

CHAPTER 3

PROVISIONS FOR ALL COMPLIANCE METHODS

User note:

About this chapter: Chapter 3 explains the three compliance options for alterations and additions available in the code. In addition, this chapter also lays out the methods to be used for seismic design and evaluation throughout this code. Finally, this chapter clarifies that provisions in other Jamaica Codes related to repairs, alterations, additions, relocation and changes of building use shall also be addressed unless they conflict with this code. In that case, this code takes precedence.

SECTION 301 ADMINISTRATION

301.1 General. The *repair, alteration, change of building use, addition* or relocation of all *existing buildings* shall comply with Section 301.2, 301.3, or 301.4.

301.2 Repairs. Repairs shall comply with the requirements of Chapter 4.

301.3 Alteration, addition or change of building use. The *alteration, addition or change of building use* of all *existing buildings* shall comply with one of the methods listed in Section 301.3.1, 301.3.2 or 301.3.3 as selected by the applicant. Sections 301.3.1 through 301.3.3 shall not be applied in combination with each other.

Exception: Subject to the approval of the *building official*, *alterations* complying with the *building laws* in existence at the time the building or the affected portion of the building was built shall be considered in compliance with the provisions of this code. New structural members added as part of the *alteration* shall comply with the *Jamaica Building Code*. This exception shall not apply to alterations that constitute substantial improvement in *flood hazard areas*, which shall comply with Section 503.2, 701.3 or 1301.3.3. This exception shall not apply to the structural provisions of Chapter 5 or to the structural provisions of Sections 706, 806 and 906.

301.3.1 Prescriptive compliance method. *Alterations, additions and changes of building use* complying with Chapter 5 of this code in buildings complying with the *Jamaica Fire Code* shall be considered in compliance with the provisions of this code.

301.3.2 Work area compliance method. *Alterations, additions and changes of building use* complying with the applicable requirements of Chapters 6 through 12 of this code shall be considered in compliance with the provisions of this code.

301.3.3 Performance compliance method. *Alterations, additions and changes of building use* complying with Chapter 13 of this code shall be considered in compliance with the provisions of this code.

301.4 Relocated buildings. Relocated buildings shall comply with the requirements of Chapter 14.

301.5 Compliance with accessibility. Accessibility requirements for *existing buildings* shall comply with the 2009 edition of ICC A117.1.

SECTION 302 GENERAL PROVISIONS

302.1 Applicability. The provisions of Section 302 apply to all *alterations, repairs, additions, relocations* of structures and *changes of building use* regardless of compliance method.

302.2 Dangerous conditions. The *building official* shall have the authority to require the elimination of conditions deemed *dangerous*.

302.3 Additional codes. *Alterations, repairs, additions and changes of building use* to, or relocation of, *existing buildings* and structures shall comply with the provisions for *alterations, repairs, additions and changes of building use* or relocation, respectively, in this code and the *Jamaica Energy Conservation Code, Jamaica Fire Code, Jamaica Fuel Gas Code, Jamaica Mechanical Code, Jamaica Plumbing Code, Jamaica Private Sewage Disposal Code, Jamaica Property Maintenance Code, Jamaica Small Building/Residential Code* and the *Jamaica Electrical Code*. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

302.4 Existing materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the *building official* to be *unsafe* or dangerous.

302.5 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for *repairs and alterations*, provided that *unsafe* conditions are not created. Hazardous materials shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

302.5.1 New structural members and connections. New structural members and connections shall comply with the detailing provisions of the *Jamaica Building Code* for new buildings of similar structure, purpose and location.

Exception: Where alternative design criteria are specifically permitted.

302.6 Occupancy and use. Where determining the appropriate application of the referenced sections of this code, the occupancy and use of a building shall be determined in accordance with Chapter 3 of the *Jamaica Building Code*.

SECTION 303
STRUCTURAL DESIGN LOADS AND
EVALUATION AND DESIGN PROCEDURES

303.1 Live loads. Where an *addition* or *alteration* does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be evaluated and designed for live loads *approved* prior to the *addition* or *alteration*. If the *approved* live load is less than that required by Section 1607 of the *Jamaica Building Code*, the area designated for the nonconforming live load shall be posted with placards of *approved* design indicating the *approved* live load. Where the *addition* or *alteration* results in increased design live load, the live load required by Section 1607 of the *Jamaica Building Code* shall be used.

303.2 Snow loads on adjacent buildings. Not applicable.

303.3 Seismic evaluation and design procedures. Where required, seismic evaluation or design shall be based on the procedures and criteria in this section, regardless of which compliance method is used.

303.3.1 Compliance with full seismic forces. Where compliance requires the use of full seismic forces, the criteria shall be in accordance with one of the following:

1. One-hundred percent of the values in the *Jamaica Building Code*. Where the existing seismic force-resisting system is a type that can be designated as “Ordinary,” values of R , Ω_0 and C_d used for analysis in accordance with Chapter 16 of the *Jamaica Building Code* shall be those specified for structural systems classified as “Ordinary” in accordance with Table 12.2-1 of ASCE 7, unless it can be demonstrated that the structural system will provide performance equivalent to that of a “Detailed,” “Intermediate” or “Special” system.
2. ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 303.3.1 for the applicable *risk category*.

303.3.2 Compliance with reduced seismic forces. Where seismic evaluation and design is permitted to use reduced seismic forces, the criteria used shall be in accordance with one of the following:

1. The *Jamaica Building Code* using 75 percent of the prescribed forces. Values of R , Ω_0 and C_d used for analysis shall be as specified in Section 303.3.1 of this code.
2. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A as specified in Items 2.1 through 2.4 and sub-

ject to the limitations of the respective Appendix A chapters shall be deemed to comply with this section.

- 2.1. The seismic evaluation and design of unreinforced masonry bearing wall buildings in *Risk Category* I or II are permitted to be based on the procedures specified in Appendix Chapter A1.
 - 2.2. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in *Risk Category* I or II are permitted to be based on the procedures specified in Chapter A2.
 - 2.3. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in *Risk Category* I or II are permitted to be based on the procedures specified in Chapter A3.
 - 2.4. Seismic evaluation and design of soft, weak, or open-front wall conditions in multiple-unit residential buildings of wood construction in *Risk Category* I or II are permitted to be based on the procedures specified in Chapter A4.
3. ASCE 41, using the performance objective in Table 303.3.2 for the applicable *risk category*.

SECTION 304
IN-SITU LOAD TESTS

304.1 General. Where used, in-situ load tests shall be conducted in accordance with Section 1708 of the *Jamaica Building Code*.

SECTION 305
ACCESSIBILITY FOR EXISTING BUILDINGS

305.1 Scope. The provisions of Sections 305.1 through 305.9 apply to maintenance, *change of building use*, *additions* and *alterations to existing buildings*, including those identified as *historic buildings*.

305.2 Maintenance of facilities. A *facility* that is constructed or altered to be *accessible* shall be maintained *accessible* during occupancy.

TABLE 303.3.1
PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH
FULL SEISMIC FORCES

RISK CATEGORY (Based on IBC Table 1604.5)	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-1N EARTHQUAKE HAZARD LEVEL	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-2N EARTHQUAKE HAZARD LEVEL
I	Life Safety (S-3)	Collapse Prevention (S-5)
II	Life Safety (S-3)	Collapse Prevention (S-5)
III	Damage Control (S-2)	Limited Safety (S-4)
IV	Immediate Occupancy (S-1)	Life Safety (S-3)

TABLE 303.3.2
PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH REDUCED SEISMIC FORCES

RISK CATEGORY (Based on IBC Table 1604.5)	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-1E EARTHQUAKE HAZARD LEVEL	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-2E EARTHQUAKE HAZARD LEVEL
I	Life Safety (S-3). See Note a	Collapse Prevention (S-5)
II	Life Safety (S-3). See Note a	Collapse Prevention (S-5)
III	Damage Control (S-2). See Note a	Limited Safety (S-4). See Note b
IV	Immediate Occupancy (S-1)	Life Safety (S-3). See Note c

- a. For Risk Categories I, II and III, the Tier 1 and Tier 2 procedures need not be considered for the BSE-1E earthquake hazard level.
- b. For Risk Category III, the Tier 1 screening checklists shall be based on the Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on *MS*-factors that are the average of the values for Collapse Prevention and Life Safety.
- c. For Risk Category IV, the Tier 1 screening checklists shall be based on Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on *MS*-factors for Life Safety.

305.3 Extent of application. An *alteration* of an existing *facility* shall not impose a requirement for greater accessibility than that which would be required for new construction. *Alterations* shall not reduce or have the effect of reducing accessibility of a *facility* or portion of a *facility*.

305.4 Change of building use. *Existing buildings* that undergo a change of group or *building use* shall comply with this section.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *Jamaica Building Code* are not required to be provided in *existing buildings* and facilities undergoing a *change of building use* in conjunction with *alterations* where the *work area* is 50 percent or less of the aggregate area of the building.

305.4.1 Partial change of building use. Where a portion of the building is changed to a new occupancy classification, any *alterations* shall comply with Sections 305.6, 305.7 and 305.8.

305.4.2 Complete change of building use. Where an entire building undergoes a *change of building use*, it shall comply with Section 305.4.1 and shall have all of the following accessible features:

1. Not fewer than one accessible building entrance.
2. Not fewer than one accessible route from an accessible building entrance to *primary function* areas.
3. Signage complying with Section 1111 of the *Jamaica Building Code*.
4. Accessible parking, where parking is being provided.
5. Not fewer than one accessible passenger loading zone, where loading zones are provided.
6. Not fewer than one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

Where it is *technically infeasible* to comply with the new construction standards for any of these requirements for a change of group or occupancy, Items 1 through 6 shall conform to the requirements to the maximum extent technically feasible.

Exception: The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units.

305.5 Additions. Provisions for new construction shall apply to *additions*. An *addition* that affects the accessibility to, or contains an area of, a *primary function* shall comply with the requirements in Section 305.7.

305.6 Alterations. A *facility* that is altered shall comply with the applicable provisions in Chapter 11 of the *Jamaica Building Code*, unless *technically infeasible*. Where compliance with this section is *technically infeasible*, the *alteration* shall provide access to the maximum extent technically feasible.

Exceptions:

1. The altered element or space is not required to be on an accessible route, unless required by Section 305.7.
2. Accessible means of egress required by Chapter 10 of the *Jamaica Building Code* are not required to be provided in existing facilities.
3. The *alteration* to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.
4. Type B dwelling or sleeping units required by Section 1107 of the *Jamaica Building Code* are not required to be provided in *existing buildings* and facilities undergoing *alterations* where the *work area* is 50 percent or less of the aggregate area of the building.

305.7 Alterations affecting an area containing a primary function. Where an *alteration* affects the accessibility to, or contains an area of *primary function*, the route to the *primary function* area shall be *accessible*. The accessible route to the *primary function* area shall include toilet facilities and drinking fountains serving the area of *primary function*.

Exceptions:

1. The costs of providing the *accessible* route are not required to exceed 20 percent of the costs of the *alterations* affecting the area of *primary function*.
2. This provision does not apply to *alterations* limited solely to windows, hardware, operating controls, electrical outlets and signs.
3. This provision does not apply to *alterations* limited solely to mechanical systems, electrical systems,

installation or *alteration* of fire protection systems and abatement of hazardous materials.

4. This provision does not apply to *alterations* undertaken for the primary purpose of increasing the accessibility of a *facility*.
5. This provision does not apply to altered areas limited to Type B dwelling and sleeping units.

305.8 Scoping for alterations. The provisions of Sections 305.8.1 through 305.8.15 shall apply to *alterations* to *existing buildings* and *facilities*.

305.8.1 Entrances. Where an *alteration* includes alterations to an entrance that is not accessible, and the *facility* has an *accessible* entrance, the altered entrance is not required to be *accessible* unless required by Section 305.7. Signs complying with Section 1111 of the *Jamaica Building Code* shall be provided.

305.8.2 Elevators. Altered elements of existing elevators shall comply with ASME A17.1 and ICC A117.1. Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

305.8.3 Platform lifts. Platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as a component of an accessible route.

305.8.4 Stairways and escalators in existing buildings. Where an escalator or stairway is added where none existed previously and major structural modifications are necessary for installation, an accessible route shall be provided between the levels served by the escalator or stairways in accordance with Section 1104.4 of the *Jamaica Building Code*.

305.8.5 Ramps. Where slopes steeper than allowed by Section 1012.2 of the *Jamaica Building Code* are necessitated by space limitations, the slope of ramps in or providing access to existing facilities shall comply with Table 305.8.5.

TABLE 305.8.5
RAMPS

SLOPE	MAXIMUM RISE
Steeper than 1:10 but not steeper than 1:8	76 mm
Steeper than 1:12 but not steeper than 1:10	150 mm

For SI: 1 mm = 0.03937 inch.

305.8.6 Accessible dwelling or sleeping units. Where Group I-1, I-2, I-3, R-1, R-2 or R-4 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the *Jamaica Building Code* for Accessible units apply only to the quantity of spaces being altered or added.

305.8.7 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the *Jamaica Building Code* for Type A units apply only to the quantity of the spaces being altered or added.

305.8.8 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or

sleeping units are being added, the requirements of Section 1107 of the *Jamaica Building Code* for Type B units apply only to the quantity of the spaces being added. Where Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered and where the *work area* is greater than 50 percent of the aggregate area of the building, the requirements of Section 1107 of the *Jamaica Building Code* for Type B units apply only to the quantity of the spaces being altered.

305.8.9 Jury boxes and witness stands. In *alterations*, accessible wheelchair spaces are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these spaces where the ramp or lift access restricts or projects into the required means of egress.

305.8.10 Toilet rooms. Where it is *technically infeasible* to alter existing toilet and bathing rooms to be *accessible*, an *accessible* family or assisted-use toilet or bathing room constructed in accordance with Section 1109.2.1 of the *Jamaica Building Code* is permitted. The family or assisted-use toilet or bathing room shall be located on the same floor and in the same area as the existing toilet or bathing rooms. At the inaccessible toilet and bathing rooms, directional signs indicating the location of the nearest family or assisted-use toilet room or bathing room shall be provided. These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

305.8.11 Additional toilet and bathing facilities. In assembly and mercantile occupancies, where additional toilet fixtures are added, not fewer than one accessible family or assisted-use toilet room shall be provided where required by Section 1109.2.1 of the *Jamaica Building Code*. In recreational facilities, where additional bathing rooms are being added, not fewer than one family or assisted-use bathing room shall be provided where required by Section 1109.2.1 of the *Jamaica Building Code*.

305.8.12 Dressing, fitting and locker rooms. Where it is *technically infeasible* to provide accessible dressing, fitting or locker rooms at the same location as similar types of rooms, one accessible room on the same level shall be provided. Where separate-sex facilities are provided, accessible rooms for each sex shall be provided. Separate-sex facilities are not required where only unisex rooms are provided.

305.8.13 Fuel dispensers. Operable parts of replacement fuel dispensers shall be permitted to be 1,370 mm (54 inches) maximum, measuring from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

305.8.14 Thresholds. The maximum height of thresholds at doorways shall be 19 mm (³/₄ inch). Such thresholds shall have beveled edges on each side.

305.8.15 Amusement rides. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride's performance differs

from that specified by the manufacturer or the original design, the amusement ride shall comply with requirements for new construction in Section 1110.4.8 of the *Jamaica Building Code*.

305.9 Historic buildings. These provisions shall apply to *facilities* designated as historic structures that undergo *alterations* or a *change of building use*, unless *technically infeasible*. Where compliance with the requirements for accessible routes, entrances or toilet rooms would threaten or destroy the historic significance of the *facility*, as determined by the authority having jurisdiction, the alternative requirements of Sections 305.9.1 through 305.9.4 for that element shall be permitted.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *Jamaica Building Code* are not required to be provided in historic buildings.

305.9.1 Site arrival points. Not fewer than one accessible route from a site arrival point to an accessible entrance shall be provided.

305.9.2 Multiple-level buildings and facilities. An accessible route from an accessible entrance to public spaces on the level of the accessible entrance shall be provided.

305.9.3 Entrances. Not fewer than one main entrance shall be accessible.

Exception: If a public entrance cannot be made accessible, an accessible entrance that is unlocked while the building is occupied shall be provided; or, a locked accessible entrance with a notification system or remote monitoring shall be provided.

Signs complying with Section 1111 of the *Jamaica Building Code* shall be provided at the public entrance and the accessible entrance.

305.9.4 Toilet and bathing facilities. Where toilet rooms are provided, not fewer than one accessible family or assisted-use toilet room complying with Section 1109.2.1 of the *Jamaica Building Code* shall be provided.