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 I-Codes® related to repairs, alterations, additions, relocation and changes of occupancy must also be addressed unless they conflict with this code. In that case, this code takes precedence.*

SECTION 301
((~~ADMINISTRATION~~)) COMPLIANCE METHODS

[S] 301.1 General. All *repairs*, *alterations*, *changes of occupancy*, *additions* and relocations of buildings shall comply with this chapter. The ((~~*repair*~~,)) *alteration, change of occupancy*, *addition* or relocation of all *existing buildings* and structures shall also comply with Section 301.2, 301.3, or 301.4.

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

[S] 301.3 Alteration, addition or change of occupancy. The *alteration*, *addition* or *change of occupancy* of all *existing buildings* and structures shall also 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 *code official*, *alterations* ((~~complying~~)) that comply with the 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 unless the building is undergoing a *substantial alteration*. New structural members added as part of the *alteration* shall comply with the *International Building Code*. This exception shall not apply to alterations that constitute substantial improvement in *flood hazard areas*, which shall comply with Section 310. ((~~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 occupancy* complying with Chapter 5 of this code in buildings complying with the *International 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 occupancy* 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 occupancy* complying with Chapter 13 of this code shall be considered in compliance with the provisions of this code.

[S] 301.4 Relocated buildings. Relocated buildings shall comply with the requirements of ((~~Chapter 14~~)) Section 309.

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

[S] SECTION 302
((~~GENERAL PROVISIONS~~))
ADDITIONAL REQUIREMENTS FOR ALL COMPLIANCE METHODS

[S] 302.1 Applicability. The provisions of Section 302 apply to all *alterations*, *repairs*, *additions*, relocations of structures and *changes of occupancy* regardless of the compliance method chosen by the applicant.

[S] 302.2 ((~~Dangerous conditions~~)) RESERVED. ((~~The *code official* shall have the authority to require the elimination of conditions deemed *dangerous.*~~)) **

[S] 302.3 Additional codes. ((~~*Alterations*~~)) Regardless of the compliance method, *alterations*, *repairs*, *additions* and *changes of occupancy* to, or relocation of, *existing buildings* and structures shall comply with the provisions for *alterations, repairs, additions* and *changes of occupancy* or relocation, respectively, in this code and the *International Energy Conservation Code, International Fire Code, International Fuel Gas Code, International Mechanical Code,* ((~~*International*~~)) *Uniform Plumbing Code,* ((~~*International Private Sewage Disposal Code, International Property Maintenance Code, International Residential Code*~~)) *Seattle Boiler and Pressure Vessel Code*, *Seattle Electrical Code* and NFPA 70. Elevators and other conveyances shall comply with the *International Building Code*. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

Note: Additional requirements relating to elevators and other conveyances are in the Seattle Building Code. Most requirements are located in Chapter 30.

[S] 302.3.1 Fire prevention. Except as specifically provided for in this code, the provisions of the *International Fire Code* shall apply to matters affecting or relating to structures, processes and premises regarding:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;
2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and
3. The construction, extension, *repair*, *alteration* or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

[S] 302.4 Existing materials. Materials already in use in a building ((~~in compliance~~)) complying with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless ((~~determined~~)) the materials are deemed unsafe by the ((~~building~~)) *code official*. ((~~to be unsafe.~~))

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.

[BS] 302.5.1 New structural members and connections. New structural members and connections shall comply with the detailing provisions of the *International 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 *International Building Code.*

[S] 302.7 Safeguards during construction. Regardless of compliance method, *alterations*, repairs *additions* and *changes of occupancy* to, or relocation of, *existing buildings* and structures shall comply with the provisions of Chapter 15.

[S] 302.8 Occupant load increases in Group A occupancies. Regardless of which compliance method is used, when the occupant load in an existing Group A occupancy is increased, an automatic sprinkler system shall be installed in the fire area containing the Group A occupancy if a sprinkler system would be required by *International Building Code* Section 903.2.1 for new construction.

Exception: A sprinkler system is not required if all the following conditions are met:

1. The increase in occupant load is either 50 occupants or less, or no more than 10 percent of the occupant load of the existing Group A occupancy, whichever is greater; and
2. The existing means of egress has adequate capacity to accommodate the additional occupant load; and
3. The total occupant load in the Group A occupancy does not exceed one occupant per 5 square feet; and
4. The increase in occupant load is not part of a *substantial alteration*.

[S] 302.9 Unsafe building appendages. Parapet walls, cornices, spires, towers, tanks, statuary and other appendages or structural members that are supported by, attached to, or a part of a building and that are in a deteriorated condition or are otherwise unable to sustain the design loads that are specified in this code, are hereby designated as *unsafe* building appendages. All such *unsafe* building appendages are public nuisances and shall be abated in accordance with Section 101.14.

[S] 302.10 Unreinforced masonry chimneys. Whenever an unreinforced masonry chimney is altered or *repaired*, or when the building in which such a chimney is located undergoes *substantial alteration*, the chimney shall conform to rules promulgated by the code official.

[S] SECTION 303
STRUCTURAL ((~~DESIGN LOADS AND EVALUATION AND DESIGN PROCEDURES~~)) REQUIREMENTS FOR ALL COMPLIANCE METHODS

* **[S] ((~~[BS] 303.2 Snow loads on adjacent buildings.~~** ~~Where an *alteration* or *addition* changes the potential snow drift effects on an adjacent building, the *code official* is authorized to enforce Section 7.12 of ASCE 7.~~))

[S] 303.1 Structural provisions for alterations. Alterations to any building or structure shall comply with the requirements of Sections 303.1.1 through 303.1.8.

** **[BS] 303.1.1 New structural elements.** New structural elements in alterations, including connections and anchorage, shall comply with the International Building Code.

[BS] 303.1.2 Minimum design loads. The minimum design loads on existing elements of a structure that do not support additional loads as a result of an *alteration* shall be the loads applicable at the time the building was constructed.

** **[BS] 303.1.3 Existing structural elements carrying gravity load.** Any existing gravity load-carrying structural element for which an *alteration* causes an increase in design ((~~dead, live or snow~~)) gravity load ((~~, including snow drift effects,~~)) of more than 5 percent shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity

((~~loads~~)) load required by the *International Building Code* for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the *alteration* shall be shown to have the capacity to resist the applicable design ((~~dead, live and snow~~)) gravity loads ((~~including snow drift effects~~)) required by the *International Building Code* for new structures.

((~~Exceptions~~)) Exception: ((~~1.~~)) Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the ((~~altered~~)) existing building and its alteration ((~~complies~~)) comply with the conventional light-frame construction methods of the *International Building Code*. ((~~or the provisions of the *International Residential Code*.~~

~~2. Buildings in which the increased dead load is due entirely to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m^2) or less over an existing single layer of roof covering.~~))

[BS] 303.1.3.1 ((~~Live loads~~)) Design live load. Where ((~~an *addition* or~~)) the *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 for storage occupancies is less than that required by Section 1607 of the *International Building Code*, the area ((~~designated~~)) designed for the nonconforming live load shall be posted with placards of *approved* design indicating the *approved* live load. Where the ((~~*addition* or~~)) *alteration* ((~~results~~)) does result in increased design live load, the live load required by Section 1607 of the *International Building Code* shall be used. **

[BS] 303.1.4 Existing structural elements carrying lateral load. ((~~Except as permitted by Section 503.13, where~~)) Where the *alteration* increases design lateral loads in accordance with Section 1609 or 1613 of the *International Building Code*, or where the *alteration* results in a prohibited structural irregularity as defined in ASCE 7, or where the *alteration* decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of Sections 1609 and 1613 of the *International Building Code*. Reduced *International Building Code*-level seismic forces in accordance with Section 303.4.2 shall be permitted. **

Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the *alteration* considered is not more than 10 percent greater than its demand-capacity ratio with the *alteration* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the *International Building Code*. Reduced *International Building Code*-level seismic forces in accordance with Section 303.4.2 shall be permitted. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

[BS] 303.1.5 ((~~Anchorage~~)) Wall anchorage for unreinforced masonry walls in major alterations. Where the ((~~*work area*~~)) portion of the building undergoing the intended *alteration* exceeds 50 percent of the aggregate area of the building, ((~~area,~~)) the building is assigned to Seismic Design Category C, D, E or F, and the building's structural system includes unreinforced masonry ((~~bearing~~)) walls, the *alteration* work shall include installation of wall anchors at the ((~~floor and~~)) roof ((~~lines~~)) line to resist seismic forces, unless an evaluation demonstrates compliance of existing wall anchorage. ((~~Reduced~~)) For purposes of this section, reduced design seismic forces shall be permitted. **

[BS] 303.1.6 Anchorage of unreinforced masonry partitions in major alterations. Where the *work area* exceeds 50 percent of the building area, and where the building is assigned to Seismic Design Category C, D, E or F, unreinforced masonry partitions and nonstructural walls within the *work area* and adjacent to egress paths from the *work area* shall be anchored, removed or altered to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces shall be permitted. **

[BS] 303.1.7 Voluntary ((~~lateral force-resisting system alterations~~)) seismic improvements. ((~~Structural *alterations*~~)) *Alterations* to existing structural elements or *additions* of new structural elements that are ((~~intended exclusively to improve the lateral force-resisting system and are~~)) not otherwise required by ((~~other sections of this code~~)) this chapter and are initiated for the purpose of improving the performance of the seismic force-resisting system of an existing structure or the performance of seismic bracing or anchorage of existing nonstructural elements ((~~shall not be required to meet the requirements of Section 1609 or Section 1613 of the *International Building Code*, provided that all of the following apply~~)) shall be permitted, if an engineering analysis is submitted demonstrating the following: **

((~~1. The capacity of existing structural systems to resist forces is not reduced.~~))

1. The altered structure and the altered nonstructural elements are no less conforming to the provisions of the *International Building Code* with respect to earthquake design than they were prior to the *alteration.*

   Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the *alteration* considered is no more than 10 percent greater than its demand-capacity ratio with the *alteration* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces per Sections 1609 and 1613 of the *International Building Code.* For purposes of this exception, comparisons of demand capacity ratios and calculation of design lateral loads,

forces, and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

2. New structural elements are detailed and connected to existing or new structural elements as required ((~~by the *International Building Code*~~)) for new construction.
3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required ((~~by the *International Building Code*~~)) for new construction.
4. The *alterations* do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

** **[S] 303.2 Structural provisions for changes of occupancy.** Where a *change of occupancy* results in a structure being reclassified to a higher *risk category* determined in accordance with Table 1604.5 of the *International Building Code*, the structure shall conform to the seismic requirements for a new structure of the higher risk category. For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 303.4.1 for the applicable risk category, shall be deemed to meet the requirements of Section 1613 of the *International Building Code*.

Exception: Specific seismic detailing requirements of Section 1613 of the *International Building Code* for a new structure shall not be required to be met where the seismic performance is shown to be equivalent to that of a new structure. A demonstration of equivalence shall consider the regularity, overstrength, redundancy and ductility of the structure.

[S] 303.3 Structural provisions for additions. *Additions* to any building or structure shall comply with the requirements of Sections 303.3.1 through 303.3.2.

** **[BS] 303.3.1 Existing structural elements carrying gravity load.** Any existing gravity load-carrying structural element for which an *addition* and its related *alterations* cause an increase in design ((~~dead, live or snow~~)) gravity load ((~~, including snow drift effects,~~)) of more than 5 percent shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity ((~~loads~~)) load required by the *International Building Code* for new structures.

Any existing gravity load-carrying structural element whose ((~~vertical~~)) gravity load-carrying capacity is decreased ((~~as part of the *addition* and its related *alterations*~~)) shall be considered ((~~to be~~)) an altered element subject to the requirements of Section ((~~503.3~~)) 303.1.3. Any existing element that will form part of the lateral load path for any part of the *addition* shall be considered ((~~to be~~)) an existing lateral load-carrying structural element subject to the requirements of Section ((~~502.5~~)) 303.3.2.

((~~**Exception:** Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the *existing building* and the *addition* together comply with the conventional light-frame construction methods of the *International Building Code* or the provisions of the *International Residential Code*.~~))

** **[BS] 303.3.1.1 ((~~Live loads~~)) Design live load.** Where ((~~an~~)) the *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 *International Building Code*, the area ((~~designated~~)) designed for the nonconforming live load shall be posted with placards of *approved* design indicating the *approved* live load. Where the *addition* ((~~or *alteration* results~~)) does result in increased design live load, the live load required by Section 1607 of the *International Building Code* shall be used.

** **[BS] 303.3.2 Existing structural elements carrying lateral load.** Where the *addition* is structurally independent of the *existing structure*, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the *addition* is not structurally independent of the *existing structure*, the *existing structure* and its *addition* acting together as a single structure shall be shown to meet the requirements of Sections 1609 and 1613 of the *International Building Code*. ((~~using full seismic forces.~~)) For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 303.4.1 for the applicable risk category, shall be deemed to meet the requirements of Section 1613 of the *International Building Code*.

((~~Exceptions~~)) Exception: ((~~1.~~)) Any existing lateral load-carrying structural element whose demand-capacity ratio with the *addition* considered is not more than 10 percent greater than its demand-capacity ratio with the *addition* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the *International Building Code*. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

((~~2. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the *existing building* and the addition together comply with the conventional light-frame construction methods of the *International Building Code* or the provisions of the *International Residential Code*.~~))

[S][BS] ((~~303.3~~)) 303.4 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~~)) specified in the *Interna-*

tional Building Code or ASCE 41. The procedures contained in Appendix A of this code shall be permitted to be used as specified in Section 303.4.2.

[BS] ((~~303.3.1~~)) 303.4.1 Compliance with ((~~full~~)) International Building Code–level seismic forces. Where compliance ((~~requires the use of full seismic forces~~)) with the seismic design provisions of the International Building Code is required, the criteria shall be in accordance with one of the following:

1. One-hundred percent of the values in the *International 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 *International 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~~)) Table 303.4.1 for the applicable *risk category*.

[BS] TABLE ((~~303.3.1~~)) 303.4.1
PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH ((~~FULL~~)) INTERNATIONAL BUILDING CODE–LEVEL 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)

[BS] ((~~303.3.2~~)) 303.4.2 Compliance with reduced International Building Code 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 *International 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~~)) 303.4.1 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 subject 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~~)) 303.4.2 for the applicable *risk category*. Footnote a of Table 11.4.2 and Item 3 of Section 11.4.8 of ASCE 7 do not apply.

[BS] TABLE ((~~303.3.2~~)) 303.4.2
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 3/4 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.

SECTION 304
IN-SITU LOAD TESTS

[BS] 304.1 General. Where used, in-situ load tests shall be conducted in accordance with Section 1708 of the *International 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 occupancy, additions* and *alterations* to *existing buildings*, including those identified as ((~~*historic buildings*~~)) *landmarks*.

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

[S] 305.3 Extent of application. ((~~An~~)) Maintenance, *alterations*, *change of occupancy*, *additions* to or relocations of *existing buildings* of an existing *facility* shall not impose a requirement for greater accessibility than that which would be required for new construction. ((~~*Alterations*~~)) Maintenance, *alterations*, *change of occupancy*, *additions* to or relocations of *existing buildings* shall not reduce or have the effect of reducing accessibility of a *facility* or portion of a *facility.*

[S] 305.4 Change of occupancy. *Existing buildings* that undergo a change of group or occupancy shall comply with this section.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in *existing buildings* and facilities undergoing a *change of occupancy* in conjunction with *alterations* where the *work area* is 50 percent or less of the aggregate area of the building or less than a level 3 *alteration.*

[S] 305.4.1 Partial change of occupancy. 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 as applicable.

305.4.2 Complete change of occupancy. Where an entire building undergoes a *change of occupancy,* 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 *International 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.

[S] 305.6 Alterations. A *facility* that is altered shall comply with the applicable provisions in Chapter 11 of the *International 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 *International 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 *International Building Code* are not required to be provided in *existing buildings* and facilities undergoing a *change of occupancy* in conjunction with *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 *International 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.

[S] 305.8.4 Stairways and escalators in existing buildings. ((~~Where~~)) In *alterations*, *change of occupancy*, or *additions* 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 *International Building Code.*

305.8.5 Ramps. Where slopes steeper than allowed by Section 1012.2 of the *International 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	3 inches
Steeper than 1:12 but not steeper than 1:10	6 inches

For SI: 1 inch = 25.4 mm.

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 *International Building Code* for Accessible units apply only to the quantity of spaces being altered or added.

[S] 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 *International Building Code* for Type A units and Chapter 9 of the International Building Code for visible alarms apply only to the quantity of the spaces being altered or added.

[S] 305.8.8 Type B dwelling or sleeping units. Type B dwelling or sleeping units shall comply with the applicable requirements of Section 305.8.8.1.

Exception: When using the provisions of Chapter 9, Group I-1, I-2, R-2, or R-3 dwelling or sleeping units where the first *certificate of occupancy* was issued before March 15, 1991, are not required to provide Type B dwelling or sleeping units.

[S] 305.8.8.1 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, or R-3 ((~~or R-4~~)) dwelling or sleeping units are being added, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being added. Where Group I-1, I-2, R-1, R-2, or 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 *International 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.

[S] 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 *International 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. The number of toilet facilities and water closets required by the *International Building Code* is permitted to be reduced by one, in order to provide accessible features. At the inaccessible toilet and bathing rooms, provide 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 *International 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 *International 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 54 inches (1370 mm) 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 3/4 inch (19.1 mm). 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 *International Building Code.*

[S] 305.9 ((~~Historic buildings~~)) Accessibility provisions for landmark structures. These provisions shall apply to *facilities* designated as ((~~historic~~)) landmark structures that undergo *alterations* or a *change of occupancy*, 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~~)) *code official*, 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 *International Building Code* are not required to be provided in historic buildings.

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

[S] 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.

[S] 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 *International Building Code* shall be provided at the public entrance and the accessible entrance.

[S] 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 *International Building Code* shall be provided.

[S] SECTION 306
LANDMARKS

[B] 306.1 Landmarks. The provisions of this code relating to the construction, *repair*, *alteration*, *addition*, restoration and movement of structures, and *change of occupancy* shall be mandatory for landmarks. Landmarks shall comply with the accessibility requirements of Section 305.9.

Exception: Where *approved* by the *code official*, compliance with this code is not required where preservation of historic elements precludes complete compliance and a reasonable degree of safety to the public and the occupants of the building is provided.

[S] SECTION 307
SUBSTANTIAL ALTERATION REQUIREMENTS FOR ALL COMPLIANCE METHODS

[S] 307.1 Substantial alterations or repairs. Regardless of which compliance method is used, a building or structure to which *substantial alterations* or *repairs* are made shall conform with the requirements of this section and the following sections of the *International Building Code:*

1. Section 403 when applicable;

2. Special requirements for the Fire District found in Chapter 4 when applicable;
3. Section 717;
4. Chapter 8;
5. Section 903 and 905;
6. Sections 909.20.5, 909.20.6 and 909.21; and
7. Chapter 10.
8. Fire alarms shall be provided as required by the *International Fire Code.*

[S] 307.1.1 Definition. For the purpose of this section, *substantial alteration* or repair means any one of the following, as determined by the *code official*:

1. *Repair* of a building with a *damage ratio* of 60 percent or more.
2. Remodeling or an *addition* that substantially extends the useful physical or economic life of the building or a significant portion of the building, other than typical tenant remodeling.
3. A change of a significant portion of a building to an occupancy that is more hazardous than the existing occupancy, based on the combined life and fire risk as determined by the *code official.* The *code official* is permitted to use Table 307.1 as a guideline.
4. Reoccupancy of a building that has been substantially vacant for more than 24 months in occupancies other than Group R-3.
5. A significant increase in the occupant load of an unreinforced masonry building.

[S] 307.1.2 Seismic regulations. Buildings or structures to which *substantial alterations* or *repairs* are made shall comply with Section 303.4.2. In addition, the *code official* is authorized to require testing of existing materials when there is insufficient evidence of structural strength or integrity.

Exceptions:

1. If an *alteration* is substantial only because it is a change to a more hazardous occupancy, compliance with this subsection is required only if the life hazard risk increases, as determined by the *code official.*
2. For Group R-3 occupancies, when approved by the *code official*, the applicant is permitted to evaluate and strengthen portions of the building lateral support structure, such as foundations and cripple walls.
3. For permitted one- or two- family dwellings, less than four stories, that are *substantial alterations* due to a move into the SBC, the applicant is permitted to evaluate and strengthen portions of the building lateral support structure, such as foundations and cripple walls, subject to the approval of the *building official.*

[S] 307.1.3 Report. A proposal for structural rehabilitation shall be submitted based on a comprehensive report prepared by a licensed structural engineer according to rules promulgated by the *code official.* The report shall include an investigation and structural analysis of the building based on Section 303.4.2. The report shall specify the building's seismic deficiencies, and propose measures that will provide an acceptable degree of seismic safety considering the nature, size and scope of the project. This requirement shall also apply to Section 101.14 as conditions require.

[S] 307.1.4 Energy use regulations. An *alteration* or *repair* described in Items 1, 2, or 4 of Section 307.1.1 shall comply with Section C503.8 of the *International Energy Conservation Code.*

Exceptions:

1. Existing residential buildings of three stories or less are not required to comply with this section.
2. A project that is defined as a *substantial alteration* primarily due to the seismic retrofitting of a building's unreinforced masonry walls shall not be required to comply with this section.

[S] TABLE 307.1
RATING OF OCCUPANCIES BY DEGREE OF HAZARD

Occupancy	Description	Life	Fire	Combined Rating
A1	Assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures	4	3	12
A2	Assembly uses intended for food and/or drink consumption	4	3	12
A3	Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A	4	3	12
A4	Assembly uses intended for viewing of indoor sporting events and activities with spectator seating	3	1	3
A5	Assembly uses intended for participation in or viewing outdoor activities	3	1	3
B	Office, professional or service-type transactions, including storage of records and accounts.	2	1	2
B	Eating & drinking establishments with an occupant load of less than 50	2	1	2
B	Buildings or portions of buildings having rooms used for educational purposes beyond 12th grade	2	1	2
E	Any building used for educational purposes by six or more persons at any one time for educational purposes through the 12th grade	3	2	6
E	Day care centers for more than five children older than 2-1/2 years of age	3	2	6
I4	Facilities that provide accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services; facilities that provide supervision and personal care on less than a 24-hour basis for more than five children 2-1/2 years of age or less	4	3	12
F1	Moderate hazard factory and industrial	2	2	4
F2	Low-hazard factory and industrial	1	1	1
H1	Occupancies with a detonation hazard	5	4	20
H2	Occupancies which present a deflagration hazard or a hazard from accelerated burning	5	4	20
H3	Occupancies containing materials that readily support combustion or that pose a physical hazard	5	4	20
H4	Occupancies containing materials that are health hazards	5	4	20
H5	Semiconductor fabrication facilities	5	4	20
I1	Buildings, structures or portions thereof for more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care	3	3	9
I2	Buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation	4	3	12
I3	Buildings and structures that are inhabited by more than five persons who are under restraint or security	4	3	12
M	Buildings used for display and sale of merchandise	3	2	6
R1	Occupancies containing sleeping units where the occupants are primarily transient in nature	3	3	9
R2	Occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature	3	3	9
R3	Residential 3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, or I	2	1	2
S1	Moderate hazard storage	2	2	4
S2	Low-hazard storage	1	1	1
U	Buildings and structures of an accessory character and miscellaneous structures	1	1	1

[S] SECTION 308
REROOFING

[BS] 308.1 General. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 of the *International Building Code* and the *International Energy Conservation Code*.

Exceptions:

1. *Roof replacement* or roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 of the *International Building Code* for roofs that provide positive roof drainage.

2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1502 of the *International Building Code* for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1502 of the *International Building Code*.

[BS] 308.2 Structural and construction loads. ((~~Structural roof components shall be capable of supporting the roof covering system and the material and equipment loads that will be encountered during installation of the system.~~)) Where addition or replacement of roofing or replacement of equipment results in additional dead loads, structural components supporting the reroofing equipment shall comply with Section 303.1. **

[BS] 308.3 Roof replacement. *Roof replacement* shall include the removal of all existing layers of roof coverings down to the roof deck. **

Exception: Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 1507 of the *International Building Code*.

[BS] 308.3.1 Roof recover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:

1. The new roof covering is installed in accordance with the roof covering manufacturer's *approved* instructions.
2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, are installed.
3. Metal panel, metal shingle and concrete and clay tile roof coverings are installed over existing wood shake roofs in accordance with Section 308.4.
4. A new protective *roof coating* is applied over an existing protective *roof coating*, a metal roof panel, metal roof shingles, mineral-surfaced roll roofing, a built-up roof, modified bitumen roofing, thermoset and thermoplastic single-ply roofing or a spray polyurethane foam roofing system.

[BS] 308.3.1.1 Exceptions. A roof recover shall not be permitted where any of the following conditions occur:

1. The existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
2. The existing roof covering is slate, clay, cement or asbestos-cement tile.
3. The existing roof has two or more applications of any type of roof covering.

[BS] 308.4 Roof recovering. Where the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space, the entire existing surface shall be covered with gypsum board, mineral fiber, glass fiber or other *approved* materials securely fastened in place. **

[BS] 308.5 Reinstallation of materials. Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars and metal counterflashings shall not be reinstalled where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled. **

[BS] 308.6 Flashings. Flashings shall be reconstructed in accordance with *approved* manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation. **

[S] SECTION 309
MOVED STRUCTURES

309.1 Nonresidential buildings or structures. Nonresidential buildings or structures moved into or within the city shall comply with standards adopted by the *code official*. The *code official* is authorized to require an inspection of the building before or after moving. The permit holder shall correct all deficiencies identified by the inspection. The *code official* is authorized to require that a bond or cash deposit in an amount sufficient to abate or demolish the building be posted prior to issuance of a permit. See Section 106 of the *International Building Code* for information required on plans. Any moved building that is not in complete compliance with standards for moved buildings within 18 months from the date of permit issuance and is found to be a public nuisance may be abated. Moved buildings and structures shall also comply with the *International Energy Conservation Code*.

309.2 Residential buildings or structures. Residential buildings or structures moved into or within the city are not required to comply with all of the requirements of this code if the original occupancy classification of the building or structure is not changed. Compliance with all of the requirements of this chapter will be required if the moved residential buildings or structures undergo substantial alteration. Work performed on new and existing foundations shall comply with all of the requirements of this code for new construction.

[S] SECTION 310
FLOOD HAZARD AREAS

[BS] 310.1 Flood hazard areas. Buildings and structures in flood hazard areas established in Section 1612.3 of the *International Building Code* shall comply with Sections 310.1.1 through 310.1.3.

((~~In *flood hazard areas*, *alterations* that~~)) When any combination of *repairs*, *alterations*, or *additions* constitute *substantial improvement*, ((~~shall require that~~)) the *existing building* and all *repairs*, *alterations*, and *additions* shall comply with Section 1612 of the *International Building Code*. ((~~, or Section R322 of the *International Residential Code*, as applicable.~~))

310.1.1 Repairs. Any *repair* that constitutes *substantial improvement* of the existing structure or buildings that have been substantially damaged, as defined in Section 202, shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design according to Section 1612 of the *International Building Code*.

Any *repairs* that do not constitute *substantial improvement* or *repair* of *substantial damage* of the existing structure, as defined in Section 202, are not required to comply with the flood design requirements for new construction according to Section 1612 of the *International Building Code*.

Exception: For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the *International Building Code*.

310.1.2 Alterations. *Alterations* that constitute *substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design according to Section 1612 of the *International Building Code.*

Any alterations that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction according to Section 1612 of the *International Building Code.*

Exception: For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the International Building Code.

310.1.3 Additions. *Additions* shall comply with the flood design requirements for new construction according to Section 1612 of the *International Building Code.*

If the *addition* constitutes *substantial improvement*, the existing structure shall be brought into compliance with the requirements for new construction for flood design according to Section 1612 of the *International Building Code.*