



## **PART** **2**

# **General Safety Provisions**

## **Chapters 3 and 4**

- **Chapter 3** General Requirements
- **Chapter 4** Emergency Planning and Preparedness

**A** basic requirement of the *International Fire Code* (IFC) is to prevent the ignition of materials inside and outside buildings. Controlling fuels and ignition sources limits the potential for fire. Chapter 3 contains requirements for combustible waste materials, control or elimination of ignition sources, open flames and recreational fires, and the use of smoking materials. Certain equipment can also be a source of ignition, and Chapter 3 addresses the proper operation of asphalt kettles and powered industrial trucks. In occupancies such as assembly uses of covered malls, controls are specified for certain hazardous materials or displays of vehicles. Chapter 3 also contains requirements for the protection from vehicle impact to prevent the release of compressed gas, flammable liquid or hazardous materials.

Chapter 4 requires that evacuation plans be prepared, that a hazardous materials communication program be established, and that employees be trained to identify fire hazards and safely evacuate building occupants. ■

### **312.3**

**Vehicle Impact Protection**

### **315.6, 605.12**

**Storage and Abandoned Wiring in Plenums**

### **403**

**Emergency Preparedness Requirements**

**CHANGE TYPE:** Addition

**CHANGE SUMMARY:** This change authorizes the code official to approve barriers other than posts.

**2015 CODE:**

### SECTION 312 VEHICLE IMPACT PROTECTION

**312.1 General.** Vehicle impact protection required by this code shall be provided by posts that comply with Section 312.2 or by other approved physical barriers that comply with Section 312.3.

**312.2 Posts.** Guard posts shall comply with all of the following requirements:

1. Constructed of steel not less than 4 inches (102 mm) in diameter and concrete filled.
2. Spaced not more than 4 feet (1219 mm) between posts on center.
3. Set not less than 3 feet (914 mm) deep in a concrete footing of not less than a 15-inch (381 mm) diameter.
4. Set with the top of the posts not less than 3 feet (914 mm) above ground.
5. Located not less than 3 feet (914 mm) from the protected object.

**312.3 Other Barriers.** ~~Physical barriers shall be a minimum of 36 inches (914 mm) in height and shall resist a force of 12,000 pounds (53 375 N) applied 36 inches (914 mm) above the adjacent ground surface. Barriers other than posts specified in Section 312.2 that are designed to resist, deflect or visually deter vehicular impact commensurate with an anticipated impact scenario shall be permitted where approved.~~

**CHANGE SIGNIFICANCE:** The 2012 language in Section 312.3 is a carryover from the merger of the three legacy codes. This section was originally from the *BOCA National Fire Prevention Code*. The initial intent of the code was to provide prescriptive design criteria in Section 312.2 and performance-based criteria in Section 312.3, but it did not provide for a true performance-based alternative since it addressed a force, but not an impact velocity (i.e., a 12,000-pound vehicle traveling at 10 mph).

The change for the 2015 IFC provides a true performance-based option. The code official now has the ability to approve a barrier based on its ability to resist, deflect or visually deter vehicular impact.

## 312.3

### Vehicle Impact Protection



Alternative vehicle impact protection



## 315.6, 605.12

### Storage and Abandoned Wiring in Plenums

**CHANGE TYPE:** Addition

**CHANGE SUMMARY:** This change prohibits storage in air-handling plenums. Abandoned material and wiring cables must be removed from plenums.

**2015 CODE: 315.6 Storage in Plenums.** Storage shall not be permitted in plenums. Abandoned material in plenums shall be deemed to be storage and shall be removed. Where located in plenums, the accessible portion of abandoned cables in plenums that are not identified for future use with a tag shall be deemed storage and shall be removed.

**605.12 Abandoned Wiring in Plenums.** Accessible portions of abandoned cables in air-handling plenums shall be removed. Cables that are unused and have not been tagged for future use shall be considered abandoned.

#### SECTION 202 GENERAL DEFINITIONS

**Plenum.** An enclosed portion of the building structure, other than an occupiable space being conditioned, that is designed to allow air movement, and thereby serve as part of an air distribution system.

**CHANGE SIGNIFICANCE:** Common sense dictates that plenums are not suitable for storage. However, until this section of code was added, there was no specific prohibition against storage in plenums in the IFC. Storage



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Abandoned wiring material in plenum

in plenums adds fuel load to an area that may not be sprinklered, can cause a ceiling to collapse under a fire condition and adds additional risk to firefighters as this storage represents an unknown threat.

This new section is intended to introduce a concept that has been in the NFPA 70 *National Electrical Code*<sup>®</sup> (as well as in NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems) for a long time: plenums are intended for a specific use as stated in the definition. That is, they are to be a part of the air distribution system so as to allow air movement. Plenums are also used (legitimately) for stringing communications and data cables as well as pipes and sprinkler pipes and other similar products. However, it is a common construction practice not to make the effort to remove wiring and cables when they become obsolete.

The proposal requires only the “accessible portions” of abandoned cables be removed, because there is no intent to cause potential damage to the building or facility by attempting to remove cables or circuits that are strung through walls, floors or other building elements. Conversely, unused cables that are tagged for future use are allowed to remain.

# 403

## Emergency Preparedness Requirements

**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** This section has been extensively revised and the content updated for consistency. To assist the fire code official, many portions of this chapter have been relocated in an attempt to consolidate into one section all of the requirements for emergency preparedness.

**2015 CODE:**

### **SECTION 403 408 USE AND OCCUPANCY-RELATED EMERGENCY PREPAREDNESS REQUIREMENTS**

**403.1 408.1 General.** In addition to the other requirements of this chapter, the provisions of this section are applicable to specific occupancies listed herein. In addition to the requirements of Section 401, occupancies, uses and outdoor locations shall comply with the emergency preparedness requirements set forth in Sections 403.2 through 403.12.3.3. Where a fire safety and evacuation plan is required by Sections 403.2 through 403.11.4, evacuation drills shall be in accordance with Section 405 and employee training shall be in accordance with Section 406.

**403.2 408.2 Group A Occupancies.** An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group A occupancies, other than those occupancies used exclusively for purposes of religious worship with an occupant load less than 2,000, and for buildings containing both a Group A occupancy and an atrium. Group A occupancies shall comply with the requirements of Sections 403.2.1 through 403.2.4 408.2.1 and 408.2.2 and Sections 401 through 406.

**403.2.1 408.2.1 Seating Plan.** In addition to the requirements of Section 404.2, the fire safety and evacuation plans for assembly occupancies shall include the information required by Section 404.3 and a detailed seating plan, occupant load and occupant load limit. Deviations from the approved plans shall be allowed provided the occupant load limit for the occupancy is not exceeded and the aisles and exit accessways remain unobstructed.

**403.2.2 408.2.2 Announcements.** In theaters, motion picture theaters, auditoriums and similar assembly occupancies in Group A used for noncontinuous programs, an audible announcement shall be made not more than 10 minutes prior to the start of each program to notify the occupants of the location of the exits to be used in the event of a fire or other emergency.

**Exception:** In motion picture theaters, the announcement is allowed to be projected upon the screen in a manner approved by the fire code official.

**403.2.3 Fire Watch Personnel.** Fire watch personnel shall be provided where required by Section 403.12.1.

# FIRE SAFETY & EVACUATION PLANNING FOR BUSINESSES AND COVERED MALL BUILDINGS

April 2012

**COLORADO SPRINGS FIRE DEPARTMENT**  
Division of the Fire Marshal



If you have any questions or comments regarding the information contained within, or if you need assistance interpreting these requirements, please contact:

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Emergency preparedness, fire safety and evacuation plan

**403.2.4 Crowd Managers.** Crowd managers shall be provided where required by Section 403.12.3.

**403.3 Ambulatory Care Facilities.** Ambulatory care facilities shall comply with the requirements of Sections 403.3.1 through 403.3.3 as well as 401 and 404 through 406.

**403.3.1 Fire Evacuation Plan.** The fire safety and evacuation plan required by Section 404 shall include a description of special staff actions. This shall include procedures for stabilizing patients in a defend-in-place response, staged evacuation, or full evacuation in conjunction with the entire building if part of a multitenant facility.

403 continues

403 continued

**403.3.2 Fire Safety Plan.** A copy of the plan shall be maintained at the facility at all times. Plan shall include all of the following in addition to the requirements of Section 404:

1. Locations of patients who are rendered incapable of self-preservation.
2. Maximum number of patients rendered incapable of self-preservation.
3. Area and extent of each ambulatory care facility.
4. Location of adjacent smoke compartments or refuge areas, where required.
5. Path of travel to adjacent smoke compartments.
6. Location of any special locking, delayed egress or access control arrangements.

**403.3.3 Staff Training.** Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Records of instruction shall be maintained. Such instruction shall be reviewed by the staff not less than every two months. A copy of the plan shall be readily available at all times within the facility.

**403.3.4 Emergency Evacuation Drills.** Emergency evacuation drills shall comply with Section 405. Emergency evacuation drills shall be conducted not less than four times per year.

**Exceptions:** The movement of patients to safe areas or to the exterior of the building is not required.

**403.4 Group B Occupancies.** An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group B occupancy where the Group B occupancy has an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge and for buildings having an ambulatory care facility.

**403.5 Group E Occupancies.** An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. Group E occupancies shall also comply with Sections 403.5.1 through 403.5.3.

**403.5.1 408.3.1 First Emergency Evacuation Drill.** The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

~~**408.3.2 Emergency Evacuation Drill Deferral.** In severe climates, the fire code official shall have the authority to modify the emergency evacuation drill frequency specified in Section 405.2.~~

**403.5.2 408.3.3 Time of Day.** Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic