



# CLARK COUNTY FIRE DEPARTMENT

## Fire Prevention Bureau

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**Code Sections: Chapter 46**

**Control Number: A.0**

**Effective Date: 12/15/11**

**TITLE: NEW WORK IN EXISTING BUILDINGS**

**SCOPE:** Clark County Fire Department requirements for application of current code requirements to new construction in an existing building without a building addition. Additions to buildings are outside the scope of this document.

**PURPOSE:** To standardize application of code requirements for new work in existing buildings in accordance with the Clark County Fire Code. In particular, the purpose of this document is to define when upgrade to fire protection systems or other fire safety features must be implemented.

**DEFINITIONS:**

**Addition:** Extension or increase in floor area or height of a building or structure.

**Alteration:** Any construction or renovation to an existing structure other than repair or addition.

**International Building Code, 2009 edition (IBC):** Document promulgated by the International Code Council, as amended and adopted by the Department of Development Services, that sets forth code requirements that apply to, amongst other items, new work in existing buildings, covering a range of topics such as structural, egress, and fire-resistance requirements.

**International Fire Code, 2009 edition (IFC):** Document promulgated by the International Code Council, as amended and adopted by the Fire Department, that sets forth code requirements that apply to, amongst other things, new work in existing buildings, covering a range of topics such as fire protection system design and operational use permits.

**International Existing Building Code, 2009 edition (IEBC):** Document promulgated by the International Code Council that sets forth code requirements that apply to new work in existing buildings.

**Level 1 Alteration:** Term as used in the IEBC, includes the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose. Minor

additions or renovations to building service systems, such as electrical, plumbing, and HVAC systems, are included. See Appendix A for representative examples of Level 1 alterations.

**Level 2 Alteration:** Term as used in the IEBC, includes the reconfiguration of space. Where the work area of a Level 2 alteration exceeds 50% of the aggregate area of the building, the alteration shall be considered a Level 3 alteration. See Appendix B for representative samples of Level 2 alterations.

**Level 3 Alteration:** Term as used in the IEBC, includes alterations where the work area exceeds 50% of the aggregate area of the building. Level 3 alterations are comprised solely of Level 2 alterations with work area that exceeds 50% of the aggregate building area. Level 1 alterations with work areas that exceed 50% of the aggregate building area are not included in Level 3 alterations.

**Repair:** Reconstruction or renewal of any part of an existing building for the purpose of its maintenance. Repair does not include any reconfiguration of walls, ceilings, doors or windows, and does not include the expansion of existing systems or the installation of new equipment for new purposes

**Work Area:** Includes that portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by the code.

## **PROCEDURE:**

### **General**

In accordance with Section 3404.1 of the IBC, all alterations shall be conducted in accordance with current adopted codes.

Fire protection systems not within the work area or not affected by the scope of work shall be maintained in accordance with the codes in effect at the time of construction. Such systems shall be maintained in accordance with Section 901.6 of the IFC. Existing buildings shall also comply with Chapter 46 of the IFC. Existing non-compliant conditions found during alterations shall be corrected so that existing fire protection systems meet the code in effect at time of construction.

Where work conducted in an existing building causes a fire protection system to be deficient or out of compliance, such fire protection systems shall be modified in accordance with current adopted codes, to correct the deficient or non-compliant issue.

## **LEVEL 1 ALTERATION**

Regardless of the size of area included within the Level 1 alteration, upgrade of fire protection systems to meet current code is not required within the work area.

In general, Level 1 alterations are limited to changes in finishes; minor building service changes, including electrical, plumbing, and HVAC work; and minor construction that does not change the configuration of walls, ceilings and floors.

Where fire protection systems have to be temporarily removed, such as the case with removing fire alarm devices when applying new wall finishes, the original devices shall be permitted to be reconnected to the system at their original device locations or relocated within the same coverage area. Fire Department permitting and subsequent testing will be required to verify system integrity. Where fire protection systems have to be modified by adding fire protection devices, the new device(s) shall be in accordance with current code requirements, and Fire Department permitting and subsequent testing will be required for the new devices.

Examples of Level 1 alterations are provided in Appendix A.

**ANY SCOPE OF WORK THAT CAN BE CLEARLY DESCRIBED BY ONE OF THE LEVEL 1 SCENARIOS SHALL BE CONSIDERED A LEVEL 1 ALTERATION.**

## **LEVEL 2 ALTERATION**

In general, Level 2 alterations include construction that changes the configuration of rooms, including walls, ceilings and floors. In addition, Level 2 alterations include work to accommodate a change in occupancy or tenancy of a space.

Where a Level 2 alteration occurs, all fire protection systems within the work area shall be in compliance with the current adopted code, as required by the fire code official. Where the area of the Level 2 alteration is less than 50% of the space, then only the fire protection systems in the affected area are required to be in compliance with current code. Where the area of the Level 2 alteration is greater than 50% of the space, then the fire protection systems throughout the space are required to be in compliance with current code.

Where a Fire Protection Report is prepared for a scope of work that utilizes the allowance for less than 50% of the area, such report shall address the scope of work, identify whether the scope of work is less than 50%, and be submitted and reviewed by the Fire Department. The scope of work description shall detail upgrades for fire protection, including, but not limited to, tenant control valve, standpipe hose connection, fire sprinkler installation, fire alarm installation, and other fire protection upgrade details.

Examples of Level 2 alterations are provided in Appendix B.

### **LEVEL 3 ALTERATION**

Where work involves a Level 3 alteration, 100% of the building shall have fire protection systems upgraded to meet current code requirements, as required by the fire code official.

## Appendix A – Level 1 Alterations

- Alterations permitted to forego fire protection system upgrade in compliance with Section 3412 of the IBC as adopted by Clark County.
- Anything not requiring a building (all disciplines) permit.
- A new wall opening for convenience between two unchanged rooms.
- Replacement of mechanical, plumbing and electrical fixtures with like or similar products.
- Replacement of existing doors and windows with similar ones.
- Work dedicated to the installation of new electrical, plumbing and/or mechanical fixtures or equipment.
- The upgrading of a single fire protection system would not automatically trigger an upgrade of other fire protection systems.
- Patching or restoration or replacement of damaged materials, elements, equipment or fixtures for the purposes of maintaining such components in good or sound condition with respect to existing loads or performance requirements.
- **Full Refreshment of Hotel Rooms – Full Tower.** All rooms in the tower will be refreshed to include wall finishes (paint, paper, etc.), floor covering (carpet, tile, wood, etc), ceiling finish, bathroom fixtures, lighting fixtures, cabinetry and furniture. Tub, shower, sinks, and vanity locations within the bathroom may be relocated. Wet bars locations may be relocated within the original footprint of the guest room. New doors of differing dimension may be installed within the original footprint of the guest room such as to bathroom or closet. The scope of work may include re-positioning partition walls within the original footprint of the guest room. Reconfiguration of space within the original footprint of the guest room may be constructed. The dimension of the bathroom within the original guest room floor plan may be increased or decreased. This refreshment work may exceed 50% and up to 100% of the aggregate area of the tower or building. Because all of the work is aesthetic improvement only and no change to the original guest room overall footprint takes place, no upgrade of the life safety devices is required.

## Appendix B – Level 2 Alterations

- Work that involves the relocation of perimeter walls of the work space.
- Renovations to existing spaces that include a change of use or occupancy,
- Installation of new ceilings or modifications to ceilings. Level 2 compliance will apply to fire protection systems affected by the ceiling, such as fire sprinkler and fire alarm devices and notification appliances.
- An alteration to a leased tenant space of separate tenancy than the base building.
- Permitted change in a tenant space in a covered mall building.