

CHAPT 5C - EXISTING BUILDING CODE

Draft for discussion purposes
(DPW - Building Division)

3/30/21 Draft

Note to the reader:

This draft incorporates by reference, the International Existing Building Code, 2018 Edition, (IEBC), and Hawaii State Building Code into a new chapter 5C of the Hawai‘i County Code. Proposed changes to the language of the IRC, that have been incorporated into the Code, are indicated using brackets and strike outs for repeals and underscoring for additions.

Please note that this draft does not include PART II of the bill that will contain amendments to other ordinances.

PART I. NEW CHAPTER.

SECTION 1. The Hawai‘i County Code 1983 (2016 Edition, as amended), is amended by adding a new chapter, establishing an existing building code, to be designated chapter 5C, and to read as follows:

“CHAPTER 5C. EXISTING BUILDING CODE.

Article 1. General Provisions.

Section 5C-1-1. Title.

This chapter shall be known as the “existing building code.”

Section 5C-1-2. Purpose.

The purpose of this chapter is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures within the County and certain equipment specifically regulated herein. *{5-1(b).}*

Section 5C-1-3. Scope; exceptions.

This chapter shall apply to the design, construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of existing building or structure or any appurtenances connected or attached to buildings or structures.

Exceptions to these minimum requirements are listed below:

{5-2, State Existing Building Code.}

Exceptions:

Detached one- and two-family dwellings and multiple single-family dwellings (townhomes) not more than three stories above *grade plane* in height with a separate means of egress, and their

accessory structures not more than three stories above *grade plane* in height, shall comply with this chapter or the residential building code, chapter 5B, Hawai‘i County Code.
{101.2 Scope IEBC 2018.}

Section 5C-1-4. Administrative provisions.

Provisions relating to permitting, enforcement, inspection, and other administrative procedures pertaining to this chapter are contained in chapter 5, the construction administrative code.

Section 5C-1-5. Existing buildings.

- (a) Permitted buildings in existence at the time of the adoption of this chapter may have their existing permitted use or occupancy continued if such use or occupancy was legal at the time of the adoption of this chapter, provided such continued use does not constitute a hazard to the general safety and welfare of the occupants and the public. {5-6(a), 3-180-10 SBC.}
- (b) Alteration, repair, addition, and change of occupancy. Alteration, repair, addition, and change of occupancy to a building or structure in existence at the time of the adoption of this chapter shall comply with the requirements of this chapter. {5-6(b).}

Section 5C-1-6. Definitions.

As used in this chapter, unless it is apparent from the context that a different meaning is intended:

“Accessory structure” means a structure not greater than 3,000 square feet (279 m²) in floor area, and not over two stories in height, the use of which is customarily accessory to and incidental to that of the dwelling and which is located on the same lot.

“Authority having jurisdiction” means the director of the department of public works, or the director’s authorized representative.

“Building” means any structure used or intended for supporting or sheltering any use or occupancy. The term shall include but not be limited to, any structure mounted on wheels such as a trailer, wagon, or vehicle which is parked and stationary for any 24-hour period, and is used for business or living purposes; provided, however, that the term shall not include a push cart or push wagon which is readily movable and which does not exceed 25 square feet in area, nor shall the term include a trailer or vehicle, used exclusively for the purpose of selling any commercial product therefrom, which hold a vehicle license and actually travels on public or private streets.

To the extent context otherwise permits and/or requires, the definitions of “building” as used in chapters: 5A, the building code; 5B, the residential building code; 5C, the existing building code; 5D, the electrical code; 5E, the energy conservation code; and 5F, the plumbing code; are incorporated by reference herein. {202, IBC; 5-71(1).}

“Building work” means the design, construction, alteration, relocation, enlargement, replacement, repair, removal, demolition of any building or structure, or any other activities regulated by this structure. {5-19(a).}

“Chapter” means this chapter. {SBC.}

“This code” means the existing building code, contained in chapter 5C, or the construction administrative code, contained in chapter 5, or both, as the context requires. {Source: 5A-1-6.}

“Construction code” means collectively: chapter 5, the construction administrative code; chapter 5A, the building code; chapter 5B, the residential building code; chapter 5C, the existing building code; chapter 5D, the electrical code; chapter 5E, the energy conservation code; chapter 5F, the plumbing code; and all administrative rules adopted pursuant to these chapters.

“ Dwelling” means any building that contains one or two dwelling units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes. {202, IBC.}

“Existing building” means a building erected prior to the effective date of this chapter, or one for which a legal permit has been issued.

“Existing structure” means a structure erected prior to the effective date of this chapter, or one for which a legal permit has been issued. {202, IBC.}

“ICC” means the International Code Council. {SBC.}

“Owner-builder” means owners or lessees of property who build or improve buildings or structures on their property for their own use, or for use by their immediate family. This definition shall not preempt owner-builder by exemption as defined by section 444-2.5, Hawai‘i Revised Statutes. {5-4, HCC and 444-2.5, HRS.}

“Permit” means a formal authorization issued by the authority having jurisdiction that authorizes performance of specified work, pursuant to the construction code, including the following chapters and all administrative rules adopted pursuant to the following chapters:

- (1) 5, the construction administrative code;
- (2) 5A, the building code;
- (3) 5B, the residential building code;
- (4) 5C, the existing building code;
- (5) 5D, the electrical code;
- (6) 5E, the energy conservation code; and
- (7) 5F, the plumbing code.

“Person” means any individual, firm, partnership, association, or corporation; or its or their successors or assigns, according to the context thereof. {9-5.}

Section 5C-1-7. Compliance required.

- (a) No person shall perform or cause to be performed any building work which does not comply with the provisions of this code or any permit issued pursuant to this code.
- (b) No person shall perform any work covered by this code in violation of the provisions of chapters 444 or 448E, Hawai‘i Revised Statutes. {9-15(b).}
- (c) Any approval or permit issued pursuant to the provisions of this code shall comply with all applicable requirements of this code. {5-12.}
- (d) The granting of a permit, variance, or approval of plans or specifications pursuant to this code does not dispense with the necessity to comply with any applicable law to which a permit holder may also be subject. {5-12.}

Section 5C-1-8. Conflict.

- (a) If any provisions of this code conflict with or contravene provisions of the Hawai‘i State Building Code or the International Building Code, 2018 Edition, that have been incorporated by reference, the provisions of this code shall prevail as to all matters and questions arising out of the subject matter of such provisions. {5-5.}
- (b) In situations where two or more provisions of this code and any applicable law, other than those provided for in subsection (a), cover the same subject matter, the stricter shall be complied with. {5-12(8).}

Section 5C-1-9. References to model codes.

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 5C-1-8.

- (1) Wherever referenced in this code, the International Building Code shall mean the building code, chapter 5A, Hawai‘i County Code.
- (2) Wherever referenced in this code, the International Residential Code, shall mean the residential building code, chapter 5B, Hawai‘i County Code.
- (3) Wherever referenced in this code, the International Existing Building Code, shall mean the existing building code, chapter 5C, Hawai‘i County Code.
- (4) Wherever referenced in this code, the International Electrical Code shall mean the electrical code, chapter 5D, Hawai‘i County Code.
- (5) Wherever referenced in this code, the International Energy Conservation Code, shall mean the energy conservation code, chapter 5E, Hawai‘i County Code.
- (6) Wherever referenced in this code, the International Plumbing Code shall mean the plumbing code, chapter 5F, Hawai‘i County Code.
- (7) Wherever in this Code reference is made to the International Fuel Gas Code, the provisions of the International Fuel Gas Code shall be deemed to be only guidelines and not mandatory.

- (8) Wherever in this Code reference is made to the International Mechanical Code, the provisions of the International Mechanical Code shall be deemed to be only guidelines and not mandatory.
- (9) Wherever in this Code reference is made to the International Property Maintenance Code, the provisions of the International Property Maintenance Code shall be deemed to be only guidelines and not mandatory.
- (10) Wherever referenced in this code, the International Fire Code shall mean the fire code, chapter 26, Hawai'i County Code.

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.

{To address references in the IEBC to other Model Codes 5A-1-9; State IEBC Sections 102.4 and 102.4.4-102.4.11}

Article 2. Installation Requirements.

Section 5C-2-1. International existing building code adopted.

- (a) The “International Existing Building Code, 2018 Edition,” as published by the International Code Council, Incorporated, 4051 Flossmoor Road, Country Club Hills, IL 60478, is adopted by reference and made a part of this code, subject to any amendments hereinafter set forth in this chapter. Hereafter, the “International Existing Building Code, 2018 Edition,” shall be referred to as the “International Existing Building Code.” The appendices of the International Existing Building Code are not adopted unless otherwise provided in this chapter.
- (b) The scope, technical specifications, and exemptions set forth in the International Existing Building Code are hereby adopted as the standard for building work covered by this code, provided there are no specific provisions in any other section of this code covering the particular matter.
- (c) A copy of the International Existing Building Code shall be available for public inspection at the Hilo and Kailua-Kona offices of the department of public works and at the office of the County clerk. {5-3(a).}
- (d) The International Existing Building Code adopted and incorporated by reference into this code, shall be subject to the amendments hereinafter set forth.
- (1) Chapter 1, “Scope and Administration,” of the International Existing Building Code is deleted in its entirety.
 - (2) Chapter 1, Part 2 – “Administration and Enforcement” of the International Existing Building Code is deleted in its entirety.
 - (3) Section 202, “Definitions,” of the International Existing Building Code is amended by adding the following definitions:

“EXISTING BUILDING is a building for which a legal building permit has been issued, or one which complied with this Code in effect at the time the building was erected.”

“FAMILY shall be as defined in the Zoning Code except that a nursing, care home, or other similar facility with not more than five patients may be considered a family under this code.”
 - (4) Section 202, “GENERAL DEFINITIONS,” of the International Existing Building Code is amended by amending the following definitions to read as follows:

“BUILDING. Any structure [~~utilized~~] used or intended for supporting [~~or sheltering~~] any use or occupancy. The term shall include but not be limited to any structure mounted on wheels such as

a trailer, wagon or vehicle which is parked and stationary for any 24-hour period, and is used for business or living purposes; provided, however, that the term shall not include a push cart or push wagon which is readily movable and which does not exceed 25 square feet in area, nor shall the term include a trailer or vehicle, used exclusively for the purpose of selling any commercial product therefrom, which hold a vehicle license and actually travels on public or private streets.”

“CODE OFFICIAL. [~~The officer or other designated authority charged with the administration and enforcement of this code.~~] The director of the County department of public works, or the director’s authorized representative.”

- (5) Subsection 301.5, “Compliance with accessibility,” of the International Existing Building Code is amended to read as follows:

“301.5 Compliance with accessibility. Accessibility requirements for *existing buildings* shall comply with the [~~2009 edition of ICC A117.1.~~] following:

1. Construction of State or County buildings or facilities shall comply with Section 103-50 Hawai‘i Revised Statutes.
2. Americans with Disabilities Act Standards for Accessible Design.
3. Housing and urban development recognized “safe harbors” for compliance with the Fair Housing Acts design and construction requirements.
4. Pertinent laws relating with disabilities shall be administered and enforced by agencies responsible for their enforcement.

Prior to the issuance of a building permit, the owner (or the owner’s representative, professional architect, or engineer) shall submit a statement that all requirements, relating to accessibility for persons with disabilities, shall be complied with.”

- (6) Section 303.3, “Seismic evaluation and design procedures,” is amended by adding a new subsection 303.3.3, “Pre-engineered bracing of post and pier foundations” to read as follows:

“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.”

{from State IEBC Amendment, SIEBC (4)}

- (7) Section 405.2, “Repairs to damaged buildings” of the International Existing Building Code, is amended by adding subsection 405.2.1.2, “Walls Without Studs” to read as follows:

“Section 405.2.1.2 Walls without studs.

405.2.1.2.1 General. For Type V-B buildings, single-wall construction without studs may be used in accordance with this section for repairs to existing buildings of single-wall construction only.

One-story and the uppermost story of wood frame Type V-B buildings may be of single-wall construction with board thickness specified in this section, without studs, when requirements of this section are met. Floor to ceiling height must not exceed 8 feet (2,438 mm).

Any provision of this code to the contrary notwithstanding, studding of not less than 2-inches by 3-inches (51 mm by 76.2 mm) may be used on one-story buildings of double-wall construction.

When wood-frame dwellings are supported by posts, 2-inch by 4-inch (51mm by 102 mm) foundation bracing must be provided.

For one-story conventional residential structures, the local practice of using foundation blocks with termite shields is acceptable in all areas except in flood hazard areas and for developments adjacent to drainage facilities as specified in chapter 27, Hawai‘i County Code.

405.2.1.3 Board for single-wall construction

405.2.1.3.1 One and one-eighth inch boards. Single-wall construction with boards of 1-1/8 inch (28.6 mm) net thickness are not required to have girts.

405.2.1.3.2 One-inch boards. Where single-wall construction is with boards of one-inch thickness (25.4 mm), no girt is required, provided approved stiffeners for any section of such wall are spaced not more than 10 feet (3048 mm) along the wall.

405.2.1.3.3 Three-fourths-inch boards. Single-wall construction with boards of 3/4-inch (19.1 mm) net thickness must have girts and cross partitions at least every 30 feet (9144 mm).

405.2.1.3.4 Approved stiffeners. Approved stiffeners must be studs at least 2-inches by 4-inches (51 mm by 102 mm), full height window or door jambs, posts, walls or partitions at right angles to the section of wall under construction.

405.2.1.3.5 Girts. Girts for single-wall construction must be not less than 2-inches by 6-inches (51 mm by 152 mm) belt course or other approved strengthening about mid height between the floor and ceiling on all exterior walls.

405.2.1.3.6 Complete load path. Blocking, bridging, straps, approved framing anchors or mechanical fasteners must be designed and installed to provide continuous ties from the roof to the foundation system. Sheet metal clamps, ties or clips, must be formed of ASTM A153 G90 galvanized steel or other approved corrosion-resistant material of not less than 0.040-inch (1.01 mm) nominal thickness. Uplift resistance must be in accordance with Table R802.11.”

{from Oahu Amendment}

- (8) Subsection 506.4.2, “Snow and wind loads,” of the International Existing Building Code 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*~~] the Building Code, Chapter 5A, for the new risk category.

~~[Exception]~~Exceptions:

1. 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.”

{from State IEBC Amendment, SIEBC (5)}

- (9) Subsection 506.4.3, “Seismic loads,” of the International Existing Building Code 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*~~] the Building Code, Chapter 5A, for the new *risk category* using full seismic forces.

Exceptions:

1. 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.

2. 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.
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.
{from State IEBC Amendment, SIEBC (6)}

- (10) Subsection 706.2, “Addition of replacement of roofing or replacement of equipment,” of the International Existing Building Code 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 *alteration* 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 *International Building Code*~~] the Building Code, Chapter 5A, for new structures.

Exceptions:

1. 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 *International Building Code*~~] the Building Code, Chapter 5A, or the provisions of [~~the *International Residential Building Code*~~] the Residential Building Code, Chapter 5B.
2. 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/m²) or less over an existing single layer of roof covering.”
{from State IEBC Amendment, SIEBC (7)}

- (11) Subsection 706.3.2, “Roof diaphragms resisting wind loads in high-wind regions,” of the International Existing Building Code 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 or section of a building located where the [~~ultimate design wind speed, V_{ult}~~] basic wind speed, V , determined in accordance with Figure 1609.3(1) of [~~the *International Building Code*~~] the Building Code, Chapter 5A, is greater than 115 mph (51 m/s) or in a special wind region, as defined in Section 1609 of [~~the *International Building Code*~~] the Building Code, Chapter 5A, 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 *International Building Code*~~] the Building Code, Chapter 5A, 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 International Building Code~~] the Building Code, Chapter 5A.”
{from State IEBC Amendment, SIEBC (8)}

- (12) Subsection 1006.2, “Snow and wind loads” of the International Existing Building Code 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~~] the Building Code, Chapter 5A, for the new risk category.

~~[Exception]~~Exceptions:

1. Where the area of the new occupancy is less than 10 percent of the building area[~~-~~ The], 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.”

{from State IEBC Amendment, SIEBC (9)}

- (13) Subsection 1006.3, “Seismic loads” of the International Existing Building Code 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~~] the Building Code, Chapter 5A, 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.
2. 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.”

{from State IEBC Amendment, SIEBC (10)}

Article 3. Reserved

Article 4. Building Work Within Special Flood Hazard Areas.

Section 5C-4-1. General applicability.

- (a) The provisions of this article shall apply to new construction or the renovation and major alteration, addition, or reinstallation of any existing buildings or structures, within a special flood hazard area as identified by chapter 27, Hawai‘i County Code. Such construction work shall comply with chapter 16 of the International Building Code, and chapter 27, Floodplain Management.
- (b) The provisions of this article shall not apply to the following:
 - (1) Any building or structure exempted from chapter 27;
 - (2) Any building or structure which has been granted a flood control variance pursuant to article 5, chapter 27; or
 - (3) Any building or structure lawfully existing prior to November 8, 1993, subject to the provisions of chapter 27.

Section 5C-4-2. Definitions.

As used in this article, unless it is apparent from the context that a different meaning is intended:

“Base flood elevation” means the water surface elevation of the base flood.

“Flood or flooding” means:

- (1) A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - (A) The overflow of inland or tidal waters;
 - (B) The unusual and rapid accumulation or runoff of surface waters from any source; or
 - (C) Mudslides (i.e., mudflows) which are approximately caused by flooding as defined in paragraph (1)(B) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current; or
- (2) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1)(A) of this definition.

“Special flood hazard area” means an area having special flood or flood-related erosion hazards, and shown on the Flood Insurance Rate Maps as Zones A, AO, AE, A99, AH, VE, or V.

“Water-tight” when referring to construction below the inundation level, means constructed to exclude moisture and withstand the hydraulic pressure resulting from the anticipated depth of inundation.

Section 5C-4-3. General Requirements.

Contractor will provide a certified flood zone elevation mark on jobsite for flood zone elevation reference point.”