



People Helping People Build a Safer World™

Update on the 2012 *International Fire Code* and 2012 *International Building Code*

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Chapter

What Will We Cover?

- This 1-hour seminar is an update on the significant changes to the 2012 *IFC* and 2012 *IBC*.
- A complete analysis can be found in the ICC publications for Significant Changes to the *IFC*, *IBC*, *IRC* and *PMG* codes.

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Margin Markings

- **Solid vertical lines** in the margins within the body of the code indicate a technical change to the requirements in the 2012 edition.
- **Deletion indicators in the form of an arrow** are provided in the margin where an entire section, paragraph, exception or table has been deleted or an item in a list of items or a table has been deleted.
- * ▫ **A single asterisk** [*] placed in the margin indicates that text or a table has been relocated within the code.
- ** ▫ **A double asterisk** [**] placed in the margin indicates that the text or table immediately following it has been relocated there from elsewhere in the code.

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Organization of the 2012 IFC

- The 2012 IFC was reorganized into seven parts.
- This new organization allows for flexibility when regulations for new technologies arise.
- The reorganization also aligns the IFC to certain IBC chapters.



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Organization of the 2012 IFC

- The IFC organization is:
 - Part 1 - Administration & Definitions (Chapters 1 & 2)
 - Part 2 - General Safety Provisions (Chapters 3 & 4)
 - Part 3 – Building & Equipment Design Features (Chapters 5-11)
 - Part 4 – Special Occupancies & Operations (Chapters 20 – 49)
 - Part 5 – Hazardous Materials (Chapters 50 – 79)
 - Part 6 – Adopted Standards (Chapter 80)
 - Part 7 – Appendices (Appendices A – J)

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Section 202: Group B, E, I and R Care Occupancies

- Requirements for the various types of medical or occupant care and their occupancy classifications are now based on defined terms, the number of persons, and whether persons are capable of self-preservation.



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Section 202: Care Occupancies

- Requirements for occupancy classification are based on:
 - The number and age of the occupants or patients
 - The type of care provided
 - The duration of care
 - Are the occupants capable of self-preservation?



Care Categories By Type

TABLE 202-A Care Categories by Type

Care Category	Are Occupants Capable of Self-Preservation?
Ambulatory Care	No; the person cannot respond as an individual to an emergency situation.
Custodial	Yes, but at a slower rate of egress and the occupants may have mental illnesses.
Detoxification	No; individuals may cause injury to themselves or others and may be either medicated or secured with limited or no ability to egress.
Personal Care Service	Yes
Medical	Depends on the disease, injury, or illness and whether the patient is rendered incapable of self-preservation.
Incapable of Self-Preservation	No; the person cannot respond as an individual to an emergency situation.

Care Occupancy Classification Criteria

TABLE 202-B Care Occupancy Classification Criteria

Occupancy & Function	Number of Persons & Age	Type of Care	Duration of Care
Group B Ambulatory Care Facility	4 or more persons; Age is not relevant	Incapable of Self Preservation	Less than 24 hours
Group E Day Care Facility	More than 5; Over 2½ years	Personal Care Services	Less than 24 hours
Group E Day Care Facility	More than 5 but not more than 100; Less than 2½ years	Custodial	Less than 24 hours
Group I-1	More than 16; Age is not relevant	Custodial	24 hours
Group I-2	More than 5; Age is not relevant	Medical or Detoxification; Incapable of Self Preservation	24 hours
Group I-4 Day Care Facility	More than 5; Age is not relevant	Custodial	Less than 24 hours
Group R-3	5 or less; Age is not relevant	Not relevant	Not relevant
Group R-4	More than 5 but not more than 16; Age is not relevant	Custodial	24 hour

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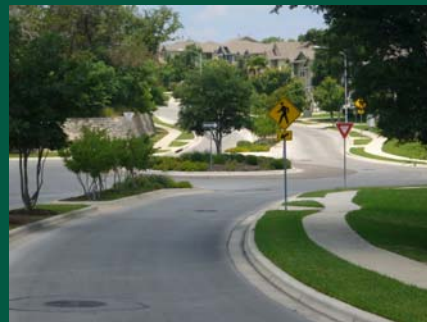
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Section 503.4.1: Traffic Calming Devices

- Traffic calming devices are prohibited in the 2012 IFC unless they are approved by the fire code official.
- Traffic calming devices are defined in Section 202.



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Section 503.4.1: Traffic Calming Devices

- In many jurisdictions approval of traffic calming devices are not regulated by the fire code official.
- This provision authorizes the fire code official to limit the installation of these devices.



Section 604.5: Emergency Lighting Equipment

- Section 604.5 sets forth new requirements for activation and power reliability testing of emergency illumination for means of egress.
- Section 604.5 also requires documentation of test results.





Section 901.4.6: Pump and Riser Room Size

- Rooms housing a fire pump, sprinkler risers, or both, must be adequately sized to facilitate their installation, repair or replacement.



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Section 901.4.6: Pump and Riser Room Size

- The area of the room must provide for the removal of the largest fire protection component without the removing a door or element of permanent construction.



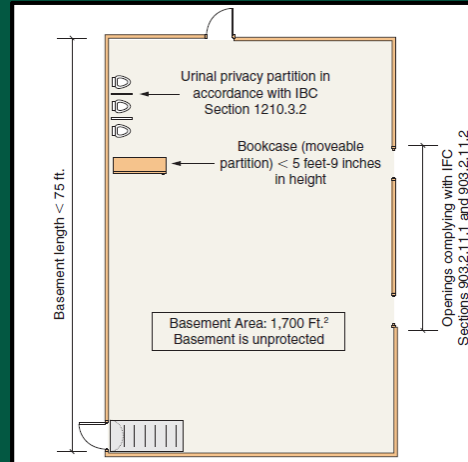
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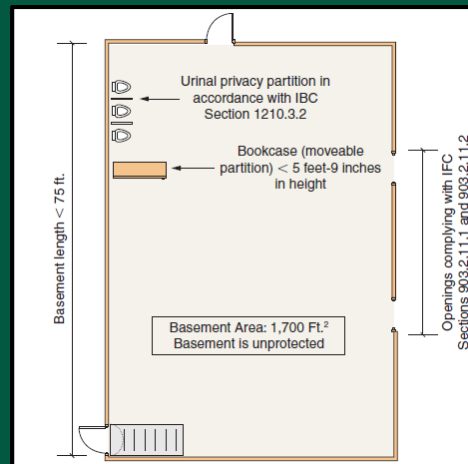
Section 903.2.11.1.3: Basements

- Section 903.2.11.1.3 was revised by now requiring automatic sprinkler protection in basements when wall, partitions or other obstructions that restrict application of fire streams are introduced.



Section 903.2.11.1.3: Basements

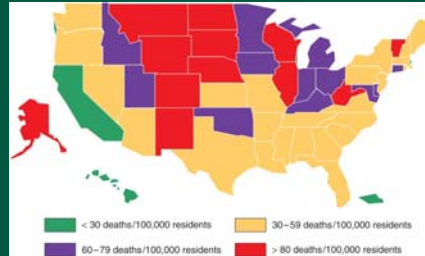
- IBC Section 105.12 item 13 exempts partitions < 5 feet, 9 inches in height from a building permit.
- Introducing book cases or any other fixture into a basement that could be considered a fire stream obstruction will require the code official to decide if sprinkler protection is required.





908.7: Carbon Monoxide Alarms

- A broader 1991 JAMA paper that was limited to CO poisonings in dwellings found a steady decline from 1513 deaths in 1979 to 878 deaths in 1988.



Section 908.7: Carbon Monoxide Alarms

- Single station CO alarms must be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720, *Standard for the Installation of Household CO Warning Equipment*.
- Open and enclosed parking garages as defined in the IBC are exempt.



Section 1005.1: MOE Sizing

- The exit width/capacity requirements are now arranged in a logical and well-organized layout.
- Reduced exit width factors have been established for sprinklered buildings with an emergency voice/alarm communication system.



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Section 1104.16.5.1: Examination

- New Section 1104.16.5.1 requirements stipulate an inspection frequency for fire escape stairs and balconies.



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1104.16.5.1: Examination

- Fire escape stairs and balconies require an inspection every 5 years by a registered design professional or individuals approved by the fire code official.
- The inspection report should include an analysis of the mechanical fasteners, handrails and grab bars.



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Section 2108.2: Automatic Sprinkler System

- New requirements were added to Section 2108.2 now allow dry cleaning plants using Class III-A or III-B solvents in unsprinklered buildings.



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Section 2108.2: Automatic Sprinkler System

- Sprinkler protection is not required for a Class III-A solvent dry cleaning machine when the quantity is < 330 gallons and the design complies with any one of 5 design options.



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Section 2108.2: Automatic Sprinkler System

- Compliance options are:
 - Maintain a limited oxidant concentration of < 8%
 - Maintain the solvent 30°F below its flash temperature
 - Maintain the solvent vapor concentration < 25% LFL



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Section 2108.2: Automatic Sprinkler Systems

- Compliance options are:
 - Utilize Class I, Group D, Division 2 electrical equipment
 - Provide an automatic fire-extinguishing system



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Would You Like to Learn More?

- SABCA, sponsored by the City of San Antonio DSD, is hosting four *Significant Changes to the 2012 IFC and 2012 IBC* seminars October 10th through 13th.
- Each 7 hour seminar costs \$160.00.
- Registration closes September 30th, 2011
- <http://www.ci.sat.tx.us/dsd/sabca.asp>

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