

Illinois Home Performance Certificate of Completion Requirements

The Illinois Home Performance with ENERGY STAR program (IHP) endeavors to set specific requirements for homeowners to achieve recognition through the program. In order for a participant to receive the program's Certificate of Completion, which includes the Home Performance with ENERGY STAR logo, a specific process must be followed *and* a specific level of energy savings or performance metrics must be achieved. This will protect the value and brand of IHP, the Certificate, and the ENERGY STAR logo and will further the goals of the program, namely to retrofit homes and save energy, not to just complete audits. Furthermore, holding participants to specific energy/performance metrics allows IHP to compare favorably with the well-known new-home energy efficiency certifications such as LEED for Homes and ENERGY STAR Qualified New Homes.

We have determined a need for two levels of Certification in order to allow the program to both cast a wide net and encourage comprehensiveness in the retrofit components. The first tier (Silver certification) aligns with the U.S. Department of Energy's definition of a residential retrofit, which is currently utilized in the U.S. DOE EERE Better Buildings program. The higher tier (Gold certification) signifies exemplary performance and may be accomplished through two tracks, the first of which is a checklist of specific performance metrics. The second track will be developed over time as U.S. DOE's new Home Energy Score (a national residential energy efficiency asset rating tentatively scheduled for release in late 2011) is finalized or as an alternative scoring system more appropriate for Illinois may be developed. To learn more about IHP, visit us at www.IllinoisHomePerformance.org or 866-395-1032.

Basic Participation Requirements

In all instances, homeowners must follow the process outlined below:

- 1) Home energy assessment (aka energy audit)
 - a. Completed by a BPI Building Analyst and BPI Envelope (BPI BA+E) certified individual employed by an IHP Participating Contractor
 - b. Follows BPI BA+E standards
 - i. BPI Home Energy Auditing standard will be reviewed for possible inclusion as well, upon its completion
 - c. Homeowner receives copy of HEA summary report
- 2) Home energy upgrade (aka retrofit)
 - a. Overseen by a BPI BA+E certified individual employed by an IHP Participating Contractor
 - b. In all applicable instances, follows BPI BA+E standards
 - c. Results in a Silver or Gold IHP Certificate
 - d. In each instance, air sealing is performed prior to installing insulation
- 3) Verification of work (aka test-out)
 - a. Completed by a BPI BA+E certified individual overseen by an IHP Participating Contractor
 - b. Includes blower door and combustion safety testing and visual inspection of completed work; findings/results are documented
 - c. Homeowner receives copy of performance improvement report, which is also used by the program to determine which Certificate may be issued
- 4) Homeowner agrees to participate in third-party quality assurance inspection program
 - a. Completed by BPI BA+E certified program representative

- b. Serves as an additional verification point and added (free) benefit to the homeowner
- c. Only a specified percentage of homes will receive the QA inspection; Participating Contractor's level of experience and history in the program will determine whether inspection is required, based upon IHP's transparent Quality Assurance tier system.

Earning the IHP Silver Certificate

- Retrofit achieves a minimum of 15% modeled total energy savings reduction from baseline, as determined during home energy assessment.

NOTE: When pursuing this certification track, the post-retrofit modeled total energy use figure must be clearly stated in the test-out report, which will be compared to the pre-retrofit figure to determine achievement of the IHP Silver Certificate.

Earning the IHP Gold Certificate

Each of the following performance metrics are met:

- Ventilation: Meets requirements set forth in ASHRAE 62.2 2007**
- Building infiltration rate: 4 ACH50 –OR– 30% reduction below baseline**
 - NOTE: If multiple IHP home improvement projects have been undertaken at a single residence, the air leakage rate baseline is determined by *first* IHP home energy assessment. This will ensure a homeowner is not penalized for completing some air sealing in their achievement of the Silver Certificate, should they later aim to achieve the Gold Certificate.

As well as four out of the five metrics listed below:

- Duct leakage rate (when ducts are partially or fully outside the conditioned space): Sum of supply and return leakage to the outside divided by fan flow $\leq 10\%$** (see BPI Envelope Professional Standard, pg7)
- Wall insulation: $R \geq 13$**
- Attic insulation: $R \geq 49$.** Not required for cathedral ceilings.
- Basement/crawlspace insulation: If unconditioned, floor insulation $R \geq 30$ –OR– If conditioned, wall insulation $R \geq 10$ continuous or $R \geq 13$ cavity;** in either instance, must be installed with proper air sealing and venting so as to avoid moisture problems. Not required for exposed masonry.
- Heating and cooling equipment: ENERGY STAR qualified, subject to manufacturer installation specifications**

NOTE: When pursuing this track, each of the required performance metrics must be clearly documented in the post-retrofit test-out report in order to determine achievement of the IHP Gold Certificate.

IHP plans to add an alternate performance path to receiving the Gold certificate using the U.S.DOE Home Energy Score or similar performance rating system developed specifically for Illinois. When pursuing this track, the post-retrofit test-out report will need to incorporate the post-retrofit performance score figure in order to determine achievement of the IHP Gold Certificate. The performance path requirements will be finalized after U.S. DOE finalizes HES development.