

IECC 2009 with Hawaii Amendments

RESIDENTIAL DESIGN CHECKLIST

Project: _____

| Code Section | Description | Documentation Requirement | NA | Complete |
|--------------|--|---|--------------------------|--------------------------|
| 103.1 | Construction documents | Signed statement on plans | <input type="checkbox"/> | <input type="checkbox"/> |
| 402.1 | Wood-frame ceiling insulation <input type="checkbox"/> Table 402.1.1 insulation R-value <input type="checkbox"/> Table 402.1.3 U-factor <input type="checkbox"/> 402.1.4 alternatives <input type="checkbox"/> 402.1.4 Total UA alternative | Insulation location and R-value indicated on plans. Radiant barrier location, if applicable. Cool roof specifications if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 402.1 | Steel-frame roof insulation <input type="checkbox"/> Table 402.1.1 insulation R-value <input type="checkbox"/> Table 402.1.3 U-factor <input type="checkbox"/> 402.2.5 exception <input type="checkbox"/> 402.1.4 Total UA alternative | | <input type="checkbox"/> | <input type="checkbox"/> |
| 402.1 | Wood-frame wall insulation <input type="checkbox"/> Table 402.1.1 insulation R-value <input type="checkbox"/> Table 402.1.3 U-factor <input type="checkbox"/> Table 402.1.1 exceptions <input type="checkbox"/> 402.1.4 Total UA alternative | | <input type="checkbox"/> | <input type="checkbox"/> |
| 402.1 | Steel-frame wall insulation <input type="checkbox"/> Table 402.1.1 insulation R-value <input type="checkbox"/> Table 402.1.3 U-factor <input type="checkbox"/> 402.2.5 exceptions <input type="checkbox"/> 402.1.4 Total UA alternative | | <input type="checkbox"/> | <input type="checkbox"/> |
| 402.1 | Mass wall insulation <input type="checkbox"/> Table 402.1.1 insulation R-value <input type="checkbox"/> Table 402.1.3 U-factor <input type="checkbox"/> Table 402.1.1 exceptions <input type="checkbox"/> 402.1.4 Total UA alternative | | <input type="checkbox"/> | <input type="checkbox"/> |
| 402.3 | Windows Table 402.1.1 SHGC ≤ 0.30 <input type="checkbox"/> 15 ft ² area exemption <input type="checkbox"/> Area-weighted average <input type="checkbox"/> North-facing window exemption <input type="checkbox"/> Shaded window exemption | | SHGC indicated on plans | <input type="checkbox"/> |
| 402.3 | Skylights Table 402.1.1 SHGC ≤ 0.30 <input type="checkbox"/> 15 ft ² area exemption <input type="checkbox"/> Area-weighted average Table 402.1.3 U-factor ≤ 0.75 <input type="checkbox"/> 15 ft ² area exemption <input type="checkbox"/> Overall envelope compliance | SHGC and U-factor indicated on plans. | <input type="checkbox"/> | <input type="checkbox"/> |
| 402.4 | Air leakage <input type="checkbox"/> Envelope sealing <input type="checkbox"/> Unconditioned dwelling exemption | Sealing requirements indicated on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |

| Code Section | Description | Documentation Requirement | NA | Complete |
|--------------|---|---|--------------------------|--------------------------|
| 402.4.2 | Air sealing and insulation <input type="checkbox"/> Whole-house pressure test <input type="checkbox"/> Field verification <input type="checkbox"/> Unconditioned dwelling exemption | Verification method indicated on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 402.4.4 | Fenestration air leakage <input type="checkbox"/> Listed and labeled products <input type="checkbox"/> Site-built window exemption <input type="checkbox"/> Jalousie windows <input type="checkbox"/> Unconditioned dwelling exemption | | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.1 | Thermostat controls | Indicated on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.2.1 | Duct insulation <input type="checkbox"/> Exception for ducts in conditioned space | Insulation R-value on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.2.2 | Duct leakage testing <input type="checkbox"/> Exception for ducts in conditioned space | Testing requirement indicated on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.3 | Mechanical system piping insulation | Insulation R-value on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.4 | Circulating hot water systems | Insulation R-value on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.6 | Equipment sizing | | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.7 | Systems serving multiple dwelling units <input type="checkbox"/> Meet commercial requirements | | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.9 | Pool controls | Controls indicated on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 403.9.3 | Pool cover <input type="checkbox"/> Required for heated pool <input type="checkbox"/> Exception for ≥60% solar/waste heat | Indicated on plans, if applicable. | <input type="checkbox"/> | <input type="checkbox"/> |
| 404.1 | Lighting equipment ≥50% high efficacy | Lighting fixture locations included on plans. Lighting fixture schedule indicating lamp and ballast type on plans. | <input type="checkbox"/> | <input type="checkbox"/> |

Sponsor: State of Hawaii, Department of Business, Economic Development and Tourism

Acknowledgment: This material is based upon work supported by the Department of Energy under Award Number DE-EE0000216

Disclaimer: This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor the State of Hawaii, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government, the State of Hawaii or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government, the State of Hawaii or any agency thereof.