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# STATE OF HAWAII DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES STATE BUILDING CODE COUNCIL

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

November 17, 2020

SUBJECT: State Existing Building Code Adoption Adopting the 2018 International Existing Building Code with Amendments

The attached document is the Hawaii State Existing Building Code as adopted on November 17, 2020 by the State Building Code Council in accordance with HRS 107-24.

No later than November 17, 2021, the design of all State building construction must comply with the attached code in accordance with HRS 107-27.

No later than November 17, 2022, each county in the State of Hawaii must amend and adopt the attached code in accordance with HRS 107-28(a).

If by November 17, 2022, a county does not amend the attached code, it shall become applicable as an interim county building code in accordance with HRS 107-28(b).

State Building Code Council

Attached: Hawaii State Existing Building Code

STATE OF HAWAII

## State Building Code Council

## HAWAII STATE EXISTING BUILDING CODE

# Effective Date: November 17, 2020

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#### Scope.

The State Existing Building Code is hereafter referred to as "this code". This code sets forth minimum requirements for the alteration, movement, enlargement, replacement, repair, change of use and occupancy, maintenance, removal and demolition of every existing building or structure or any appurtenances connected or attached to existing buildings or structures.

### Definitions.

Unless the context otherwise requires, in this code:

"IBC" means the "State Building Code" adopted by the State Building Code Council adopting and amending the "*International Building Code*, 2018 Edition", published by the International Code Council.

"ICC" means the International Code Council.

"IEBC" means the "State Existing Building Code", adopted by the State Building Code Council adopting and amending the "*International Existing Building Code*, 2018 Edition", published by the International Code Council.

"IECC" means the "State Energy Conservation Code", Hawaii Administrative Rules, Chapter 3-181.1 adopting and amending the "International Energy Conservation Code, 2018 Edition" published by the International Code Council.

"IRC" means the "State Residential Code" adopted by the State Building Code Council adopting and amending the "International Residential Code for One- and Two-family Dwellings, 2018 Edition", published by the International Code Council.

"Section" means a section of a chapter of the International Existing Building Code, 2018 Edition or a section of this code.

#### Adoption of the International Existing Building Code

The "International Existing Building Code, 2018 Edition", as copyrighted and published in 2017 by International Code Council, Incorporated, 500 New Jersey Avenue, 6th Floor, Washington, DC 20001, is adopted by reference and made a part of this code. This incorporation by reference includes all parts of the International Existing Building Code subject to the amendments hereinafter set forth. The ICC International Existing Building Code 2018 Edition, is made a part of this chapter, subject to the amendments provided in this code. The appendices of the ICC IBC are not adopted except as provided in this code.

## Permit Authorization.

Each county of the State of Hawaii may, by ordinance, require that a permit be obtained from the building official for any area regulated by this code.

#### AMENDMENTS TO THE 2018 ICC INTERNATIONAL EXISTING BUILDING CODE (IEBC)

#### 1. Title and Purpose

Section 101.1 is amended to read as follows: "[A] 101.1 Title. These regulations shall be known as the Existing Building Code of the State of Hawaii, herein-after referred to as "this code"."

#### 2. Referenced Codes

Section 102.4 is amended to read as follows: "[A] Section 102.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.4.1 and 102.4.2.

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment of appliance, the condition of the listing shall govern.

## [A] 102.4.1 Conflicts.

Where conflicts occur between provisions of this code and reference codes and standards, the provisions of this code shall apply.

#### [A] 102.4.2 Conflicting provisions.

Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code of standard.

#### [A] 102.4.3 Conflicts with laws.

If this code conflicts with another applicable law of the jurisdiction, then said applicable law shall prevail over this code.

#### [A] 102.4.4 Building Code.

Whenever the term International Building Code is used in this code, it shall mean the adopted State Building Code.

## [A} 102.4.5 Gas.

Whenever the term International Fuel Gas Code is used in this code, it shall mean the adopted State Plumbing Code.

#### [A] 102.4.6 Plumbing.

Whenever the term International Plumbing Code is used in this code it shall mean the adopted State Plumbing Code

#### [A] 102.4.7 Fire prevention.

Whenever the term International Fire Code is used in this code, it shall mean the adopted State Fire Code.

## [A] 102.4.8 Energy.

Whenever the term International Energy Conservation Code is used in this code, it shall mean the adopted State Energy Conservation Code.

## [A] 102.4.9 Residential Code.

Wherever the term International Residential Code is used in this code, it shall mean the adopted State Residential Code".

#### [A] 102.4.10 Electrical Code.

The provisions of the State Electrical Code shall apply.

#### [A] 102.4.11 Other Codes.

Other referenced codes not listed in Section 102.4 are considered referenced guidelines and not mandatory.

#### 3. Part 2 - Administration and Enforcement

Administration and Enforcement, Sections 103 through 117, are deleted in their entirety.

## 4. Bracing of Post and Pier Foundations

Section 303.3.3 is added to read as follows: "[BS]303.3.3 Pre-engineered bracing of post and pier foundations. For conventional light-framed single family residences two stories or less above grade, seismic bracing retrofits of elevated wood post and pier foundation systems shall be permitted to be pre-engineered designs for braces or shear walls constructed in accordance with FEMA Hazard Mitigation Grant Program DR-1664-HI drawings, Structural Seismic Retrofits for Hawaii Single Family Residences with Post and Pier Foundations, May 2009."

# 5. Change of Occupancy Snow and Wind Loads - Prescriptive Method

Section 506.4.2 is amended to read as follows: "506.4.2 Snow and wind loads. Where a change of occupancy results in a structure being assigned to a higher risk category, or where the change is from a Group S or Group U occupancy to any occupancy other than Group S or Group U, the structure shall satisfy the requirements of sections 1608 and 1609 of the International Building Code for the new risk category.

- Exceptions:
  - Where the area of the new occupancy is less than 10 percent of the building area, compliance with this section is not required. The cumulative effect of occupancy changes over time shall be considered.
  - 2. Where the change is from a Group S or Group U occupancy, use of 75% of snow and wind forces shall be permitted".

#### 6. Change of Occupancy Seismic Loads - Prescriptive Method

Section 506.4.3 is amended to read as follows:

"506.4.3 Seismic loads (seismic force-resisting system). Where a change of occupancy results in a building being assigned to a higher risk category, or where the change is from a Group S or Group U occupancy to any occupancy other than Group S or Group U, the building shall satisfy the requirements of Section 1613 of the International Building Code for the new risk category using full seismic forces. Exceptions:

- 3. Where the area of the new occupancy is less than 10 percent of the building area, and the new occupancy is not assigned to Risk Category IV, compliance with this section is not required. The cumulative effect of occupancy changes over time shall be considered.
- 4. Where a change of use results in a building being reclassified from Risk Category I or II to Risk Category III and the seismic coefficient,  $S_{DS}$ , is less than 0.33, compliance with this section is not required.
- 5. Unreinforced masonry bearing wall buildings assigned to Risk Category III and to Seismic Design Category A or B, shall be permitted to use Appendix Chapter A1 of this code.
- 6. Where the change is from a Group S or Group U occupancy, use of reduced seismic forces shall be permitted".

## 7. Added Insulation

Section 706.2 is amended to read as follows:

"706.2 Addition of replacement of roofing or replacement of equipment. Any existing gravity load-carrying structural element for which an alternation causes an increase in design dead, live or snow load, including snow drift effects, of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the State Building Code for new structures.

Exceptions:

- Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the altered building complies with the conventional light-frame construction methods of the State Building Code or the provisions of the State Residential Code.
- Buildings in which the increased dead load is due entirely to the addition of a second layer of roof covering or addition of insulation, weighing 3 pounds per square foot (0.1437 kN/m3) or less over an existing single layer of roof covering"

## 8. Roof Diaphragm Retrofits

Section 706.3.2 is amended to read as follows:

"706.3.2 Roof diaphragms resisting wind loads in high-wind regions. Where roofing materials are removed from more than 50 percent of the roof diaphragm of section of a building located where the **basic** wind speed, V, determined in accordance with Figure 1609.3(1) of the **State** Building Code, is greater than 115 mph (51 m/s) or in a special wind region, as defined in Section 1609 of the **State** Building Code, roof diaphragms, connections of the roof diaphragm to the roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the State Building Code, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with at least 75 percent of the loads specified in the **State** Building Code.

### 9. Change of Occupancy Snow and Wind Loads - Work Area Method

Section 1006.2 is amended to read as follows:

"1006.2 Snow and wind loads. Where a change of occupancy results in a structure being assigned to a higher risk category, or where the change is from a Group S or Group U occupancy to any occupancy other than Group S or Group U, the structure shall satisfy the requirements of sections 1608 and 1609 of the International Building Code for the new risk category.

Exceptions:

- 1. Where the area of the new occupancy is less than 10 percent of the building area, The cumulative effect of occupancy changes over time shall be considered.
- 2. Where the change is from a Group S or Group U occupancy, use of 75% of snow and wind forces shall be permitted".

### 10. Change of Occupancy Seismic Loads - Work Area Method

Section 1006.3 of the 2018 IEBC is amended to read as follows: "1006.3 Seismic loads. Where a change of occupancy results in a building being assigned to a higher risk category, or where the change is from a Group S or Group U occupancy to any occupancy other than Group S or Group U, the building shall satisfy the requirements of Section 1613 of the International Building Code for the new risk category using full seismic forces. Exceptions:

- 1. Where a change of use results in a building being reclassified from Risk Category I or II to Risk Category III and the seismic coefficient, SDS, is less than 0.33, compliance with this section is not required.
- Where the area of the new occupancy is less than 10 percent of the building area and the new occupancy is not assigned to Risk Category IV. The cumulative effect of occupancy changes over time shall be considered.
- 3. Unreinforced masonry bearing wall buildings assigned to Risk Category III and to Seismic Design Category A or B shall be permitted to use Appendix Chapter A1 of this code.
- 4. Where the change is from a Group S or Group U occupancy, use of reduced seismic forces shall be permitted".