

**Minutes of  
RESNET Board of Directors Teleconference  
June 1, 2007**

**Members Attending**

Ben Adams  
Eric Borsting  
Steve Byers  
Philip Fairey  
Ken Fonorow  
David Goldstein  
Tom Hamilton  
Bruce Harley  
Mark Jansen  
Galo LeBron  
C.T. Loyd  
Greg Nahn  
Lee O'Neal  
Kelly Parker  
Douglas Walter  
Barb Yankie

**Members Absent**

Michael Holtz  
Joseph Lstiburek  
Daran Wastchak  
David Wilson

**Staff Attending**

Steve Baden  
Claudia Brovick

The meeting was called into order by Kelly Parker a 3:05 p.m. Eastern Daylight Time.

**Approval of Agenda**

Bruce Harley moved that the proposed agenda be accepted, Lee O'Neal seconded the motion. The motion passed.

**Approval of the April 20, 2007 Board Meeting Minutes**

Philip Fairey made a motion to approve the minutes of the April 20, 2007 Board meeting. Mark Jansen seconded the motion. The motion passed with Eric Borsting abstaining.

### **Proposed Amendment to Revise Process for Amending RESNET Standards**

Philip Fairey moved that the RESNET Board of Directors approve submitting the proposed amendment Revision of RESNET Standards (Attachment A) to the standards amendment public review and comment process. Barb Yankie seconded the motion. The motion passed.

### **Proposed Amendment for Recertification Amendment for Re-Certification of Raters**

The board discussed the proposed amendment from the RESNET Training and Education Committee. Bruce Harley proposed an amendment that would change the rater recertification requirements to passing the national rater test and a certain number of hours of RESNET approved continuing education or taking a double number of hours of continuing education approved by RESNET every three years. There was a sense of the board in agreement with the concepts of such an amendment. Bruce Harley was asked to prepare a formal amendment to be considered by the board at its next meeting.

### **Proposed Amendment for Revision of Insulation Inspection Requirements**

C.T. Loyd moved that the RESNET Board of Directors approve submitting the proposed amendment for Revision of Insulation Inspection requirements (Attachment B) to the standards amendment public review and comment process. Mark Jansen seconded the motion. The motion passed.

### **Proposed Amendment for Uniform Reporting Requirements for Energy Savings Values**

Philip Fairey moved that the RESNET Board of Directors approve submitting the proposed amendment for Uniform Reporting Requirements for Energy Savings Values (Attachment C) to the standards amendment public review and comment process. Mark Jansen seconded the motion. The motion passed.

### **Proposed Interpretation on Infiltration and Mechanical Ventilation**

Mark Jansen moved that the RESNET Board adopt the RESNET Technical Committee's proposed interpretation on Infiltration and Mechanical Ventilation (Attachment D). Barb Yankie seconded the motion. The motion passed with Eric Borsting, Galo LeBron and Greg Nahn opposing the motion.

### **RESNET Rating Financial Interest Disclosure Form**

Ken Fonorow announced that he planned to submit a proposed amendment to the rater financial interest form to be considered by the RESNET Board at its next meeting.

### **Adjournment**

Lee O'Neal made a motion to adjourn. Philip Fairey seconded the motion. The motion passed. The meeting was adjourned at 4:25 p.m. Eastern Daylight Time.

Respectfully Submitted  
Bruce Harley, Secretary

## Attachment A

### Proposed Amendment: Revision of RESNET Standards

**Proponent:**

Steve Baden, Executive Director, RESNET

***Proposed Amendment***

Chapter Five

501.4.3.1.1 – Amend as follows:

~~RESNET shall appoint three (3) representatives of the home energy rating industry and three (3) representatives of state energy offices to serve staggered, three-year terms on the Standards Procedure Revision Evaluation Committee. The Revision Evaluation Committee~~ The RESNET Board of Directors shall be responsible for conducting the periodic evaluation and the annual evaluation of proposals to change through a consensus process, whereby both consenting and the non-consenting opinions are documented and incorporated as comments into each report or proposal to change.

501.4.3.1.2 – Amend as follows:

Following initial evaluation by the ~~Revision Evaluation Committee~~ RESNET Board of Directors, proposals to change shall be posted on the RESNET Web Page for a period of not less than 30 days during which public comment shall be accepted.

501.4.3.1.3 – Amend as follows:

Following the public comment period, the ~~Revision Evaluation Committee~~ RESNET Board of Directors shall meet to reconcile public comments with the initial comments of the ~~Revision Evaluation Committee~~ RESNET Board of Directors and, if changes are determined necessary, a final set of recommended changes with consensus comments that considers public comments shall be prepared on each proposal for change.

501.4.3.1.4 – Amend as follows:

~~Proposals for change receiving two-thirds majority support from the Revision Evaluation Committee after public comment shall be incorporated into a set of proposed revised amendments that will be submitted to the RESNET Board of Directors for final approval.~~

501.4.3.1.5 - Amend as follows

**After public comment** ~~P~~ proposed revisions ~~from the Revision Evaluation Committee~~ shall be approved by a simple majority of the RESNET Board of Directors. ~~Rejection of proposals from the Revision Evaluation Committee shall require a two-thirds majority of the RESNET Board of Directors.~~ Upon approval by the RESNET Board of Directors, the changes shall be incorporated into a set of revised standards. ~~If a proposed revision fails to receive either a simple majority vote for approval or a two-thirds majority vote for rejection, it will be referred back to the Revision Evaluation Committee for further consideration.~~

### ***Justification***

The Revision Evaluation Committee with its composition of the rating industry and state energy offices served as a transition from the home energy rating technical standards from the National Association of State Energy Officials to RESNET. It has been over six years since the technical standards were transferred to RESNET. RESNET now has a formal standing committee structure and process for amending the standards. As the policy body for RESNET elected by its members it is appropriate that the RESNET Board have the responsibility of revising the standards.

## Attachment B

**Proponent:**

Technical Committee

**Applies to:**

2006 Mortgage Industry National Home Energy Rating Systems Standards  
Appendix A, On-Site Inspection Protocol

**Amendment: Revision of Insulation Inspection requirements**

*Proposed Amendment*

[page A-7]:

<b>Building Element: Floor of conditioned basement or crawl space</b>		
<b>Rated Feature</b>	<b>Task</b>	<b>On-Site Inspection Protocol</b>
Insulation	Determine amount of floor insulation	... Floor insulation over unconditioned basements <u>or enclosed (vented or unvented) crawlspaces</u> need not be enclosed to attain a “Grade II” or “Grade I” assessment; floor insulation over <del>vented or</del> ambient conditions does.

[page A-11]:

<b>Building Element: Walls (continued)</b>		
<b>Rated Feature</b>	<b>Task</b>	<b>On-Site Inspection Protocol</b>
Insulation Installation	Determine cavity insulation installation characteristics	... To attain a rating of "Grade I", wall insulation shall be enclosed on all six sides, and shall be in substantial contact with the sheathing material on at least one side (interior or exterior) of the cavity. <u>Exception: the interior sheathing/enclosure material is optional in climate zones 1-3, provided insulation is adequately supported and meets all other requirements.</u>  For rim or band joist insulation, use the inspection guidelines under “Walls—Insulation value” to assess “Grade I”, “Grade II”, or “Grade III” installation. <u>Exception: the interior sheathing/enclosure material is optional in all climate zones, provided insulation is adequately supported and meets all other requirements.</u>  ...

<b>Building Element: Ceiling (continued)</b>		
Insulation value	Determine R-value of insulation in attic	<p>Use the inspection guidelines under “Walls—Insulation value” to assess “Grade I”, “Grade II”, or “Grade III” installation. Note: in addition to the inspection guidelines under “Walls”, “Grade I” installation for ceiling insulation also requires that the insulation be installed in complete contact with the drywall or <u>sheathing plywood</u> surfaces it is intended to insulate. For loose fill applications, be sure to get four readings which accurately reflect the insulation level (<del>do not just measure the low or high spots</del>; the depth should be representative of the entire attic area being examined). Multiply the <del>average</del> <u>minimum</u> depth of insulation by its R-value per inch to obtain the total R-value.</p> <p>Insulation <u>in ceilings with attic above</u> need not be enclosed to attain a “Grade II” or “Grade I” assessment. <u>For sealed, unvented attic/roof assemblies, the interior sheathing/enclosure material is optional in climate zones 1-3, provided insulation is adequately supported and meets all other requirements, including full contact with the exterior (roof) sheathing.</u> For ceiling insulation, eave baffles or equivalent construction is required to prevent wind washing to be considered “Grade I”.</p> <p>Note whether the cavity insulation leaves the framing <u>elements</u> exposed, or covers them; if covered, note the thickness that covers the framing.</p>

***Background/Rationale:***

There are three main parts to this amendment. First, an exception to the necessity for interior enclosure for rim joists to achieve Grade I status had been brought up in public presentations before adoption of the 2005 enhancements to the Standards. Although intended, that exception was omitted from the final adopted standard. Second, the requirement to treat the floor insulation in vented, enclosed crawl spaces identically to floors over outdoor air is difficult to justify; although vented crawlspaces tend to be leaky, wind washing of insulation is unlikely to have nearly the effect as for an exposed floor. The final proposed changes apply to ceiling assemblies. In addition to editorial changes, these consider the differences in driving forces in very warm climates, where internal sheathing of insulation in unoccupied spaces (such as “cathedralized” attics or doubled, “blind cavity” walls) is not as critical to ensure adequate performance or to reduce wind-washing. Interior-side sheathing is necessary in mixed and cold climates to reduce vapor transmission in wintertime conditions, while exterior-side sheathing or enclosure is also needed to reduce wind-washing.

## Attachment C

### RESNET Proposed Amendment

**Proposal Title:** Uniform reporting requirements for Energy Savings Values (ESV) calculations

**Proponent:** ENERGY STAR for Homes Program – Modified by RESNET Technical Committee

**Proposed Changes:**

**303.3.3** If ratings are conducted to evaluate energy saving improvements to the home, the following requirements will apply in addition to the information set forth under Section 303.3.2 of this Standard, ~~each rating report shall include~~

~~**303.3.3.1** The estimated annual energy cost savings for the home reconfigured to include these improvements;~~

~~**303.3.3.31** The annual energy cost savings for the Rated a home shall be estimated ~~calculated~~ by comparing the projected annual energy use cost of the Rated ~~Home with~~ to the projected annual energy use cost of a reference home. For new homes in which the results will be used to apply for an Energy Efficient Mortgage (EEM), the most recent HERS reference home shall be used as the baseline, except when an alternative reference home is specified by the lender or program underwriter. For existing homes in which the results will be used to apply for an Energy Improvement Mortgage (EIM) the unimproved home shall be used as the baseline. For savings calculations unrelated to EEM's or EIM's, the user may select any reference home as the baseline. ~~either the RESNET representation of the 1993 Model Energy Code's Standard Design Home for new homes or with the original home for existing homes~~. The monthly energy savings for the improved home shall be equal to the annual energy savings for the home divided by 12.~~

~~**303.3.3.2** The estimated monthly energy cost savings for the Rated ~~improved~~ home shall be equal to the annual energy cost savings ~~for the home~~ divided by 12.~~

~~**303.3.3.23** The Energy Value ~~of~~ for the Rated ~~improved~~ homes (e.g., present value of the energy cost savings) shall be calculated as follows:~~

~~**303.3.3.23.1** For Fannie Mae energy efficient mortgages the present value factor shall be calculated as:~~

$$pvf = [1 - (1 + r)^{-n}] / r$$

where:

pvf = present value factor

r = prevailing mortgage rate (i.e., Assumed Rate)

n = weighted life of the measures (23 years)

To determine the Energy Value ~~of~~ for the Rated ~~improved~~ home, the present value factor (pvf) shall be multiplied by the annual energy cost savings.

~~**303.3.3.23.2** For Fannie Mae energy efficient mortgage products, the prevailing mortgage rate ~~financing interest rate~~ (i.e., Assumed Rate) shall be provided by RESNET annually from the information provided by Fannie Mae.~~



**303.3.3.23.3** A weighted lifetime of 23 years shall be used in determining the present value factor for the energy cost savings.

**303.3.3.4** For FHA and Freddie Mac energy mortgages, the present worth of energy savings shall be calculated by taking the net annual energy savings (the annual energy savings minus the annual maintenance costs) times the present value factor developed by the U.S. Department of Housing and Urban Development. The present value factor is contained in the "HUD Mortgage Letter 93-13", as posted on RESNET's web site at [http://www.natresnet.org/resources/lender/handbook/hud\\_93-13.htm](http://www.natresnet.org/resources/lender/handbook/hud_93-13.htm).

**303.3.3.5** Each rating report shall include:

- The estimated monthly energy cost savings for the Rated home;
- The Energy Value for the Rated home;
- For FHA and Freddie Mac energy mortgages, the present worth of energy savings;
- The weighted lifetime of the measures that was used to determine the present value factor;
- The prevailing mortgage rate (i.e., Assumed Rate) that was used to determine the present value factor;
- The utility rates that were used to determine the estimated annual energy cost savings. The following units shall apply, as applicable to the fuel type(s) used by the Rated home: \$ per kWh for electricity, \$ per therm for natural gas, and \$ per gallon for fuel oil;
- The reference home from which annual energy cost savings were calculated (e.g., 1993 MEC, 2006 IECC, 2006 HERS)
- A reference to the methodology used to calculate the values on the report. Specifically, the report shall reference "Section 303.3.3 of RESNET's 2006 Mortgage Industry National Homes Energy Rating Systems Standards"

#### **Justification:**

The proposed language was prepared with three goals in mind:

1. The current reporting requirements for energy savings and energy values do not encompass many of the underlying assumptions that are used. To increase transparency and reduce the potential for oversights by loan officers and Providers, an expanded list of reporting requirements is proposed. These additional reporting requirements could be included in a footnote, such as:

"The Energy Savings Value is based on a 6.21% interest rate, \$0.075 per kWh of electric consumption, \$1.15 per therm of gas consumption, 23 year weighted life of measures, using calculation procedures in section 303.3.3 of RESNET's 2006 Mortgage Industry National Homes Energy Rating Systems Standards and the HERS 2006 reference home as a baseline for calculating the savings".
2. When calculating the annual energy cost savings, the baseline from which savings are to be measured has been revised. The existing language reference the "the RESNET representation of the 1993 Model Energy Code's Standard Design Home ", while the proposed language would allow for the use of any standardized baseline (e.g., 1993 MEC, 2006 IECC, 2006 HERS).
3. Grammatical changes have been made to enhance the consistency, clarity, and readability of this section.