# Part 9 ALTERATION, ADDITION TO AND CHANGE OF USE OF EXISTING BUILDINGS

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# Applicability and Implementation

#### 1.1 GENERAL

The provisions of this part are intended to maintain or increase the current degree of public safety as well as health and general welfare in existing buildings while permitting alteration, addition to or change of use.

#### 1.2 APPLICABILITY

#### 1.2.1 General

The provisions of this part shall apply to existing buildings that will continue to be or are proposed to be in occupancy groups A, B, C, D, E, F, G and H. The provisions shall not apply to buildings of historical or architectural value identified and classified by designated authorities. For such buildings, the provisions of Sec 1.5 of Part 1 and Sec 1.16 of Part 3 shall be applicable.

#### 1.2.2 Change in Use

No change in use of an existing building shall be allowed if the proposed use is not in conformity with the land use pattern and within the permitted occupancy classes as may be determined by the city or area development authorities having jurisdiction.

Where an existing building is changed to a new use group classification, the provisions for new use group in this Code shall be used to determine compliance.

#### 1.2.3 Part Change in Use

Where a portion of the building is changed to a new use group classification, and that portion is separated from the remainder of the building with fire separation assemblies having a fire resistance rating as required by Table 3.2.1 of Part 3 for the separate uses, the portion changed shall be made to conform to the provisions of this Code.

Where a portion of the building is changed to a new use group classification, and that portion is not separated from the remainder of the building with fire separation assemblies having a fire resistance rating as required by Table 3.2.1 for the separate uses, the provisions of this Code which apply to each use shall apply to the entire building. Where there are conflicting provisions, those requirements which secure the greater public safety shall apply to the entire building or structure.

1.2.4

Additions to existing buildings shall comply with all of the requirements of this Code for new constructions. The combined height and area of the existing building and the new addition shall not exceed the height and open space requirements for new building specified in Part 3 of this Code. Where a fire wall that complies with Table 3.3.1 of Part 3 is provided between the addition and the existing building, the addition shall be considered as a separate building.

1.2.5

An existing building or portion thereof which does not comply with the requirements of this Code for new construction shall not be altered in such a manner that results in the building being less safe or sanitary than such building is at present. If, in the alteration the present level of safety or sanitation is to be reduced, the portion altered shall conform to the requirements of this Code.

- 1.3 **IMPLEMENTATION**
- 1.3.1 Investigation and Evaluation

For the proposed works relating to alteration, addition to and change of use, the owner of the building shall cause the existing building to be investigated and evaluated by competent professionals in accordance with the provisions of this Code.

1.3.2 Structural Analysis

The owner shall have a structural analysis of the existing building carried out to determine the adequacy of all structural systems for the proposed alteration, addition or change of use. The existing building together with the addition or alteration shall be capable of supporting the minimum load requirements specified in

1.3.3

**Submittal**The results of the investigation and evaluation as required in Sec 1.3.1 and 1.3.2 above along with all proposed compliance alternatives, shall be submitted to the Building Official.

1.3.4

**Determination of Compliance**The Building Official shall examine all relevant documents and determine whether the existing building, with the proposed additions, alterations or change of use, complies with the provisions specified in this Code for the occupancy classification and type of construction.

# **Evaluation and Compliance**

#### 2.1 **EVALUATION**

The evaluation of the existing building with the proposed additions, alterations or change of use, shall take into consideration the planning requirements as well as those relating to public safety.

#### 2.1.1

Planning Requirements
The Building Official shall determine if any of the provisions of this Code are violated by the proposed

The general requirements for buildings in various occupancy classes and types of construction are specified in Part 3 and Part 8 of this Code. These include:

- Land use classification and permitted uses (Sec 1.4; Part 3);
- Requirement of plots (Sec 1.5 Part 3);
- Means of access (Sec 1.6, Part 3); and staircase (Sec 1.12, Part 3);
- d) Open spaces within a plot; minimum separation of buildings in the same plot; road front, side and rear open spaces (Sec 1.7, Part 3);
- General height and area limitations (Sec 1.8, Part 3);
- Off street parking spaces (Sec 1.9, Part 3);
- Street encroachment (Sec 1.10, Part 3);
- Community open space and amenities for various types of buildings (Sec 1.11, Part 3);
- Ventilation requirements (natural: Sec 1.17, Part 3; artificial: Chapter 3, Part 8); i)
- Lighting and illumination requirements (Chapter 1, Part 8);

- k) Sanitation requirements (Chapters 6 and 7, Part 8);
- 1) Minimum dimension of habitable and non-habitable parts of buildings (Sec 1.12, Part 3).

The existing building with the proposed alteration or addition shall conform to the requirements of new buildings in the proposed occupancy classification. The proposed alteration or addition shall not make the building less sanitary than is at present.

2.1.2 Safety Requirements

Additions or alterations to an existing building or structure is not to be made if such additions or alterations cause the building or structure to be unsafe or more hazardous based on fire safety and life safety.

The fire safety requirements shall take into consideration the structural fire resistance, smoke and fire detection, fire protective signalling and fire suppression system features of the facility and satisfy the requirements of buildings in the relevant occupancy classification as set forth in this Code.

The fire resistance ratings of building elements for various types of construction shall satisfy the requirements specified in Chapter 3 of Part 3 of this Code. The construction requirements of various elements for Types 1, 2 and 3 fire resistive buildings shall be satisfied.

The fire resistance of the wall used for compartmentation of a building shall not be less than that specified in Sec 2.4, Part 3 of this Code. Duct penetrations of this wall shall not be permitted. Ferrous or copper piping and conduit shall be allowed to penetrate or pass through the wall if the openings around such piping and conduit are sealed with impervious noncombustible materials sufficiently tight to prevent transfer of smoke or combustible gases from one side of the wall to the other side and are so maintained. The fire door between compartments serving as horizontal exit shall be so installed, fitted and provided with gaskets that such fire door will provide a substantial barrier to the passage of smoke. The floor/ceiling shall be of such construction that the fire resistive integrity between storeys is maintained.

The smoke detection capability within the facility based on the location and operation of automatic fire detectors shall be evaluated with respect to the requirements of Chapter 3 and 4 of Part 4 for the various occupancies in this Code. Where a fire protective alarm and signalling system is provided, the capability of the system shall also be evaluated (Sec 3.3 and 4.1, Part 4). The ability of the natural or mechanical venting, exhaust or pressurization system to control the movement of smoke from a fire shall be evaluated.

The shaft and exit enclosures shall satisfy the requirements specified in Chapter 3, Part 4 of this Code.

The configuration, characteristics and support features for means of egress in the facility including the capacity of and the number of exit routes available to the building occupants shall be evaluated and the adequacy of the means of egress routes leading to a safe area shall be examined. The length of the exit access travel path in which building occupants are confined to a single path of travel shall be evaluated. Similarly the length of exit access travel to an approved exit shall be evaluated with respect to exit requirements for various occupancies as detailed in Part 4 of this Code.

The efficiency and effectiveness of the elevator equipment and controls that are available to the fire department to rescue building occupants from upper floors during a fire when such an equipment is installed, shall be evaluated.

The presence of and reliability of means of egress emergency lighting system shall also be evaluated.

The ability to suppress fire based on the installation of automatic sprinkler and stand pipe systems shall be evaluated (Chapters 4 and 5, Part 4).

The lightning protection of the building shall satisfy the requirements specified in Chapter 2 of Part 8.

2.1.3 Egress Requirements

Addition to or alteration or change of use of a building shall not be permitted if such addition or alteration or change of use causes violation of the egress requirements specified in Chapter 3, Part 4. Permission shall not be granted for any such work that will obstruct or block or hamper the existing means of egress of the building or any other building unless an equivalent and adequate means of egress is provided.

2.1.4 Structural Requirements

Addition to, alteration or change of use of an existing building or structure shall not be permitted if they cause an overloading of the structural elements including the foundation.

#### 2.2 COMPLIANCE

When an evaluation is carried out as described above and the existing building with the proposed alteration, addition and/or change of use satisfy the requirements specified for the relevant occupancy classification, the results of the evaluation shall be accepted by the Building Official.