



**STATE OF HAWAII CODE AMENDMENT PROPOSAL**  
**FORM FOR PUBLIC PROPOSALS TO**  
**AMEND THE HAWAII STATE BUILDING CODES**  
 (Form Version 1.0 May 2010)

1)

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2) Indicate appropriate Model Code(s) and Sections to be amended in Hawaii by this Proposal – **2009 International Energy Conservation Code**

**CODE AMENDMENT PROPOSAL INSTRUCTIONS**

*Please provide all of the following items in your code change proposal.*

**REQUIRED INFORMATION:**

The following items are required to be included in your proposal:

1. The proponent shall clearly state the purpose of the proposed code amendment (e.g., clarify the Code; revise outdated material; substitute new or revised material for current provision of the Code; add new Hawaii requirements to the adopted Code; delete current requirements, etc.). Any proposed revisions or additions to tables or figures must be included.
2. The proponent shall justify amending the current code provisions, stating why the proposal is superior to the current provisions of the Model Code. Proposals that add or delete requirements shall be supported by a logical explanation which clearly shows why the current Code provisions are inadequate or overly restrictive, specifies the shortcomings of the current Code provisions in Hawaii, and explains how such proposals will improve the Hawaii State Code.
3. The proponent shall substantiate the proposed code change based on technical information and substantiation. Substantiation provided which is determined as not germane to the technical issues addressed in the proposed code change shall be identified as such, and the proponent shall be notified that the proposal is considered an incomplete proposal and may be held until the deficiencies are corrected.
4. The proponent shall submit a bibliography of any substantiating material submitted with the code change proposal. The proponent shall make the substantiating materials available for review.
5. Per Hawaii Revised Statutes §107-26, the State Building Code Council shall not adopt provisions that relate to administrative, permitting, or enforcement and inspection procedures of each county. Any such code amendments shall be proposed instead to the individual county building officials during the code adoption process of each county.

**PROPOSAL FORMATTING:**

Show the proposal (see form on page 2) using ~~strikeout~~, underline format. At the beginning of each section, one of the following instruction lines are also needed:

- Revise as follows
- Add new text as follows
- Delete and substitute as follows
- Delete without substitution

The only formatting that is needed is **BOLDING**, ~~STRIKEOUT~~ AND UNDERLINING. Please do not provide additional formatting such as tabs, columns etc. DO NOT USE THE TRACKING CHANGES OPTION, AUTOMATIC NUMBERING, OR ANY OTHER ADVANCED FORMATTING TOOLS PROVIDED BY WORD.

*This  
Section  
For  
Official  
Use  
Only*

**Date Considered by Building Official Sub-Committee:** \_\_\_\_\_

**Sub-Committee Action on Proposal:** \_\_\_\_\_

**Reason for Sub-Committee Action:** \_\_\_\_\_

**Action by State Building Code Council:** \_\_\_\_\_

**PUBLIC PROPOSAL FORM TO AMEND THE HAWAII STATE BUILDING CODES**

**Date:** \_\_\_\_\_

# PUBLIC PROPOSAL FORM TO AMEND THE HAWAII STATE BUILDING CODES

## HAWAII CODE AMENDMENT PROPOSAL FORM

(See instructions on page 1)

### Model Code: **IECC-09** (*IBC-09, IEBC, IECC, UFC, IMC, UPC, IRC, etc*)

*Code Sections/Tables/Figures/Standard Proposed for Revision; If the proposal is for a new section, indicate proposed section #.*

**Proponent: Name/Company/Representing:** (DO NOT USE ACRONYMS FOR YOUR COMPANY OR ORGANIZATIONAL NAME)

Karen T. Nakamura/Building Industry Association of Hawaii/Building Industry Association of Hawaii

**Revise as follows (include deletion in strikeout, with modified text/proposed addition underlined, affected Code Section(s) in Bold):**

Revise Section **402.2.5** as follows:

**402.2.5** Steel-frame ceilings, walls, and floors. Steel-frame ceilings, walls and floors shall meet the insulation requirements of Table 402.2.5 or shall meet the U-factor requirements in Table 402.1.3. The calculation of the U-factor for a steel-frame envelope assembly shall use a series parallel path calculation method.

Exceptions: ~~In Climate Zones 1 and 2, T~~he continuous insulation requirements in Table **402.2.4** shall be permitted to be reduced to:

1. R-3 for steel frame wall assemblies with studs spaced at 24 inches (610 mm) on center.
2. R-0 for steel frame wall assemblies of buildings that meet one of the following criteria: 2.1). Exterior walls' paint or surface with an average light reflectance value > 0.64 (garages, trim and other non-wall components are exempted),  
 2.2). Central AC with a minimum efficiency of SEER 14, or  
 2.3). High efficacy lamps in a minimum of 90 percent of permanently installed lighting fixtures.

Revise Table **405.5.2(1)** as follows:

Cooling Systems g, i	<p><del>As proposed</del></p> <p><del>Capacity: sized in accordance with Section M1401.3 of the International Residential Code</del></p> <p><u>Fuel type: Electric</u></p> <p><u>Efficiency: in accordance with prevailing federal minimum standards</u></p> <p><u>Capacity: sized in accordance with Section M1401.3 of the International Residential Code</u></p>	<p><del>As Proposed</del></p> <p><u>As proposed</u></p> <p><u>As proposed</u></p> <p><u>As proposed</u></p>
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**Reason:**

When developing the proposed trade-offs, consideration was given to federal law, 42 United States Code 77.6297. This law provides specific guidance to states when addressing federally regulated equipment and appliances in state building codes.

According to this law, the states:

- Cannot require the efficiency of federally regulated equipment to exceed the federal minimum, but can permit the efficiency to exceed the minimum
- May permit prescriptive or performance trade-offs using high efficiency equipment, but only on a 1 to 1 trade-off basis (based on either units of energy or costs)

## PUBLIC PROPOSAL FORM TO AMEND THE HAWAII STATE BUILDING CODES

- Currently must use a 13 SEER unit for the reference home's AC system within the performance path. States may permit builders to receive credit for specifying higher SEER units for the design home, but the state may not require the builder to use a unit with an efficiency greater than SEER 13.

Provide multiple, affordable prescriptive path trade-offs for continuous insulation that result in equivalent or better energy performance.

Permit builders to specify high efficiency central air conditioning equipment to provide equivalent or better energy savings than continuous insulation. Specification of high efficiency equipment is expected to result in lower peak energy requirements and lower electricity use. The State of Florida has adopted similar language to this to encourage builders to specify high efficiency equipment in their hot, humid climate (regions of which are very similar to Hawaii).

**High Efficiency Air Conditioners:** For both the large and small house, specification of a SEER 14 AC unit achieved equivalent energy savings to the continuous insulation. Based on these simulation results, and because federal law requires the state to do a 1 to 1 trade off when using high efficiency mechanical equipment, it is our opinion that the state is not permitted to require an efficiency higher than 14 SEER.

### List of Supporting Information References (attached):

**Proposals must be submitted using this form and are to be submitted electronically to Council at [state.bcc@hawaii.gov](mailto:state.bcc@hawaii.gov)** or mailed to the Department of Accounting & General Services, Administrative Services Office, 1151 Punchbowl Street, Room 414, Honolulu, Hawaii 96813