



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

1)

<b>Name: Gary Chock</b>		<b>Date: July 9, 2011</b>	
<b>Department/Company: Martin &amp; Chock, Inc.</b>			
<b>Submitted on Behalf of: Structural Engineers Association of Hawaii</b>			
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2) Indicate appropriate Model Code(s) and Sections to be amended in Hawaii by this Proposal -

**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 The proponent shall clearly state the purpose of the proposed code amendment (e.g., clarify the Code; revise outdated material; substitute new or revised material for current provision of the Code; add new Hawaii requirements to the adopted Code; delete current requirements,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:** \_\_\_\_\_

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

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

**HAWAII CODE AMENDMENT PROPOSAL FORM**

**Model Code: IBC – **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)  
 Gary Chock / Martin & Chock, Inc. / SEAOH

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

Relating to Appendix U Hawaii Hurricane Sheltering Provisions for New Construction, Section U102 Hawaii residential safe room.

Add new text as follows:

**Section 422.5.4 Approved Debris Impact Resistant Wall Assemblies. Wall assemblies constructed in accordance with Table 422.5-2 shall be deemed to comply with Section 422.5.2 Windborne debris impact protection of building enclosure elements.**

**Table 422.5-2 Wall Assemblies Complying with Section 42.5.1**

<b>Wall Assemblage</b>
<b>3/4-inch plywood on wood studs</b>
<b>4-inch-thick concrete with reinforcing</b>
<b>6-inch CMU with partial grouting at reinforcing spaced at 24 inches o.c.</b>
<b>8-inch CMU with partial grouting at reinforcing spaced at 24 inches o.c.</b>
<b>1 layer of 3/4-inch plywood attached to double studs @16-inches with #8 X 3-inch wood screws at 6-inches o.c.</b>
<b>3/4" oriented strand board attached to 350S162-33 studs at 24" o.c.</b>
<b>8-1/4" cementitious lap siding over 22ga sheet metal attached to 350S162-33 studs at 24" o.c.</b>
<b>8-1/4" cementitious lap siding attached to 350S162-33 studs at 24" o.c. studs with 3/4" ply interior sheathing</b>
<b>8-1/4" cementitious lap siding attached to 350S162-33 studs at 24" o.c. with 1/2" interior 22-gage sheet metal Sureboard drywall</b>
<b>cementitious lap siding attached to 5/8 inch structural plywood on 2X4 wood studs @ 16 inches o/c.</b>
<b>cemnetitious-panel siding attached to 5/8-inch plywood on 2X4 or 362S-137-43 steel studs @ 16 inches o.c.</b>
<b>EFS with 1/2-inch dens-glass gold exterior sheathing on 362S-137-43 steel studs @ 16 inches and 1/2-inch interior gypboard</b>
<b>24gage standing seam roof decking on purlins</b>
<b>24gage steel sheet (50 ksi) on girts</b>

**Note: sheathing shall be attached to studs at 6-inches on center edge fastening.**

**Reason:**

The Residential Safe Room is a Hawaii alternative for Occupancy R-3 housing in lieu of the 2006 (and later) IBC requirement to provide impact-resistant glazing or impact resistant window protection for all exterior windows and openings. For both residential safe rooms and EHPA portion of buildings, the exterior enclosures of such spaces shall be provided with windborne debris impact resistance or protection systems conforming to ASTM E1996-09 Level D, i.e., 9 lb. 2 X 4 @ 50 fps. Based on tests conducted on test panels provided by the Hawaii Steel Framing Alliance and the Hawaii Lumber Products Association, together with previously tested panels reported in the recognized research literature, the wall assemblies given in Table 422.5-2 met the windborne debris large missile criteria of ASTM E1996 Level D and therefore can be considered in compliance with Section 422.5.2.

**List of Supporting Information References (attached): University of Hawaii report and DBEDT Wind Design Guide to be published in 2011.**

**Attention: Kerry Yoneshige, [kerry.k.yoneshige@hawaii.gov](mailto:kerry.k.yoneshige@hawaii.gov)** Department of Accounting & General Services, Administrative Services Office, 1151 Punchbowl Street, Room 414, Honolulu, Hawaii 96813