

# CHAPTER 7

## ALTERATIONS—LEVEL 1

### User note:

**About this chapter:** Chapter 7 provides the technical requirements for those existing buildings that undergo Level 1 alterations as described in Section 603, which includes replacement or covering of existing materials, elements, equipment or fixtures using new materials for the same purpose. This chapter, similar to other chapters of this code, covers all building-related subjects, such as structural, mechanical, plumbing, electrical and accessibility as well as the fire and life safety issues when the alterations are classified as Level 1. The purpose of this chapter is to provide detailed requirements and provisions to identify the required improvements in the existing building elements, building spaces and building structural system. This chapter is distinguished from Chapters 8 and 9 by involving only replacement of building components with new components. In contrast, Level 2 alterations involve more space reconfiguration, and Level 3 alterations involve more extensive space reconfiguration, exceeding 50 percent of the building area.

### SECTION 701 GENERAL

[S] **701.1 Scope.** Level 1 alterations as described in Section 602 shall comply with the requirements of this chapter. ~~((Level 1 alterations to historic buildings shall comply with this chapter, except as modified in Chapter 12.))~~

**701.2 Conformance.** An existing building or portion thereof shall not be altered such that the building becomes less safe than its existing condition.

**Exception:** Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of the *International Building Code*.

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### SECTION 702 BUILDING ELEMENTS AND MATERIALS

**702.1 Interior finishes.** Newly installed interior wall and ceiling finishes shall comply with Chapter 8 of the *International Building Code*.

**702.2 Interior floor finish.** New interior floor finish, including new carpeting used as an interior floor finish material, shall comply with Section 804 of the *International Building Code*.

**702.3 Interior trim.** Newly installed interior trim materials shall comply with Section 806 of the *International Building Code*.

[S] **702.4 Window opening control devices on replacement windows.** In Group R-2 or R-3 buildings containing dwelling units, ~~((and one- and two-family dwellings and townhouses regulated by the *International Residential Code*))~~ window opening control devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1. The window is operable.
2. One of the following applies:
  - 2.1. The window replacement includes replacement of the sash and frame.
  - 2.2. The window replacement includes the sash only where the existing frame remains.

~~((3. One of the following applies:~~

3.1) **3.** In Group R-2 or R-3 buildings containing dwelling units, the bottom of the clear opening of the window opening is at a height less than 36 inches (915 mm) above the finished floor.

~~((3.2. In one- and two-family dwellings and townhouses regulated by the *International Residential Code*, the bottom of the clear opening of the window opening is at a height less than 24 inches (610 mm) above the finished floor.))~~

4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position.
5. The vertical distance from the bottom of the clear opening of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

**Exception:** Operable windows where the **bottom** of the **clear opening** of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F2006.

**[S] 702.5 Replacement window for emergency escape and rescue openings.** Where windows are required to provide *emergency escape and rescue openings* in Group R-2 and R-3 occupancies, ~~((and one- and two-family dwellings and townhouses regulated by the *International Residential Code*,))~~ replacement windows shall be exempt from the requirements of Section 1031.3 of the *International Building Code*, ~~((and Section R310.2 of the *International Residential Code*,))~~ provided that the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening.
2. Where the replacement window is part of a *change of occupancy* it shall comply with Section 1011.5.6.

**702.5.1 Control devices.** Window opening control devices or fall prevention devices complying with ASTM F2090 shall be permitted for use on windows required to provide *emergency escape and rescue openings*. After operation to release the control device allowing the window to fully open, the control device shall not reduce the net clear opening area of the window unit. *Emergency escape and rescue openings* shall be operational from the inside of the room without the use of keys or tools.

**702.6 Bars, grilles, covers or screens.** Bars, grilles, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosure or window wells that serve such openings, provided all of the following conditions are met:

1. The minimum net clear opening size complies with the code that was in effect at the time of construction.
2. Such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.
3. Where such devices are installed, they shall not reduce the net clear opening of the emergency escape and rescue openings.
4. Smoke alarms shall be installed in accordance with Section 907.2.11 of the *International Building Code*.

**[W][S] 702.7 Materials and methods.** New work shall comply with the materials and methods requirements in the *International Building Code*, ~~((*International*))~~ *Seattle Energy* ~~((*Conservation*))~~ *Code*, *International Mechanical Code* and ~~((*International*))~~ *Uniform Plumbing Code*, as applicable, that specify material standards, detail of installation and connection, joints, penetrations and continuity of any element, component or system in the building.

**[FG] 702.7.1 International Fuel Gas Code.** The following sections of the *International Fuel Gas Code* shall constitute the fuel gas materials and methods requirements for Level 1 alterations.

1. Chapter 3, entitled "General Regulations," except Sections 303.7 and 306.
2. Chapter 4, entitled "Gas Piping Installations," except Sections 401.8 and 402.3.
  - 2.1. Sections 401.8 and 402.3 shall apply where the work being performed increases the load on the system such that the existing pipe does not meet the size required by code. Existing systems that are modified shall not require resizing as long as the load on the system is not increased and the system length is not increased even if the altered system does not meet code minimums.
3. Chapter 5, entitled "Chimneys and Vents."
4. Chapter 6, entitled "Specific Appliances."

## SECTION 703 FIRE PROTECTION

**703.1 General.** Alterations shall be done in a manner that maintains the level of fire protection provided.

## SECTION 704 MEANS OF EGRESS

**704.1 General.** Alterations shall be done in a manner that maintains the level of protection provided for the means of egress.

**704.1.1 Projections in nursing home corridors.** In Group I-2, Condition 1 occupancies, where the corridor is at least 96 inches (2438 mm) wide, projections into the corridor width are permitted in accordance with Section 407.4.3 of the *International Building Code*.

**704.2 Casework.** Addition, alteration or reconfiguration of nonfixed and movable cases, counters and partitions not over 5 feet 9 inches (1753 mm) in height shall maintain the required means of egress path.

**704.3 Locking arrangements in educational occupancies.** In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors with locking arrangements designed to keep intruders from entering the room shall comply with Section 1010.2.8 of the *International Building Code*.

**[S] ((SECTION 706  
STRUCTURAL**

~~[BS] 706.1 General.~~ Where *alteration* work includes replacement of equipment that is supported by the building or where a reroofing permit is required, the provisions of this section shall apply.

~~[BS] 706.2 Addition or 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* 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* 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<sup>2</sup>) or less over an existing single layer of roof covering.

~~[BS] 706.3 Additional requirements for reroof permits.~~ The requirements of this section shall apply to *alteration* work requiring reroof permits.

~~[BS] 706.3.1 Bracing for unreinforced masonry bearing wall parapets.~~ Where a permit is issued for reroofing for more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall include installation of parapet bracing unless an evaluation demonstrates compliance of such items. Reduced seismic forces shall be permitted.

~~[BS] 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,  $V_{ult}$ , determined in accordance with Figure 1609.3(1) of the *International Building Code*, is greater than 130 mph (58 m/s), roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *International Building Code*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *International Building Code*.

**Exception:** Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7-88 or later editions.)

**[S] SECTION ((707)) 705  
ELECTRICAL**

~~[S] ((707.1)) 705.1 Health care facilities.~~ In Group I-2 facilities, ambulatory care facilities and outpatient clinics, any altered portion of an existing electrical systems shall be required to meet installation and equipment requirements in the *Seattle Electrical Code* and NFPA 99 for medical gas systems.

**[S] ((SECTION 708  
ENERGY CONSERVATION**

~~708.1 Minimum requirements.~~ Level 1 *alterations* to existing buildings or structures do not require the entire building or structure to comply with the energy requirements of the *International Energy Conservation Code* or *International Residential Code*. The *alterations* shall conform to the energy requirements of the *International Energy Conservation Code* or *International Residential Code* as they relate to new construction only.)

