home. Include number of wood burning stoves if applicable.
2. Most improved annual energy bill. Percentage of change pre to post energy efficiency retrofit

HVAC Efficiency

3. Heating system: Smallest BTU per sq. ft., installed.
(Homes with wood stoves do not qualify. If electric, convert Kwh to BTU's.)
4. Highest CFM per fan watt draw. (How well does fan deliver?)
5. Tightest ducts - Lowest CFM 25 (duct leakage measurement)

Comfort and Health

6. Tightest building - Lowest CFM 50 building air infiltration measurement
(This entry must have a continuous ventilation system.)
7. Smallest temperature stratification floor to ceiling.

All qualified contestants then submit Part 2 for displays.

Part 2: In addition to the information provided in Part 1, displays will including:

1. 4-5 photos of the house (1 exterior, others at applicant discretion).
2. A list of features that make this house a model sustainable building materials or practices (NOT limited to energy related features)
3. 50 word or less occupant/homeowner testimonial addressing comfort, health, cost savings or durability.
4. Building Performance Info: Furnace BTU, A/C tonnage, structural assembly walls/floor/ceiling, Insulation type and R-value in walls, floor and ceiling.
5. 12 months of disaggregated energy bills. With base load cost – total annual conditioning cost – and total overall utility cost.

Entry Fees:

Part 1: Preliminary application \$30 non-refundable

Part 2: Discounted formatting/printing/mounting of display board: \$70 non-refundable. The display boards will be the property of APPLE until at least January 2012 when contestants may request to pick up their entry board for their ongoing marketing use.

Application Form Part 1 (Due March 31th)

Mail to:

APPLE Center for Sustainable Living
412 Commercial Street, Nevada City CA 95959

Please include a check for \$30.00 made out to The APPLE Center.

Project Name _____

Basic House Information:

Location (city, state): _____

of Occupants: _____

Year built: _____ Year retrofit completed or N/A: _____

Contactor/Architect: _____

Contact Person: _____

Phone: _____

Email: _____

Mailing Address: _____

Complete #1 plus a minimum of 3 of the other 7 questions/categories)

1. What is the annual energy bill, electrical and gas, including administration fees?
Electric \$ _____ Gas \$ _____
Number of wood burning stoves _____ Sq. footage of home _____
2. What is the annual energy bill pre and post an energy retrofit?
Pre _____ Post _____
3. BTU's per sq. ft: _____ If electric, provide Kwh aswell: _____
(Homes with wood stoves do not qualify.)
4. Highest total CFM per fan watt draw: _____
5. Lowest CFM 50 building air infiltration measurement: _____
(This entry must have a continuous ventilation system)
6. CFM 25 duct leakage measurement: _____
7. Greatest temperature stratification floor to ceiling: _____ Greatest ceiling height: _____