



Montana Building Codes Advisory Council
David Cook, Program Manager
Montana Department of Labor and Industry
PO Box 200517
Helena, Montana 59624-1728

September 9, 2013

Dear Mr. Cook,

NorthWestern Energy (NorthWestern) encourages the State of Montana to adopt the 2012 International Energy Conservation Code (IECC). This recommendation is based on the discussion points provided below and with the understanding that some implementation delays may be warranted.

1. **General Statement in Favor of adopting the 2012 IECC.** Montana will be well served to keep pace with the National Codes, including the IECC. The main benefits of the energy code are to conserve energy over the life of the structure and to reduce the cost of owning and operating a home or commercial property in Montana.

2. **Adoption Timeline.** NorthWestern recommends the commercial sections of the energy code be adopted as soon as practical without revisions. Regarding the residential 2012 IECC, some provisions of the may be considered unduly burdensome if implemented without a reasonable transition period as noted below.

3. **2012 IECC Reference: Table R402.1.1**
Recommendation Regarding Wall Insulation Sheathing. A change to the residential provisions of the 2012 IECC prescriptive path is the addition of wall insulation sheathing. The United States Environmental Protection Agency (USEPA) ENERGY STAR® New Homes program and the United States Department of Energy (USDOE) Building America Program have demonstrated and endorsed this construction technique based on more than fifteen years of experience. To accommodate Montana builders to become more familiar with this construction technique delaying implementation of for one year may be reasonable. If builders do not wish to install wall insulation sheathing they may take advantage of the flexibility built into the IECC with envelope component tradeoff and performance approaches. For example, installing more efficient windows or additional ceiling insulation will allow

for a reduction in the R-value of the walls. Numerous trade-offs can be easily documented using REScheck.

4. 2012 IECC Reference: Table R402.1.3

Recommendation Regarding Frame Wall Assembly U-Factor. NorthWestern recommends the 2012 IECC frame wall assembly R-value in Table 402.1.1 be amended to R-21 to correspond with a U-factor value of 0.048 in Table 402.1.3.

5. 2012 IECC Reference: 402.1.4 Total UA Alternative

Recommendation Regarding Use of Total UA Alternative in REScheck Compliance Software.

REScheck software was developed and is maintained by USDOE to provide a simple and accessible way for builders to use the Total UA Alternative approach to meeting the energy code envelope requirements. The free public domain software is only useful if it includes all Montana amendments to the IECC. NorthWestern recommends that REScheck be allowed as an energy code compliance alternative in Montana *only* if it incorporates all current Montana amendments. USDOE has made similar adjustments to the REScheck software for other states.

6. 2012 IECC Reference: Table R402.4.1.2

Recommendation Regarding Building Tightness Testing. One of the most significant changes in the 2012 IECC is the requirement for building tightness testing. It is important that code officials be able to establish minimum qualifications for individuals who will be performing the testing. The provision that code officials be able to require third party testing is also very important. NorthWestern recommends the Montana Department of Labor and Industry provide guidance to local jurisdictions regarding how to set minimum certification standards for building tightness and duct tightness testers.

a. Tightness Testing.

NorthWestern recommends the Performance Testing Comfort Systems (PTCS) New Homes Duct Testing certification be adopted as the minimum requirement for duct tightness and building tightness. The one-day training is an accepted standard in the four Pacific Northwest States. The training is also recognized by the Northwest Energy Efficiency Alliance and the Bonneville Power Administration.

b. Modified Timeline for Building Tightness Testing.

NorthWestern supports the mandatory blower door testing requirements of the 2012 IECC but suggest that this component be phased in. Instead of the typical 90 days for implementation, the State may consider allowing one year for local jurisdiction adoption. This may be especially important in the smaller jurisdictions and more rural areas of the State. The proposed extension will afford building officials and the builders an entire building season to adjust to the provisions of the code update and to allow for acquisition of equipment and training to effectively comply with this valuable component of the code.

7. **2012 IECC Reference: R405.5.2(1)**

Recommendation Regarding Envelope Efficiency vs. Equipment Efficiency. NorthWestern Energy supports the 2012 IECC which does not allow for space conditioning equipment tradeoffs for envelope efficiency. While such a trade-off was allowed for with the 2006 IECC, this is not consistent with conserving energy and reducing the costs of owning an operating a home over the life of the structure. As noted above, appropriate trade-offs within the building envelope components may be provided with the 2012 IECC. De-emphasizing the efficiency of the building envelope in favor of space conditioning equipment efficiency effectively loses the opportunity for an appropriately efficient envelope. The building envelope will last the life of the house while the space conditioning equipment may be replaced several times. NorthWestern Energy does not support modifying the 2012 IECC to allow for space conditioning equipment trade-offs for envelope efficiency.

NorthWestern Energy appreciates this opportunity to provide supporting comments regarding the adoption of the 2012 IECC.

Sincerely,



William Thomas
Manager, Regulatory Support Services