2007/2008 PROPOSED CHANGES TO THE INTERNATIONAL FIRE CODE

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TENTATIVE ORDER OF DISCUSSION

2007/2008 PROPOSED CHANGES TO THE INTERNATIONAL FIRE CODE

The following is the tentative order in which the proposed changes to the code will be discussed at the public hearings. Proposed changes which impact the same subject have been grouped to permit consideration in consecutive changes.

Proposed change numbers that are indented are those which are being heard out of numerical order. Indentation does **not** necessarily indicate that one change is related to another. Proposed changes may be grouped for purposes of discussion at the hearing at the discretion of the chair.

WILDLAND-URBAN	F16-07/08	F50-07/08	G58-07/08, Part II
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FG3-07/08, Part V	F18-07/08	F53-07/08	F204-07/08
FG5-07/08, Part V	F19-07/08	F54-07/08,	F171-07/08
WUIC2-07/08	F20-07/08	F55-07/08	F88-07/08, Part I
WUIC3-07/08	FG6-07/08, Part V	F56-07/08	F89-07/08
WUIC4-07/08	F21-07/08	F57-07/08	F90-07/08
WUIC5-07/08	FG5-07/08, Part VI	F58-07/08	F91-07/08
WUIC6-07/08	F22-07/08	G212-07/08, Part II	M94-07/08
FS5-07/08, Part VII	F23-07/08	F59-07/08	M97-07/08
WUIC7-07/08	F24-07/08	F60-07/08	F92-07/08
WUIC8-07/08	F25-07/08	E9-07/08, Part II	F93/07/08
WUIC9-07/08	F26-07/08	E35-07/08, Part II	F94-07/08
WUIC10-07/08	F27-07/08	F61-07/08	F95-07/08
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WUIC15-07/08	F32-07/08	F65-07/08	F100-07/08
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	F34-07/08	F68-07/08	F102-07/08, Part I
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FS189-07/08. Part I	F172-07/08
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F1-07/08

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

101.2 Scope. This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding:

- 1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;
- 2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises;
- 3. Fire hazards in the structure or on the premises from occupancy or operation;
- 4. Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems.
- 5. Conditions affecting firefighter safety during emergency operations.

Reason: Section 101.3 "Intent" currently states that the intent of the code is to provide minimum requirements for firefighter safety during emergency operations. However, this intent of the code is not communicated in the current scope language of 101.2. Inclusion of this language will clarify that the scope of the code does cover issues related to firefighter safety during emergency operations.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F2-07/08

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Revise as follows:

101.2 Scope. This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding:

- 1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;
- 2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises;
- 3. Fire hazards in the structure or on the premises from occupancy or operation;
- 4. Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems-:
- 5. Conditions affecting the safety of firefighters and emergency responders during emergency operations.

Reason: Section 101.3 "Intent" currently states that the intent of the code is to provide minimum requirements for firefighter safety during emergency operations. However, this intent of the code is not communicated in the current scope language found in Section 101.2. Inclusion of this language will clarify that the scope of the code does cover issues related to firefighter safety during emergency operations.

Public Hearing: C	Committee:	AS	AM	D
- A	Assembly:	ASF	AMF	DF

F3-07/08 102.1, 202 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

1. Revise as follows:

- 102.1 Construction and design provisions. The construction and design provisions of this code shall apply to:
 - 1. Structures, facilities and conditions arising after the adoption of this code.

Exception: The construction features within the building area of one-and two-family dwellings and townhomes, constructed in accordance with the *International Residential Code*, shall not be regulated by this code. This code shall regulate the site fire protection features outside of the building area of such buildings including, but not limited to, fire apparatus access roads in accordance with Section 503 and fire protection water supplies in accordance with Section 508.

- 2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
- 3. Existing structures, facilities and conditions when identified in specific sections of this code.
- 4. Existing structures, facilities and conditions which, in the opinion of the fire code official, constitute a distinct hazard to life or property.

2. Add new definition to read as shown:

SECTION 202 GENERAL DEFINITIONS

[B] AREA, BUILDING. The area within surrounding exterior walls (or exterior walls and fire walls) exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building areas if such areas are included within the horizontal projection of the roof or floor above.

Reason: This proposal clarifies the scope issues between the IFC and the IRC regarding the regulation of the building proper and the fire protection features that are required to serve the buildings. The committee interpretation on 903.2.7, issued 3/21/04, indicates that the IFC is not applicable to IRC buildings. One item this interpretation did not address was the issue of applicability of fire protection site issue requirements contained in the IFC to the placement of IRC structures. The unwritten understating, staff interpretation and practical application has been that the IFC does apply to areas outside of the IRC building footprint. Therefore, a local jurisdiction can utilize the IFC to regulate the Fire Apparatus Access Roads in Section 503 and Fire Protection Water Supplies in Section 508 servicing IRC buildings. However, none of these concepts of scope are explicitly addressed within the code document. This code change will clarify this area for the designer, code official and end user.

The definition of "Building Area" is from the IBC and is included as specific direction to the user that the scope of the IFC only extends outside of the "Building Area" for IRC structures.

It is important to note that this code proposal only codifies current ICC interpretations and user practice.

Cost Impact: The code change proposal will not increase the cost of construction.

Analysis: While the maintenance of the technical content of the definition rests with the IBC-General Code Development Committee, the appropriateness of adding that text to Section 202 rests with the IFC Code Development Committee.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F4-07/08 102.5, Chapter 45 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

1. Revise as follows:

102.5 Historic buildings. The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures do not constitute a distinct hazard to life or property <u>comply with NFPA 914</u>. Fire protection in designated historic buildings and structures shall be provided in accordance with an approved fire protection plan.

2. Add standard to Chapter 45 as follows:

NFPA

914-07 Code for Fire Protection of Historic Structures

Reason: Section 102.5 has a number of significant problems:

- The current language exempting historic buildings from the IFC "when such buildings or structures do not constitute a distinct hazard to life or property," places a significant burden on the fire code official to prove that a historic building creates this extreme level of hazard prior to enforcing <u>any</u> provision of this code. In effect, a fire code official would have to prove a "distinct hazard to life or property" exists before requiring the following basic levels of protection:
 - a. Fire extinguishers in accordance with Section 906
 - b. Fire sprinkler system be maintained in accordance with Section 901.6
 - c. Smoke alarms in accordance with Section 907.2.10 in Group R occupancies
 - d. A vacant historic building to be secured in accordance with Section 311.2
 - e. The removal of fueled equipment in violation of Section 313
 - f. Any other technical provisions of the IFC

Webster's defines "distinct" as "presenting a clear unmistakable impression." Therefore, it is very questionable that any of the above examples would meet the code's legal standard of a "distinct hazard to life or property." The fire code official is unable to ensure even the most basic fire protection mitigation efforts are in place to protect the historic property.

- 2. The last line states "Fire protection in designated historic buildings and structures shall be provided in accordance with an approved fire protection plan." However, to guidance is provided to the fire code official as to who should create the "fire protection plan," what fire protection provisions should be contained in an "approved fire protection plan," what level of building and life safety protection would constitute an acceptable "fire protection plan" and how an approved "fire protection plan" should be enforced and updated.
- The overly broad code exemption language of "provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures" appears to exempt all historic buildings from the Operational Permit and Construction Permit requirements of Section 105. This is obviously problematic.
- 4. The exemption language clearly addresses "construction, alteration, repair, enlargement, restoration, relocation or moving" but, it is unclear how maintenance, use and occupancy features, such as interior finish provisions, are intended to be covered under this section.
- These concerns have reflected themselves on the ICC Bulletin Board where there has been significant discussion regarding the confusion of the current language and the difficulty in applying reasonable fire protection provisions to historic building and structures.

Directing the owner, design professional and fire code official to NFPA 914, Code for Fire Protection of Historic Structures, addresses all of the concerns listed above. NFPA 914 provides maximum flexibility to the owner and design professional but also provides detailed guidance to the fire code official in order to ensure a reasonable level of building and life safety is provided to the historic property. The owner and design professional also have the option of integrated performance-based and prescriptive-based options that are specifically designed around the unique needs of historic properties.

Cost Impact: The code change proposal will not increase the cost of construction.

Analysis: A review of the standard proposed for inclusion in the code, NFPA 914-07, for compliance with ICC criteria for referenced standards given in Section 3.6 of Council Policy #CP 28 will be posted on the ICC website on or before January 15, 2008.

Public Hearing:	Committee:	AS	S AM	D
Ū	Assembly:	AS	SF AMF	= DF

F5-07/08 104.3 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

104.3 Inspections. The fire code official shall make all of the required inspections, or the fire code official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The fire code official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

(Renumber subsequent sections)

Reason: This new text is identical as the text in the IBC section 104.4 but the "building official" has been replaced by the "fire code official." Similar language is already included in Section 106.2 of the IFC. However, this language is needed as it fills a void in the code under the Section 104 "General Authority and Responsibilities" as no current language exists in this section addressing the authority of the fire code official to conduct inspections or require inspections by third parties. The IBC also has two section addressing inspections, one under "Inspections" and one under "Duties and Powers of the Building Official" which is equivalent to the IFC's "General Authority and Responsibilities" section.

Public Hearing: Com	mittee:	AS	AM	D
Asse	embly:	ASF	AMF	DF

F6-07/08 104.6.3.1 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

104.6.3.1 State reporting. The fire department shall submit its fire records to the state agency responsible for collecting such data.

Reason: The collection of valid fire data at the state and national level is a core component in the effort to address the nation's fire problem. The America's Burning Revisited report clearly states that "The fire service needs more accurate information on the fire problem; all jurisdictions (100% of all fire departments) should be participating in the fire incident reporting system and in management information systems." Unfortunately, we are far from that goal. The USFA NFIRS web site indicates, "The NFIRS database comprises more than one half of all reported fires that occur annually." Therefore, 40%+ of all fires not reported to the NFIRS database. Without this data, our picture and solutions to the US fire problem are incomplete. According the USFA NFIRS web site, "As of the most current, complete data year (2005), all states are participating in NFIRS. The District of Columbia is not a participant. The state of Arizona does not participate in NFIRS but Arizona's fire departments do by reporting directly to USFA." Therefore, the reporting problem is not at the state level but at the individual fire department level in reporting to the state collection points. This code change will raise the emphasis and need for fire data reporting by local fire departments by placing model language in the fire code that requires the reporting of this critical data. As owners, developers, contractors and occupants meet their responsibilities in addressing the US fire problem should be no less on the fire department in meeting their responsibility by reporting this data.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F7-07/08 104.9.1 (New), 104.9.2 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

104.9.1 Research reports. Supporting data, when necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

104.9.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the fire code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the fire code official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the fire code official for the period required for retention of public records.

Reason: This language is identical to the current "Research Reports" and "Tests" language in the IBC Sections 104.11.1 and 104.11.2 under alternative materials Section 104.11. These sections are proposed to be included in the IFC as they are important components of the underlying Section 104.9 "Alternative materials and methods." The fire code official needs to have the authority to require research reports and tests in order to determine if a proposed alternative materials and methods is supported by valid technical substantiation.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F8–07/08 105.1.4 (New), 105.1.4.1 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

105.1.4 Annual permit. In lieu of an individual construction permit for each alteration to an already approved system or equipment installation, the fire code official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

105.1.4.1 Annual permit records. The person to whom an annual permit is used shall keep a detailed record of alterations made under such annual permit. The fire code official shall have access to such records at all times or such records shall be filed with the fire code official as designated.

Reason: This proposed language is identical to the current language in section 105.1.1 and 105.1.2 of the IBC with the exception that the title of the code official is changes and that the MEP systems have been removed from the types of permits. The need for this language in the IFC is similar to the justification for it being present in the IBC. If annual permits can be issued for MEP system, they should be able to be issued for systems regulated by the IFC.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F9-07/08 105.1.4 (New), 105.1.5 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

105.1.4 Emergency repairs. Where equipment replacement and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the fire code official

105.1.5 Repairs. Application or notice to the fire code official is not required for ordinary repairs to structures, equipment or systems. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall any repairs include addition to, alteration of, replace or relocation of any standpipe, fire protection water supply, fire sprinkler system, fire alarm system or other work affecting fire protection or life safety.

Reason: The proposed Section 105.1.4 is identical to Section 105.2.1 of the IBC. This provision is needed in the IFC to address situations where construction permits are authorized by 105.1.2. The need in the IFC is similar to the need in the IBC.

The proposed Section 105.1.5 "Repairs" is similar to the Section 105.2.2 in the IBC. Minor modifications have been made to this section to address the different types of systems regulated by the IFC as opposed to the IBC.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F10-07/08

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Revise as follows:

105.2 Application <u>for permit</u>. Application for a permit required by this code shall be made to the fire code official in such form and detail as prescribed by the fire code official. Applications for permits shall be accompanied by such plans as prescribed by the fire code official. To obtain a permit the applicant shall first file an application therefore in writing on a form furnished by the department for that purpose. Such application shall:

- 1. Identify and describe the work or operation covered by the permit for which application is made.
- 2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
- 3. Indicate the use and occupancy for which the proposed work is intended.
- 4. Be accompanied by construction documents and other information as required in Section 105.4.
- 5. State the valuation of the proposed work.
- 6. Be signed by the applicant or the applicant's authorized agent.
- 7. Give such other data and information as required by the fire code official.

Reason: Consistency and coordination among the I-Codes are cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established, for the 2006/2007 cycle, and extended, for the 2007/2008 cycle, the ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in the International Codes family and improve the correlation among the I-Codes through the code development process.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes. The intent of this correlation effort is not necessarily to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes.

This proposal focuses on the information to be provided on permit applications and is being submitted by the AHC-Admin to correlate the IFC with current Section 105.3 of the International Building Code and International Existing Building Code, Section R105.3 of the International Residential Code, and Section 105.4 of the International Wildland-Urban Interface Code.

The information needed by the fire code official in order to properly evaluate permit applications for code compliance is really no different than for the code officials responsible for the other construction-related I-Codes noted above. The expanded requirements will provide the fire code official with critical information about the work or construction being proposed and is consistent with the list-format used in the other I-Codes where this section exists.

Cost impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F11-07/08

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

105.2.3 Time limitation of application. An application for a permit for any proposed work or operation shall be deemed to have been abandoned six months <u>180 days</u> after the date of filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that the fire code official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each if there is reasonable cause. The extension shall be requested in writing and justifiable cause demonstrated.

Reason: This proposed change matches the language in Section 105.3.2 of the IBC which covers the same topic of "Time limitations of application." This will provide consistency between the two codes. In addition, extensions should be requested in writing to memorialize the request and action on the request.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F12-07/08

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

105.3.2 Extensions. A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit when work is unable to be commenced within the time required by this section for good and satisfactory reasons. The fire code official is authorized to grant, in writing, one or more extensions of the time period of a permit for periods of not more than 90 <u>180</u> days each. Such extensions shall be requested by the permit holder in writing and justifiable cause demonstrated.

Reason: This proposal modifies the maximum permit extension time from 90 to 180 days. This is consistent with Section 105.5 of the IBC which allows for a maximum 180 day extension. The extension dates between the IFC and IBC should be the same in order to provide consistency to the owner, developer, fire official and building official.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F13-07/08

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

105.3.3 Occupancy prohibited before approval. The building or structure shall not be occupied prior to the fire code official issuing a permit that indicates that and conducting associated inspections indicating the applicable provisions of this code have been met.

Reason: A straight reading of the current language in Section 105.3.3, appears to only require the issuance of a permit prior to the occupancy of a building or structure. The current language also infers that the issuance of a permit is the mechanism to ensure that the applicable provisions of the code have been met. This is clearly not the case. Approval of inspections associated with the permit is the method to ensure the permitting conditions have actually been met in the field application and the requirement that the "applicable provisions of this code have been met." The proposed code change would ensure that inspection associated with permit occur prior to occupancy of a building or structure.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Co	mmittee:	AS	AM	D
Ass	sembly:	ASF	AMF	DF

F14-07/08 105.3.8 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

105.3.8 Validity of permit. The issuance or granting of a permits shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinances of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents, operational documents and other data shall not prevent the fire code official from requiring correction of errors in the documents or other data.

Reason: This proposed language is identical to the language in Section 105.4 of the IBC with the exceptions that the title of the official has changes, operational permits are included and the last sentence of Section 105.4 was not carried over as it is more germane to the role of the building official. The need for covering the "validity of permit" topic in the IFC is similar to the need for this language in the IBC. The fire code official needs to be able to rely on the information provided in the permit and the permit is not authorization to violate the code.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F15–07/08 105.4.1

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Revise as follows:

105.4.1 Submittals. Construction documents <u>and other data</u> shall be submitted in <u>one two</u> or more sets <u>with each</u> <u>application for a permit</u> and in such form and detail as required by the fire code official. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

Exception: The fire code official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

Reason: Consistency and coordination among the I-Codes are cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established, for the 2006/2007 cycle, and extended, for the 2007/2008 cycle, the ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in the International Codes family and improve the correlation among the I-Codes through the code development process.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes. The intent of this correlation effort is not necessarily to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes.

This proposal focuses on construction document submittal and is being submitted by the AHC-Admin to provide improved correlation of the IFC with Section 106.1 of the International Building Code, International Existing Building Code and International Wildland-Urban Interface Code, Section R106.1 of the International Residential Code, and Section 106.3.1 of the International Fuel Gas Code, International Mechanical Code, International Plumbing Code.

Changing the number of sets of documents to be submitted from one to two will provide correlation with Section 105.4.6. The added exception provides the fire code official with flexibility in determining the need for detailed documents when the services of a registered design professional are not required.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F16-07/08

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

105.4.1 Submittals. Construction documents shall be submitted in one or more sets and in such form and detail as required by the fire code official. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. <u>Where special conditions</u> exist, the fire code official is authorized to require additional construction documents prepared by a registered design professional professional.

Exception: The fire code official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with the code.

Reason: This proposal will modify Section 105.4.1 to be identical with 106.1 of the IBC with the exception that the title of the official has changed. This language is needed in the IFC for the same reasons it is in the IBC. Special conditions may be confronted by the fire code official and the fire code official needs to have the authority to issue what is typically referred to as "over the counter permits" for minor scope or work.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F17–07/08 105.4.1.1 (New)

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Add new text as follows:

105.4.1.1 Examination of documents. The fire code official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the work indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

Reason: Consistency and coordination among the I-Codes are cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established, for the 2006/2007 cycle, and extended, for the 2007/2008 cycle, the ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in the International Codes family and improve the correlation among the I-Codes through the code development process.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes. The intent of this correlation effort is not necessarily to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes.

This proposal focuses on the review of construction documents as part of the permit process and is being submitted by the AHC-Admin to correlate the IFC with current Section 106.3 of the *International Building Code* and *International Existing Building Code*, Section R106.3 of the *International Residential Code* and the code changes that were approved in the 2006/2007 cycle creating new Section 106.9 of the *International Wildland-Urban Interface Code* and new Section 104.3 of the *International Energy Conservation Code* (see *Supplement to the International Codes/2007*).

This proposed section provides for examination of the construction documents by the fire code official or someone assigned by the fire code official to determine code compliance prior to issuance of a permit.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F18-07/08 105.4.2.1 (New)

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Add new text as follows:

105.4.2.1 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale all of the following:

- 1. Topography
- 2. Width and percent of grade of fire apparatus access roads
- 3. Landscape and vegetation details
- 4. Locations of structures or building envelopes

- 5. Existing or proposed overhead utilities
- 6. Structures and their appendages
- 7. Roof classification of buildings
- 8. Occupancy classification of buildings
- 9. Site water supply systems

The fire code official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

Reason: Consistency and coordination among the I-Codes are cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established, for the 2006/2007 cycle, and extended, for the 2007/2008 cycle, the ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in the International Codes family and improve the correlation among the I-Codes through the code development process.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes. The intent of this correlation effort is not necessarily to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes.

This proposal focuses on site plan submittal prior to permit issuance and is being submitted by the AHC-Admin to correlate the IFC with current Section 106.2 of the *International Building Code* and *International Existing Building Code*, Section R106.2 of the *International Residential Code*, and the code change that was approved in the 2006/2007 cycle modifying Section 106.3 of the *International Wildland Urban Interface Code* (see *Supplement to the International Codes/2007*).

Certain code requirements such as distance from fire hydrants, distance from apparatus access roads, location and construction of access roads, and obstructions to fire fighting efforts are dependent on the structure's location on the lot and the topography of the site. As a result, a scaled site plan containing the data listed in this section is required to permit review for code compliance prior to permit issuance for new construction. The section also allows that the fire code official can waive the requirement for a site plan when it is not required to determine code compliance, such as for work involving only interior alterations or repairs.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F19-07/08 105.4.2.1 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

105.4.2.1 Fire protection system shop drawings. Shop drawings for the fire protections system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

Reason: This proposed language is identical to the current language in the IBC section 106.1.1.1. The current IFC 105.4.2, which this proposed language would be a subsection of, is the same as 106.1.1 in the IBC. However, the fire protection shop drawing clarification language in 106.1.1.1 was not included under the IFC section 105.4.2. This proposal corrects this omission as the language is needed in the IFC as the fire protection systems are likely to be permitted under the IFC document.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Co	ommittee:	AS	AM	D
As	ssembly:	ASF	AMF	DF

F20-07/08 105.4.4.1 (New)

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Add new text as follows:

105.4.4.1 Phased approval. The fire code official is authorized to issue a permit for the construction of part of a structure, system or operation before the construction documents for the whole structure, system or operation have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent

requirements of this code. The holder of such permit for parts of a structure, system or operation shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure, system or operation will be granted.

Reason: Consistency and coordination among the I-Codes are cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established, for the 2006/2007 cycle, and extended, for the 2007/2008 cycle, the ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in the International Codes family and improve the correlation among the I-Codes through the code development process.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes. The intent of this correlation effort is not necessarily to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes.

This proposal focuses on the administration of the permit process and is being submitted by the AHC-Admin to correlate the IFC with current Section 106.3.3 of the *International Building Code* and *International Existing Building Code*, Section R106.3.3 of the *International Residential Code*, and the code changes that were approved in the 2006/2007 cycle creating new Section 106.12 of the *International Wildland-Urban Interface Code* and new Section 104.3.3 of the *International Energy Conservation Code* (see Supplement to the International Codes/2007).

This provision would provide the code official with a useful administrative tool by providing the authority to issue a partial permit to allow for the practice of "fast tracking" a job. The section makes it clear that any construction under a partial permit is "at the holder's own risk" and "without assurance that a permit for the entire structure will be granted." The code official is under no obligation to accept work or issue a complete permit in violation of the code, ordinances or statutes simply because a partial permit had been issued. The purpose is to proceed with construction while the design continues for other aspects of the work. The section has been slightly modified from the source texts by adding "systems and operations" to make it more relevant to the IFC.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F21-07/08

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Delete and substitute as follows:

105.4.5 Corrected documents. Where field conditions necessitate any substantial change from the approved construction documents, the fire code official shall have the authority to require the corrected construction documents to be submitted for approval.

105.4.5 Amended construction documents. Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

Reason: The current language in 105.4.5 to submit corrected documents is too specific based on the <u>sole</u> fact that "when field conditions necessitate. ..." However, this not the only reason that revised construction documents would be needed. As an example, the owner may choose to make a revision, a design professional may value engineer a design or a contractor may change materials from the original approved construction documents. The proposed language is from 106.4 in the IBC. This proposed new language is broad and addresses any condition that may cause the installation to not be in compliance with the approved construction documents.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F22-07/08 105.4.7 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

105.4.7 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of:

- 1. New buildings or structures or additions.
- 2. Existing buildings or structures.
- 3. Distance from lot lines.
- 4. Fire apparatus access roads.
- 5. Fire protection water supply.

Exception: The fire code official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

Reason: This proposed language is similar to the current language in Section 106.2 of the IBC. However, this proposal has been modified to change the title of the official, change the information needed on site plan and move the last sentence to an exception from the main body since the language is really an exception. This language is needed in the IFC for fire code official to be able to effectively review the construction plans for compliance with this code and referenced documents.

Cost Impact: The code change will increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F23-07/08

105.6.16

Proponent: Lynne M. Kilpatrick, Fire Department, Seattle, WA, representing Washington State Association of Fire Marshals

Revise as follows:

105.6.16 Flammable and combustible liquids. An operational permit is required:

- 1. To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This requirement shall not apply to the off-site transportation in pipelines regulated by the Department of Transportation (DOTn) nor does it apply to piping systems.
- 2. To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
 - 2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the code official, would cause an unsafe condition.
 - 2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
- 3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
- 4. <u>To store, handle or use Class IIIB liquids in tanks or portable tanks for fueling motor vehicles at motor fueldispensing facilities or where connected to fuel-burning equipment.</u>
- 4. <u>5.</u> To remove Class I or Class II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary on-site pumps normally used for dispensing purposes.
- 5. <u>6.</u> To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
- 6- 7. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank.
- 7. 8. To change the type of contents stored in a flammable or combustible liquid tank to a material which poses a greater hazard than that for which the tank was designed and constructed.
- 8. 9. To manufacture, process, blend or refine flammable or combustible liquids.
- <u>9.10.</u> To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.
- 10-11. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.

Reason: Currently there is no requirement to obtain a permit for the storage or use of Class IIIB liquids either inside or outside of a building. In light of the increasing trend to use Class IIIB liquids inside and outside of buildings in connection with fuel-burning equipment and for fueling of motor vehicles this proposal adds a new item 4 that will allow a jurisdiction to require a permit conditioned appropriately for the storage and use of such tank systems. A similar change is not required in Section 105.7.6 for the installation of the tank because the existing text requires an installation permit for all combustible liquid tanks.

The proposed change to item 9 simply clarifies that a permit is required for dispensing fuels into motor vehicles directly from tank vehicles. As written this item can be interpreted to apply to motor vehicle fuel-dispensing stations but Item 5 already requires a permit for motor vehicle fuel-dispensing stations.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F24-07/08

105.6.16

Proponent: Jon Napier, Fire Department, City of Kent, WA, representing Washington State Building Code Council

Revise as follows:

105.6.16 Flammable and combustible liquids. An operational permit is required:

- To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This
 requirement shall not apply to the off-site transportation in pipelines regulated by the Department of
 Transportation (DOTn) nor does it apply to piping systems.
- To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
 - 2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the code official, would cause an unsafe condition.
 - 2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
- 3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
- 4. To remove Class I or Class II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary on-site pumps normally used for dispensing purposes.
- 5. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
- 6. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank.
- 7. To change the type of contents stored in a flammable or combustible liquid tank to a material which poses a greater hazard than that for which the tank was designed and constructed.
- 8. To manufacture, process, blend or refine flammable or combustible liquids.
- 9. To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.
- 10. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles, vessels and other special equipment at commercial, industrial, governmental or manufacturing establishments.

Reason: Section 105.6.16 does not address the issue of permits for the sites used for dispensing fuel from tank vehicles into the fuel tanks of marine vessels and special equipment. Section 105.6.16(10) requires a permit for utilizing a site for fueling motor vehicles but no mention is made of marine vessels or special equipment. Issuing a permit for dispensing fuel into marine vessels or special equipment would give the code official awareness of the operation and the opportunity to inspect the site. The requirement for a permit could be done by adding "vessels and special equipment" to subsection 10. Recently adopted IFC Chapter 46 – Marinas – defines vessels so we need to address the sites where tank vehicles will be used to fuel them. Special equipment would include equipment at farm and construction sites.

Public Hearing: Committ	ee: AS	AM	D
Assemb	ly: ASF	AMF	DF

F25-07/08

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

105.6 Required operational permits. The fire code official is authorized to issue <u>and require</u> operational permits for the operations set forth in Sections 105.6.1 through 105.6.46.

105.6.1 Aerosol products. An operational permit is required to Manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds (227 kg) net weight.

105.6.2 Amusement buildings. An operational permit is required to Operate a special amusement building.

105.6.3 Aviation facilities. An operational permit is required to Use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel-servicing vehicles. Additional permits required by other sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes.

105.6.4 Carnivals and fairs. An operational permit is required to Conduct a carnival or fair.

105.6.5 Cellulose nitrate film. An operational permit is required to Store, handle or use cellulose nitrate film in a Group A occupancy.

105.6.6 Combustible dust-producing operations. An operational permit is required to Operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, or other operations producing combustible dusts as defined in Chapter 2.

105.6.7 Combustible fibers. An operational permit is required for the storage and handling of <u>Store and handle</u> combustible fibers in quantities greater than 100 cubic feet (2.8 m3).

Exception: A permit is not required for agricultural storage.

105.6.8 Compressed gases. An operational permit is required for the storage, use or handling <u>Store</u>, use or handle at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed in Table 105.6.8.

Exception: Vehicles equipped for and using compressed gas as a fuel for propelling the vehicle.

105.6.9 Covered mall buildings. An operational permit is required for:

- 1. The placement of <u>Place</u> retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.
- 2. The Display of liquid- or gas-fired equipment in the mall.
- 3. The Use of open-flame or flame-producing equipment in the mall.

105.6.10 Cryogenic fluids. An operational permit is required to Produce, store, transport on site, use, handle or dispense cryogenic fluids in excess of the amounts listed in Table 105.6.10.

Exception: Permits are not required for vehicles equipped for and using cryogenic fluids as a fuel for propelling the vehicle or for refrigerating the lading.

105.6.11 Cutting and welding. An operational permit is required to Conduct cutting or welding operations within the jurisdiction.

105.6.12 Dry cleaning plants. An operational permit is required to Engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.

105.6.13 Exhibits and trade shows. An operational permit is required to Operate exhibits and trade shows.

105.6.14 Explosives. An operational permit is required for the Manufacture, store storage, handle handling, sell sale or use of any quantity of explosives, explosive materials, fireworks or pyrotechnic special effects within the scope of Chapter 33.

Exception: Storage in Group R-3 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with Section 3306.

105.6.15 Fire hydrants and valves. An operational permit is required to Use or operate fire hydrants or valves intended for fire suppression purposes which are installed on water systems and accessible to a fire apparatus access road that is open to or generally used by the public.

Exception: A permit is not required for authorized employees of the water company that supplies the system or the fire department to use or operate fire hydrants or valves.

105.6.16 Flammable and combustible liquids. An operational permit is required:

- To Use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This
 requirement shall not apply to the off-site transportation in pipelines regulated by the Department of
 Transportation (DOTn) nor does it apply to piping systems.
- To Store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
 - 2.1. The storage <u>Store</u> or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the code official, would cause an unsafe condition.
 - 2.2. The storage <u>Store</u> or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
- 3. To Store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
- 4. To Remove Class I or Class II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary on-site pumps normally used for dispensing purposes.
- 5. To Operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
- 6. To Place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank.
- 7. To Change the type of contents stored in a flammable or combustible liquid tank to a material which poses a greater hazard than that for which the tank was designed and constructed.
- 8. To Manufacture, process, blend or refine flammable or combustible liquids.
- 9. To Engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.
- 10. To Utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.

105.6.17 Floor finishing. An operational permit is required for floor finishing or surfacing operations <u>Finish or surface</u> floors exceeding 350 square feet (33 m2) using Class I or Class II liquids.

105.6.18 Fruit and crop ripening. An operational permit is required to Operate a fruit-, or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.

105.6.19 Fumigation and thermal insecticidal fogging. An operational permit is required to Operate a business of fumigation or thermal insecticidal fogging and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used.

105.6.20 Hazardous materials. An operational permit is required to Store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in Table 105.6.20.

105.6.21 HPM facilities. An operational permit is required to Store, handle or use hazardous production materials.

105.6.22 High-piled storage. An operational permit is required to Use a building or portion thereof as a high-piled storage area exceeding 500 square feet (46 m2).

105.6.23 (Supp) Hot work operations. An operational permit is required for Hot work including, but not limited to:

- 1. Public exhibitions and demonstrations where hot work is conducted.
- 2. Use of portable hot work equipment inside a structure.

Exception: Work that is conducted under a construction permit.

- 3. Fixed-site hot work equipment such as welding booths.
- 4. Hot work conducted within a wildfire risk area.
- 5. Application of roof coverings with the use of an open-flame device.
- 6. When approved, the fire code official shall issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate their facility=s hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 26. These permits shall be issued only to their employees or hot work operations under their supervision.

105.6.24 Industrial ovens. An operational permit is required for Operation of industrial ovens regulated by Chapter 21.

105.6.25 Lumber yards and woodworking plants. An operational permit is required for The storage or processing of lumber exceeding 100,000 board feet (8,333 ft3) (236 m³).

105.6.26 Liquid- or gas-fueled vehicles or equipment in assembly buildings. An operational permit is required to Display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings.

105.6.27 LP-gas. An operational permit is required for:

1. Storage and use of LP-gas.

Exception: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less serving occupancies in Group R-3.

2. Operation of cargo tankers that transport LP-gas.

105.6.28 Magnesium. An operational permit is required to Melt, cast, heat treat or grind more than 10 pounds (4.54 kg) of magnesium.

105.6.29 Miscellaneous combustible storage. An operational permit is required to Store in any building or upon any premises in excess of 2,500 cubic feet (71 m³) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material.

105.6.30 Open burning. An operational permit is required for The kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

Exception: Recreational fires.

105.6.31 (Supp) Open flames and torches. An operational permit is required to Remove paint with a torch; or to use a torch or open-flame device in a wildfire risk area.

105.6.32 Open flames and candles. An operational permit is required to Use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments.

105.6.33 Organic coatings. An operational permit is required for any Organic-coating manufacturing operation producing more than 1 gallon (4 L) of an organic coating in one day.

105.6.34 Places of assembly. An operational permit is required to Operate a place of assembly.

105.6.35 Private fire hydrants. An operational permit is required for the removal <u>Remove</u> from service, use or operation of <u>operate</u> private fire hydrants.

Exception: A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants.

105.6.36 Pyrotechnic special effects material. An operational permit is required for Use and handling of pyrotechnic special effects material.

105.6.37 Pyroxylin plastics. An operational permit is required for Storage or handling of more than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics and for the assembly or manufacture of articles involving pyroxylin plastics.

105.6.38 Refrigeration equipment. An operational permit is required to Operate a mechanical refrigeration unit or system regulated by Chapter 6.

105.6.39 Repair garages and motor fuel-dispensing facilities. An operational permit is required for Operation of repair garages and automotive, marine and fleet motor fuel-dispensing facilities.

105.6.40 Rooftop heliports. An operational permit is required for the Operation of a rooftop heliport.

105.6.41 Spraying or dipping. An operational permit is required to conduct a Spraying or dipping operation utilizing flammable or combustible liquids or the application of combustible powders regulated by Chapter 15.

105.6.42 Storage of scrap tires and tire byproducts. An operational permit is required to establish, conduct or maintain Storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet (71 m3) of total volume of scrap tires and for indoor storage of tires and tire byproducts.

105.6.43 Temporary membrane structures, tents and canopies. An operational permit is required to Operate an air-supported temporary membrane structure or a tent having an area in excess of 200 square feet (19 m²), or a canopy in excess of 400 square feet (37 m²).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Fabric canopies open on all sides which comply with all of the following:
 - 2.1. Individual canopies having a maximum size of 700 square feet (65 m²).
 - 2.2. The aggregate area of multiple canopies placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.
 - 2.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.

105.6.44 Tire-rebuilding plants. An operational permit is required for The operation and maintenance of a tire-rebuilding plant.

105.6.45 Waste handling. An operational permit is required for The operation of wrecking yards, junk yards and waste material-handling facilities.

105.6.46 Wood products. An operational permit is required to store <u>Storage of</u> chips, hogged material, lumber or plywood in excess of 200 cubic feet (6 m³).

Reason: The current language for required operational permits is excessively wordy with the "An operational permit is required to" placed at the front of each subsection. In order to improve readability and format, the term "require" is placed in 105.6 to create a blanket requirement for all types of operational permits. The subsections only need to list the thresholds or types of uses regulated, not the fact that "An operational permit is required to". The words "within the jurisdiction" are also proposed to be deleted from 105.6.11 Cutting and Welding, as this is a given and none of the other subsections have this added language. There are no technical changes proposed to this section.

A similar proposal has been drafted to Section 105.7.

Public Hearing: Committee	: AS	AM	D
Assembly:	ASF	AMF	DF

F26-07/08 105.7.3

Proponent: Larry Fluer, Fluer, Inc., representing Compressed Gas Association

Revise as follows:

105.7.3 Compressed gases. When the compressed gases in use or storage exceed the amounts listed in Table 105.6.8, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a compressed gas system.

Exceptions:

- 1. Routine maintenance.
- 2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

The permit applicant shall apply for approval to close storage, use or handling facilities at least 30 days prior to the termination of the storage, use or handling of compressed or liquefied gases. Such application shall include any change or alteration of the facility closure plan filed pursuant to Section 2701.6.3. The 30 day period is not applicable when approved based on special circumstances requiring such waiver.

Reason: Section 2701.6 addresses facility closure and a 30 day notice is required by 2701.6.3. The requirements in Section 105.7.3 are slightly different from 2701.6.3 where changes to the closure plan are noted and the use of a waiver is mentioned. There is no need to establish permit requirements for closure plans to be submitted for compressed gases that are different from closure plans for any other hazardous material. Closure plans must be approved as required by 2701.5, and if circumstances require additional time the closure plan should be adjusted accordingly. The modifications proposed for Section 105.7.3 bring the requirements for compressed gases into parity with those required by Section 105.7.7 for other hazardous materials.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F27-07/08 105.7.4 (New)

Proponent: Larry Fluer, Fluer, Inc., representing Compressed Gas Association

Add new text as follows:

105.7.4 Cryogenic fluids. A construction permit is required for installation of or modification to outdoor stationary cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 105.6.10. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Reason: There are two types of permits required by Section 105.1.2, operational, and construction. Operational and construction permits are required for compressed gas installations under the requirements of Sections 105.6.8 and 105.7.3; however, only operational permits have been required for cryogenic fluids under Section 105.6.10. The omission of required construction permits for cryogens appears to be an oversight. The application for permit is intended to trigger a plan review that will examine constraints on location, and the requirements of Chapter 32. The issuance of a permit to construct is intended to require the jurisdiction review the appropriate requirements to ensure that the installation meets or exceeds the minimum design criteria integral to the code.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F28-07/08

105.7.6

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

105.7.6 Flammable and combustible liquids. A construction permit is required:

- 1. To install, repair or modify a pipeline for the transportation of flammable or combustible liquids.
- 2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
- 3. To install, alter, remove, abandon or otherwise dispose of a flammable or combustible liquid tank.

Reason: The current language in 105.7.6 (1) omits the installation of a permit for a new pipeline but requires a permit to repair or modify. This appears to be an oversight as requiring a permit to repair or modify and but not install would leave a large gap in the code compliance oversight for this type of installation. In addition, (2) and (3) or 105.7.6 require a permit for the installation of other types of equipment.

Cost Impact: The code change will increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F29-07/08 105.7 through 105.7.13

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

105.7 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.13.

Exception: Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.1 Automatic fire-extinguishing systems. A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.3 Compressed gases. When the compressed gases in use or storage exceed the amounts listed in Table 105.6.8, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a compressed gas system.

Exceptions:

- 1. Routine maintenance.
- 2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

The permit applicant shall apply for approval to close storage, use or handling facilities at least 30 days prior to the termination of the storage, use or handling of compressed or liquefied gases. Such application shall include any change or alteration of the facility closure plan filed pursuant to Section 2701.6.3. The 30-day period is not applicable when approved based on special circumstances requiring such waiver.

105.7.4 Fire alarm and detection systems and related equipment. A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.5 Fire pumps and related equipment. A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers, and generators. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.7 Hazardous materials. A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter 27 when the hazardous materials in use or storage exceed the amounts listed in Table 105.6.20.

Exceptions:

- 1. Routine maintenance.
- 2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

105.7.8 Industrial ovens. A construction permit is required for installation of industrial ovens covered by Chapter 21.

Exceptions:

- 1. Routine maintenance.
- 2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

105.7.12 Standpipe systems. A construction permit is required for the installation, modification, or removal from service of a standpipe system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Reason: This proposed code change creates a general exception to the maintenance requirement under 105.7 rather than having individual exceptions under each sub-category. This is needed since some of the sub-categories do not have a maintenance permit exception but, are justified in having one. As an example, private fire hydrant maintenance does not have a permit exception so, technically, a permit would be required per the code but one is clearly not justified. The sub-sections that do have a current maintenance exception are deleted in favor of the new general exception language. This code change will also serve to simplify and clarify the current language in this section. No technical changes are proposed for this section in this code change.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	F AMF	DF

F30-07/08 105.7 through 105.7.13

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

105.7 Required construction permits. The fire code official is authorized to issue <u>and require</u> construction permits for work as set forth in Sections 105.7.1 through 105.7.13.

105.7.1 Automatic fire-extinguishing systems. A construction permit is required for Installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.2 Battery systems. A permit is required to Installation of stationary storage battery systems having a liquid capacity of more than 50 gallons (189 L).

105.7.3 Compressed gases. Installation, repair, abandonment, removal, place temporarily out of service, close or substantially modify a compressed gas system when the compressed gases in use or stored storage exceed the amounts listed in Table 105.6.8, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a compressed gas system.

Exceptions:

- 1. Routine maintenance.
- 2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

The permit applicant shall apply for approval to close storage, use or handling facilities at least 30 days prior to the termination of the storage, use or handling of compressed or liquefied gases. Such application shall include any change or alteration of the facility closure plan filed pursuant to Section 2701.6.3. The 30-day period is not applicable when approved based on special circumstances requiring such waiver.

105.7.4 Fire alarm and detection systems and related equipment. A construction permit is required for Installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.5 Fire pumps and related equipment. A construction permit is required for Installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers, and generators. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.6 Flammable and combustible liquids. A construction permit is required:

- 1. To Repair or modify a pipeline for the transportation of flammable or combustible liquids.
- 2. To Install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
- 3. To Install, alter, remove, abandon or otherwise dispose of a flammable or combustible liquid tank.

105.7.7 Hazardous materials. A construction permit is required to Install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter 27 when the hazardous materials in use or storage exceed the amounts listed in Table 105.6.20.

Exceptions:

- 1. Routine maintenance.
- 2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

105.7.8 Industrial ovens. A construction permit is required for Installation of industrial ovens covered by Chapter 21.

Exceptions:

- 1. Routine maintenance.
- 2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

105.7.9 LP-gas. A construction permit is required for Installation of or modification to an LP-gas system.

105.7.10 Private fire hydrants. A construction permit is required for the Installation or modification of private fire hydrants.

105.7.11 Spraying or dipping. A construction permit is required to Install or modify a spray room, dip tank or booth.

105.7.12 Standpipe systems. A construction permit is required for the Installation, modification, or removal from service of a standpipe system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.13 Temporary membrane structures, tents and canopies. A construction permit is required to Erect an airsupported temporary membrane structure or a tent having an area in excess of 200 square feet (19 m2), or a canopy in excess of 400 square feet (37 m²).

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Funeral tents and curtains or extensions attached thereto, when used for funeral services.
- 3. Fabric canopies and awnings open on all sides which comply with all of the following:
 - 3.1. Individual canopies shall have a maximum size of 700 square feet (65 m²).
 - 3.2. The aggregate area of multiple canopies placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.
 - 3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.

Reason: The current language for required construction permits is excessively wordy with the "A construction permit is required to" or "A construction permit is required for the" placed at the front of each subsection. In order to improve readability and format, the term "require" is placed in 105.7 to create a blanket requirement for all types of construction permits. The subsections only need to list the thresholds or types of uses regulated, not the fact that "A construction permit is required to". There are no technical changes proposed to this section.

A similar proposal has been drafted to Section 105.6.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F31-07/08 106.5 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

106.5 Occupancy prohibited before approval. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the fire code official has approved the use or occupancy.

Reason: This language is similar to the language that currently exists in Section 105.3.3 prohibiting occupancy prior to <u>permit</u> approval. However, this proposed code change clarifies that the fire code official has an important role in the approval of buildings prior to <u>occupancy</u>. Currently, the code the does not require the approval of the fire code official prior to occupancy. Ensuring compliance with this code, before the building is occupied, is of utmost importance in correcting dangerous conditions and ensuring fire protection systems are operational.

From a customer service standpoint, this language is also imperative. The owner, contractor and tenant should not be placed in a situation where a Certificate of Occupancy is issued, the building occupied and the fire code official comes along at a later date and requires corrections. There should be some basic assurance to the involved parties that occupancy of the building is tied to fire code official approval and fire code compliance. It is important to note that this language does not require and inspection unless the fire code official was of the opinion that an inspection should occur prior to occupancy.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee	e: AS	AM	D
Assembly	ASF	AMF	DF

F32–07/08 106.5 through 106.5.3 (New)

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Add new text as follows:

106.5 Testing. Installations shall be tested as required by this code and in accordance with Sections 106.5.1 through 106.5.3. Tests shall be made by the permit holder or authorized agent. The fire code official shall be notified before any required testing is conducted.

106.5.1 New, altered, extended or repaired installations. New installations and parts of existing installations, which have been altered, extended, renovated or repaired, shall be tested as required by this code to disclose defects.

106.5.2 Apparatus, instruments, material and labor for tests. Apparatus, instruments, material and labor required for testing an installation or part thereof shall be furnished by the permit holder or authorized agent.

106.5.3 Reinspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with this code. The work or installation shall then be resubmitted to the fire code official for inspection and testing.

Reason: Consistency and coordination among the I-Codes are cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established, for the 2006/2007 cycle, and extended, for the 2007/2008 cycle, the ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in the International Codes family and improve the correlation among the I-Codes through the code development process.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes. The intent of this correlation effort is not necessarily to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes.

This proposal focuses on the testing of new and altered installations and is being submitted by the AHC-Admin to correlate the IFC with the current text of Sections 107.2, 107.2.1, 107.2.3 and 107.2.4 of the *International Fuel Gas Code*, *International Mechanical Code*, and *International Plumbing Code* and the code change that was approved in the 2006/2007 cycle creating Sections 107.4, 107.4.1, 107.4.3 and 107.4.4 of the *International Wildland Urban Interface Code* (see Supplement to the International Codes/2007)

The proposed sections would provide the code official with important tools to ensure that systems and equipment installations are properly tested for code compliance and to make sure that the system is free from defects. To the extent specified in the code, testing is also required for portions of existing systems that may have been altered, extended, renovated or repaired. These provisions would also make it clear that the permit holder is responsible for performing tests as well as for supplying all of the labor and apparatus necessary to conduct the tests. Provision is also made for when a system or portion of a system does not pass the initial test or inspection.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F33-07/08

Proponent: Rebecca Baker, Jefferson County, CO, Chair, ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin)

Add new section as follows:

SECTION 112 SERVICE UTILITIES

112.1 Authority to disconnect service utilities. The fire code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section 102.6 in case of emergency where necessary to eliminate an immediate hazard to life or property. The fire code official shall notify the serving utility and, whenever possible, the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action if not notified prior to disconnection. The owner or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

Reason: Consistency and coordination among the I-Codes are cornerstones of the ICC Code Development Process. This holds true for not only the technical code provisions but also for the administrative code provisions as contained in Chapter 1 of all the I-Codes.

In response to concerns raised by the ICC membership since publication of the first editions of the I-Codes, the ICC Board established, for the 2006/2007 cycle, and extended, for the 2007/2008 cycle, the ICC Ad Hoc Committee on the Administrative Provisions in the I-Codes (AHC-Admin) to review Chapter 1 administrative provisions in the International Codes family and improve the correlation among the I-Codes through the code development process.

The AHC-Admin is submitting a series of code change proposals designed to provide consistent and correlated administrative provisions among the I-Codes. The intent of this correlation effort is not necessarily to have absolutely identical text in each of the I-Codes but, rather, text that has the same intent in accomplishing the administrative tasks among the I-Codes.

This proposal focuses on the fire code official's authority to disconnect service utilities under emergency conditions and is being submitted by the AHC-Admin to correlate the IFC with Section 111.3 of the *International Building Code*, Section R111.3 of the *International Residential Code* and the code change that was approved in the 2006/2007 cycle creating Section 111.2 of the *International Wildland Urban Interface Code* (see *Supplement to the International Codes/2007*).

This section would authorize the code official to take definitive action to abate hazards caused by or contributed by building utilities by means of disconnection of one or more of a building's utility services where all other lesser remedies have proven ineffective. This section also provides that such an action must be preceded by written notice to the utility and the owner and occupants of the building. When the hazard to the public health, safety or welfare is so imminent as to mandate immediate disconnection, this section makes it clear that the fire code official has the authority and even the obligation to cause disconnection without notice.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F34-07/08

202 (New)

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Add new definition as follows:

SECTION 202 GENERAL DEFINITIONS

FIRE HAZARD. A thing or act which increases or could cause an increase of the hazard or menace of fire to a greater degree than that customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing or extinguishing fire or any thing or act which could obstruct, delay, hinder or interfere with the operation of the fire department or the egress of occupants in the event of fire.

Reason: The definition of "Fire Hazard" is not currently found in the IFC. The term appears in the IFC 31 times and is found in the following Chapters: 1, 2, 3, 4, 6, 9, 10, 19, 20, 21, 23, 24, 26, 33, 34 and Appendix E. The inclusion of this definition will further clarify the intent of an otherwise ambiguous term.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F35-07/08

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Add new definition as follows:

SECTION 202 GENERAL DEFINITIONS

IMPORTANT BUILDING. For the purposes of Chapters 22, 34, and 38, a building that is not expendable as a result of an exposure fire or explosion. Concurrence of the fire chief is required for a building to be deemed expendable.

Reason: The definition of "Important Building" is not currently found in the IFC. The term appears in the IFC and is found in Chapters: 22, 34 and 38. The inclusion of this definition will clarify the meaning the term with the respect to locating above ground flammable and combustible liquid and LPG tanks.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F36-07/08 202 (New)

Proponent: Larry Fluer, Fluer, Inc., representing Compressed Gas Association

Add new definition as follows:

SECTION 202 GENERAL DEFINITIONS

INERT GAS. A gas that is capable of reacting with other materials only under abnormal conditions such as high temperatures, pressures and similar extrinsic physical forces. Within the context of the code, inert gases do not exhibit either physical or health hazard properties as defined (other than acting as a simple asphyxiant) or hazard properties other than those of a compressed gas. Some of the more common inert gases include argon, helium, krypton, neon, nitrogen and xenon.

Reason: The term inert gas is used in a number of sections throughout the code. For example, in Section 1601.1 exception when ethylene is used in fruit ripening, in Section 2006.4 for process mills and kettles, in Section 2211.8.2 for repair of hydrogen systems in repair garages as well as in Chapters 30 Compressed Gases, Chapter 34 Flammable and Combustible Liquids, and Chapter 41 Pyrophoric Materials.

The term "inert gas" is also used in the IMC and the IFGC without definition. The proposed definition is not in conflict with the provisions found in either of these companion codes. The definition includes an explanatory sentence intended to inform the user that inert gases do not react readily with other materials under normal temperatures and pressures, but it is possible for a reaction to occur. For example, even nitrogen combines with some of the more active metals such as lithium and magnesium to form nitrides, and at high temperatures it will also combine with hydrogen, oxygen, and other elements. The rare inert gases neon, krypton and xenon are considered rare due to their scarcity. Although these gases are commonly referred to as inert gases the formation of compounds is possible. For example, xenon combines with fluorine to form various fluorides, and with oxygen to form oxides. The compounds formed are crystalline solids.

By defining the term the likely use of gases that are not inert including carbon dioxide will be avoided.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F37-07/08 202 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new definitions as follows:

SECTION 202 GENERAL DEFINITIONS

LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS. The lowest finished ground level on an approved fire apparatus access road at a location designated by the fire code official that would be used serve the subject building or structure for fire suppression operations.

HIGHEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS. The highest finished ground level on an approved fire apparatus access road at a location designated by the fire code official that would be used to serve the subject building or structure for fire suppression operations.

Reason: The term "Lowest Level of Fire Department Vehicle Access" is used 9 time in the IFC within Chapters 9 and 10 but is undefined in the IFC. The term "Highest Level of Fire Department Vehicle Access" is used in Chapter 9 Section 905.3.1 to determine the need for standpipes in basements but is undefined in the IFC. Both of these terms are key in many provisions of the IFC and guidance is needed to the fire code official, owner, contractor and design professional to clarify the intent.

The proposed definitions incorporate four key components: 1. lowest (or highest) finished grade, 2. location is on a fire apparatus access road, 3. the exact location on the fire apparatus access road is designated by the fire code official and, 4. the location serves the building or structure for manual fire suppression operations.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F38-07/08 202 (New)

Proponent: Jon Napier, Fire Department, City of Kent, WA, representing Washington State Building Code Council

Add new definition as follows:

SECTION 202 GENERAL DEFINITIONS

MOTOR VEHICLE. A vehicle, machine, tractor, trailer, or semitrailer, or any combination thereof, propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property. It does not include a vehicle, locomotive, or car operated exclusively on a rail or rails, or a trolley bus operated by electric power derived from a fixed overhead wire, furnishing local passenger transportation similar to street-railway service.

Reason: Motor vehicles are referred to in the IFC 43 times. Currently there is no definition that describes what a motor vehicle is or how it is used. Vessels have been defined in the recently adopted Chapter 46 and defining motor vehicles will differentiate them from vessels. It also helps with the definition of mobile fueling. This definition is also in CFR 49 Part 171.8 (See attached link). http://a257.g.akamaitech.net/7/257/2422/12feb20041500/edocket.access.gpo.gov/cfr 2004/octgtr/49cfr171.8.htm

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F39-07/08

202 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new definition as follows:

SECTION 202 GENERAL DEFINITIONS

PERMIT. An official document or certificate issued by the fire code official which authorizes performance of a specified activity.

Reason: The proposed definition is similar to the one utilized in the IBC Section 202 with the exception that "authority having jurisdiction" has been changed to "fire code official." The definition is needed as the term "permit" is utilized throughout the IFC but it is currently undefined.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committe	e: AS	AM	D
Assembly	y: ASF	AMF	DF

F40-07/08 301.1, 507, 316 (New), 401.5

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

1. Revise as follows:

CHAPTER 3 GENERAL PRECAUTIONS AGAINST FIRE REQUIREMENTS

SECTION 301 GENERAL

301.1 Scope. The provisions of this chapter shall govern the occupancy and maintenance of all structures and premises for precautions against fire and the spread of fire <u>and general requirements of fire safety</u>.

2. Delete Section 507 and relocate to new Section 316 as follows:

SECTION 507 316 HAZARDS TO FIRE FIGHTERS

507.1 <u>316.1</u> **Trapdoors to be closed.** Trapdoors and scuttle covers, other than those that are within a dwelling unit or automatically operated, shall be kept closed at all times except when in use.

507.2 316.2 Shaftway markings. Vertical shafts shall be identified as required by this section.

507.2.1 <u>316.2.1</u> Exterior access to shaftways. Outside openings accessible to the fire department and which open directly on a hoistway or shaftway communicating between two or more floors in a building shall be plainly marked with the word SHAFTWAY in red letters at least 6 inches (152 mm) high on a white background. Such warning signs shall be placed so as to be readily discernible from the outside of the building.

507.2.2 <u>316.2.2</u> Interior access to shaftways. Door or window openings to a hoistway or shaftway from the interior of the building shall be plainly marked with the word SHAFTWAY in red letters at least 6 inches (152 mm) high on a white background. Such warning signs shall be placed so as to be readily discernible.

Exception: Marking shall not be required on shaftway openings which are readily discernible as openings onto a shaftway by the construction or arrangement.

507.3 <u>316.3</u> Pitfalls. The intentional design or alteration of buildings to disable, injure, maim or kill intruders is prohibited. No person shall install and use firearms, sharp or pointed objects, razor wire, explosives, flammable or combustible liquid containers, or dispensers containing highly toxic, toxic, irritant or other hazardous materials in a manner which may passively or actively disable, injure, maim or kill a fire fighter who forcibly enters a building for the purpose of controlling or extinguishing a fire, rescuing trapped occupants or rendering other emergency assistance.

3. Relocate current code Section 401.5 to new Section 316.4 as follows:

401.5 <u>316.4</u> **Security device.** Any security device or system that emits any medium that could obscure a means of egress in any building, structure or premise shall be prohibited.

Reason: Section 507 is relocated from Chapter 5 to Chapter 3 since the scope of Chapter 5 is "fire service features". These requirements are not components or features for the fire service. These issues are general hazards that could exist in any building. Chapter 3 is retitled to "general requirements" and with the revision in the scope this is a more appropriate location for these requirements.

Section 401.5 is also relocated to this new Section 316 addressing FF Hazards. When a user of the IFC looks for this regulation, the user is probably going to look in another location besides Chapter 4 as this is not an emergency planning and preparedness issue.

There is no change in the application or the intent of the code text. These sections are merely relocated to provide a more logical location for finding and applying these provisions.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Comr	nittee: A	S	AM	D
Asser	mbly: A	SF	AMF	DF

F41-07/08

304.3.2

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Revise as follows:

304.3.2 Capacity exceeding 5.33 cubic feet. Containers with a capacity exceeding 5.33 cubic feet (40 gallons) (0.15m³) shall be provided with lids. Containers and lids shall be constructed of noncombustible materials or approved combustible materials with a peak rate of heat release not exceeding 300 kW/m² when tested in accordance with <u>ASTM E 1354 at an incident heat flux of 50 kW/m² in the horizontal orientation</u>.

Exception: Waste baskets in Group I-3 occupancies shall comply with Section 808.1.

Reason: Most nonmetallic waste containers are manufactured from polyethylene which has a fuel value of 20,050 btu per pound compared to newsprint at 9,000 btu per pound. To contain combustible waste in another combustible material which has twice the fuel potential value makes little sense. This change will eliminate the possibility of using larger non retardant polyethylene trash containers within a structure. The current language "Approved combustible material" provides no direction. DuPont and Rubbermaid have had the formulation for years to make a retardant polyethylene.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F42-07/08

304.3.4 (New)

Proponent: James E. Everitt, Everitt and Associates, representing himself

Add new text as follows:

304.3.4 Plastic dumpsters exceeding one cubic yard. Plastic dumpsters having a peak rate of heat release exceeding 300 kW/m2 at an incident flux of 50 kW/m2 in the horizontal orientation when tested in accordance with ASTM E 1354 shall not be stored within buildings or placed within 15 feet of combustible walls, openings, or combustible roof lines.

Exceptions:

- 1. Dumpsters or containers in areas protected by an approved automatic sprinkler system complying with Chapter 9.
- 2. Storage in a structure shall not be prohibited where the structure is of Type I or Type IIA construction, located not less than 10 feet (3048mm) from other buildings and used exclusively for dumpster or container storage

Reason: 03 Commentary Although waste containers of this size (1.5 yards) are nearly always constructed of welded steel because of the weight of the waste load, the very fact that the waste load is large makes the containers a large fire hazard.

Medium density polyethylene dumpsters up to nine cubic yards are now being distributed which have a fuel content of 20,020btu per pound (municipal solid waste averages 4,500btu lb). Medium density polyethylene is essentially equal to the fuel value for gasoline! This material becomes a burning liquid spreading and flowing, it is an unnecessary risk to place them five feet away from a nearby structure. <u>"FIRE LOSS IN THE UNITED STATES DURING 2005</u>" States: Fires in rubbish outside of structures including dumpsters have increased

10.8% nationally from 2004.



POLYETHYLENE CART

Cost Impact: The code change proposal will not increase the cost of construction. The use of these containers is not wide spread.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F43-07/08 307.1.1

Proponent: A. Keith Brown, North Metro Fire Rescue District, representing Fire Marshal's Association of Colorado

Revise as follows:

307.1.1 Prohibited open burning. Open burning that is offensive or objectionable because of smoke or odor emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Reason: The purpose of the proposed code change is to delete a prohibition imposed by the code; namely, a prohibition against offensive or objectionable smoke or odors resulting from open burning. Enforcement of said prohibition is inherently arbitrary and capricious because the current code language compels the Fire Code Official to render an unreasonably subjective and irreproducible judgment in the absence of quantitative guidelines provided in Section 307 or referenced standards. The proposed language preserves those historic prohibitions, such as high winds (atmospheric conditions) and/or drought (local circumstances), that are demonstrably linked to fire behavior.

Cost Impact: The code change will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F44-07/08 307.4.3 (New), 307.5, 302.1, 307

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

1. Add new text as follows:

307.4.3 Portable outdoor fireplaces. Portable outdoor fireplaces shall not be operated within 15 feet (3048 mm) of a structure or combustible material.

Exception: Portable outdoor fireplaces used in accordance with manufacturer's instructions at one- and two-family dwellings.

2. Revise as follows:

307.5 Attendance. Open burning, bonfires, or recreational fires and use of portable outdoor fireplaces shall be constantly attended until the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.

3. Revise definitions as follows:

302.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

OPEN BURNING. The burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. Open burning does not include road flares, smudgepots and similar devices associated with safety or occupational uses typically considered open flames. or recreational fires or use of portable outdoor fireplaces. For the purpose of this definition, a chamber shall be regarded as enclosed when, during the time combustion occurs, only apertures, ducts, stacks, flues or chimneys necessary to provide combustion air and permit the escape of exhaust gas are open.

PORTABLE OUTDOOR FIREPLACE. A portable, outdoor, solid-fuel-burning fireplace that may be constructed of steel, concrete, clay or other noncombustible material. A portable outdoor fireplace may be open in design, or may be equipped with a small hearth opening and a short chimney or chimney opening in the top.

RECREATIONAL FIRE. An outdoor fire burning materials other than rubbish where the fuel being burned is not contained in an incinerator, outdoor fireplace, <u>portable outdoor fireplace</u>, barbeque grill or barbeque pit and has a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height for pleasure, religious, ceremonial, cooking, warmth or similar purposes.

4. Revise section title as follows:

SECTION 307 OPEN BURNING, AND RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES

Reason: This proposal adds a definition for portable outdoor fireplace and makes minor revision to definitions of open burning and recreational fire for clarification. The proposed addition of subsection 307.4.3 Portable Outdoor Fireplaces makes clear that the use of these devices is specifically regulated.

Portable outdoor fireplaces designed to burn solid fuel are available at retailers ranging from the local grocery to hardware store to big box retailers. Their widespread availability and use has created considerable confusion for citizens and the fire service as to how or if they are regulated by the IFC.

Fires in portable outdoor fireplaces cannot be considered a "recreational fire" because critical to that definition is the concept that the fire is not contained in an incinerator, outdoor fireplace, barbeque grill or barbeque pit. Some may then suggest that a portable outdoor fireplace is merely a type of "outdoor fireplace", but the IFC doesn't contain any references pertaining to where an outdoor fireplace can be located or operated.

Under the definition of open burning, the IFC commentary refers to patio fireplaces and states "These devices neither meet the literal definition of "open burning" nor is their use the type of burning intended to be regulated by Section 307, ..." However, the use and any hazard associated from operating a patio fireplace is closer to the type of activities regulated in Section 307 than use of other specific types of open flame addressed in Section 308. The current IFC Sections 307 and 308 are essentially silent on use of this specific type of device.

The proposal prohibiting use of portable outdoor fireplaces within 15 feet from any structure replicates the first exception under 307.4 Location. However, the proposal allows an exception for use of patio fireplaces at one- and two-family dwellings.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee: AS	AM	D
Assembly: ASF	AMF	DF

F45-07/08 308.3, 308.3.1, 308.3.2

Proponent: Michael E. Dell'Orfano, South Metro Fire Rescue, representing Fire Marshal's Association of Colorado

Revise as follows:

308.3 Open flame <u>decorative devices</u>. Open flame decorative devices shall be used in accordance with this section. A person shall not utilize or allow to be utilized, an open flame in connection with a public meeting or gathering for purposes of deliberation, worship, entertainment, amusement, instruction, education, recreation, awaiting transportation or similar purpose in Group A or E occupancies without first obtaining a permit in accordance with Section 105.6.

308.3.1 <u>308.7</u> (Supp) Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

- 1. One- and two-family dwellings.
- 2. Where buildings, balconies and decks are protected by an automatic sprinkler system.
- 3. LP-gas cooking devices having LP gas container with a water capacity not greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

308.3.2 <u>308.3.1</u> Open-flame decorative devices General requirements. Open-flame decorative devices shall comply with all of the following restrictions:

1. through 10. (No change to current text)

Reason: The purpose of this code change proposal is to clarify the scope of IFC Section 308.3. The way 308.3 is currently written can lead someone to believe that this section only applies to Group A and E occupancies. However, that charging paragraph only says that those uses need a permit per 105.6. This is further supported by the fact that Section 308.3.8 addresses Group R-2 Dormitories. Also, with the exception of the cooking device subsection, all other components of 308.3 appear to only address open-flame decorative devices. Therefore, the title of 308.3 was changed to reflect this scope, open-flame cooking devices were moved to a stand-alone section (similar to food preparation, torches, portable-fueled devices, etc.), and the title of 308.3.2 was changed to "general requirements" to reflect its intended use. General permit requirements are already addressed in 301.2.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F46-07/08

308.3.1

Proponent: Michael E. Dell'Orfano, South Metro Fire Rescue, representing Fire Marshal's Association of Colorado

Revise as follows:

308.3.1 (Supp) Open-flame cooking devices. Charcoal burners, LP-gas burners having an LP-gas container with a water capacity greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity], and other open-flame cooking devices shall not be operated on combustible balconies or within 10 ft (3048 mm) of any combustible construction.

Exceptions:

- 1. One- and two-family dwellings.
- 2. Where buildings, balconies and decks are protected by an automatic sprinkler system, and any LP-gas containers are not greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].
- 3. LP gas cooking devices having an LP gas container with a water capacity not greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

Reason: F28-06/07 was approved as submitted during the code hearings in Orlando, which combined Sections 308.3.1 and 308.3.1.1 of the 2006 IFC. This was intended to be only an editorial change to make the sections easier to use, without attempting to change the intent of those sections. However, the end result did change the original intent of the code. In order to be consistent with the original intent of the 2006 IFC, it is necessary to add the words in Exception #2 proposed by this code change. While there was an exception for one- and two-family dwellings in both 2006 IFC Sections 308.3.1.1, the sprinkler exception was only found in Section 308.3.1. Therefore, the original intent of the 2006 IFC was to prohibit cooking devices utilizing LP-gas cylinders greater than 2.5 pounds, even with sprinkler protection. This logic is supported by the 2003 IFC Commentary which states "Section 308.3.1.1... contains a very specific regulation for only LP-gas-fired cooking devices in the described locations and would, therefore, take precedence over the general provisions of this [308.3.1] section."

This proposal also re-locates Exception #3 to the charging paragraph in order to help the whole section work better. The end result is the same with LP-gas cylinders up to 2.5 pounds allowed, regardless of sprinkler protection.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	S AM	D
Ū.	Assembly:	AS	SF AMI	F DF

F47-07/08

308.3.1

Proponent: Joseph T. Holland, III, Hoover Treated Wood Products

Revise as follows:

308.3.1 (Supp) Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

- 1. One- and two-family dwellings.
- Where buildings, balconies and decks are protected by an automatic sprinkler system, or 1-hr or greater fire-resistance rated construction, or Type IV construction in accordance with Section 602.4 of the International Building Code, or fire-retardant-treated wood in accordance with Section 2303.2 of the International Building Code.
- 3. LP-gas cooking devices having LP gas container with a water capacity not greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

Reason: Allow other means to achieve protection of the balcony. A fire rated assembly, heavy timber and fire-retardant-treated wood are recognized as providing fire protection; heavy timber because of its dimensions and FRTW because of the treatment. All three are already recognized in the building code (Section 1406.3) for protecting balconies in addition to sprinklers.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F48-07/08

308.3.1

Proponent: Michael E. Dell'Orfano, South Metro Fire District, representing Fire Marshal's Association of Colorado

Revise as follows:

308.3.1 <u>308.7</u> (Supp) Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 ft (3048 mm) of any combustible construction.

Exceptions:

- 1. One- and two-family dwellings.
- 2. Where buildings, balconies and decks are protected by an automatic sprinkler system.
- 3. LP-gas cooking devices having an LP-gas container with a water capacity not greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

Reason: The focus of IFC Section 308.3 appears to be on open-flame decorative devices and their related uses. The flow and intent of Section 308.3 gets confused when a stand-alone topic such as "open-flame cooking devices" is inserted. Therefore, the purpose of this code change proposal is to remove open-flame cooking device regulations from Section 308.3 and create a new section (308.7) to address this issue. Section 308.7, then, would be similar to Sections 308.5 and 308.6 which address other stand-alone, specific topics.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F49–07/08 308.3.2, 308.3.3 (New)

Proponent: A. Keith Brown, North Metro Fire Rescue District, representing Fire Marshal's Association of Colorado

1. Revise as follows:

308.3.2 <u>Liquid-fueled</u> <u>Open flame decorative devices</u>. <u>Liquid-fueled</u> <u>Open-flame decorative devices shall comply</u> with all of the following restrictions:

- 1. Class I and Class II liquids and LP-gas shall not be used.
- 2. Liquid-or solid-fueled lighting devices containing more than 8 ounces (237 ml) of fuel must self-extinguish and not leak fuel at a rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.
- 3. The device or holder shall be constructed to prevent the spillage of liquid fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) when the device or holder is not in an upright position.
- 4. The device or holder shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.

Exception: Devices that self-extinguish if tipped over and do not spill fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.

- 5. The flame shall be enclosed except where openings on the side are not more than 0.375 inch (9.5 mm) diameter or where openings are on the top and the distance to the top is such that a piece of tissue paper placed on the top will not ignite in 10 seconds.
- 5. Chimneys shall be made of noncombustible materials and securely attached to the open-flame device.

Exception: A chimney is not required to be attached to any open-flame device that will self-extinguish if the device is tipped over.

- 7. Fuel canisters shall be safely sealed for storage.
- 8. Storage and handling of combustible liquids shall be in accordance with Chapter 34.
- 9. Shades, where used, shall be made of noncombustible materials and securely attached to the open-flame device holder or chimney.
- 10. Candelabras with flame lighted candles shall be securely fastened in place to prevent overturning, and shall
be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.

2. Add new text as follows:

308.3.3 Solid-fueled open-flame decorative devices. Solid-fueled open-flame decorative devices shall comply with all of the following:

- 1. The device shall be securely supported on a substantial noncombustible base.
- Solid-fueled lighting devices containing more than 8 ounces (226.8 g) of fuel must self-extinguish if tipped over.
- 3. The device or holder shall be constructed to prevent the spillage of wax when the device or holder is not in an upright position.
- 4. The device or holder shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.
- 5. Chimneys shall be made of noncombustible materials and securely attached to the open-flame device.
- 6. <u>Shades, where used, shall be made of noncombustible materials and securely attached to the open-flame</u> <u>decorative device holder or chimney.</u>
- 7. Candelabras shall be securely fastened in place to prevent overturning, and shall be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.

(Renumber subsequent sections)

Reason: The purpose of the proposed code change is to clarify which of the enumerated restrictions apply only to liquid-fueled devices, which apply only to solid-fueled devices, and which apply to both types of devices. For example, leak rates (currently Items 2, 3, and 4) apply to liquid-fueled devices but do not apply to solid-fueled devices such as paraffin candles. The restructuring of 308.3.2 into two subsections (liquid-fueled and solid-fueled) facilitates that clarification. Overall, this proposed code reorganization neither adds nor omits any restrictions pertaining to open-flame decorative devices.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F50-07/08

308.3.7

Proponent: A. Keith Brown, North Metro Fire Rescue District, representing Fire Marshal's Association of Colorado

Revise as follows:

308.3.7 Group A occupancies. Open-flame devices shall not be used in a Group A occupancy.

Exceptions:

- 1. Open-flame devices are allowed to be used in the following situations, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants:
 - 1.1. Where necessary For ceremonial or religious purposes in accordance with Section 308.3.5.
 - 1.2. On stages and platforms as a necessary part of a performance in accordance with Section 308.3.6.
 - 1.3. Where candles on tables are securely supported on substantial noncombustible bases and the candle flames are protected open-flame decorative devices are used in accordance with Sections 308.3.2, 308.3.3 and 308.3.4.
- 2. Heat-producing equipment complying with Chapter 6 and the International Mechanical Code.
- 3. Gas lights are allowed to be used provided adequate precautions satisfactory to the fire code official are taken to prevent ignition of combustible materials.

Reason: The purpose of the proposed code change is to provide parallel wording among the three items listed under Exception 1 and to make the use of open-flame decorative devices in Group A occupancies at least as stringent as the IFC requires in other occupancies. As currently written, Exception 1 Item 1.3 imposes less restrictive safety requirements for candles used in Group A occupancies than Sections 308.3.2, 308.3.3, and 308.3.4 impose for candles and other open-flame decorative devices generally. Such less restrictive use of open-flame devices in Group A

occupancies is the antithesis of the intent of the general requirement of Section 308.3.7 that open-flame devices shall not be used at all in a Group A occupancy due to the inherent need for enhanced life safety appropriate for that occupancy group. Additionally, the current wording of Item 1.3 is specific only to "candles on tables" while the language in the principal part of Exception 1 is clearly intended to apply to all open-flame devices; the proposed revision eliminates the undue specificity of the current Item 1.3.

Striking the word "necessary" in both Items 1.1 and 1.2 of Exception 1 eliminates extraneous language. The apparent intent of these items is to allow the use of open-flame devices during religious ceremonies or theatrical performances in Group A occupancies rather than to give the fire code official the opportunity to deny the use of open-flame devices on the grounds that said use is not "necessary." The proposed changes will prevent arguments over what is or is not "necessary," thus allowing the application of Exception 1 to focus on the safety procedures employed.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F51-07/08

Proponent: Ian MacDonald, Fire Department, City of Orange, CA, representing California Fire Chiefs Association

1. Revise as follows:

308.1 General. Open flame, fire and burning on all premises shall be in accordance with Sections 308.1 through 308.4, and with other applicable sections of this code. This section shall control open flames, fire and burning on all premises.

308.2 <u>308.1.1</u> Where prohibited. A person shall not take or utilize an open flame or light in a structure, vessel, boat or other place where highly flammable, combustible or explosive material is utilized or stored. Lighting appliances shall be well-secured in a glass globe and wire mesh cage or a similar approved device.

308.2.1 <u>308.1.2</u> Throwing or placing sources of ignition. No person shall throw or place, or cause to be thrown or placed, a lighted match, cigar, cigarette, matches, or other flaming or glowing substance or object on any surface or article where it can cause an unwanted fire.

308.4 <u>308.1.3</u> **Torches for removing paint.** Persons utilizing a torch or other flame-producing device for removing paint from a structure shall provide a minimum of one portable fire extinguisher complying with Section 906 and with a minimum 4-A rating, two portable fire extinguishers, each with a minimum 2-A rating, or a water hose connected to the water supply on the premises where such burning is done. The person doing the burning shall remain on the premises 1 hour after the torch or flame-producing device is utilized.

308.3.1 (Supp) <u>308.1.4</u> Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

- 1. One- and two-family dwellings.
- 2. Where buildings, balconies and decks are protected by an automatic sprinkler system.

3. <u>308.1.4.1</u> Liquefied-petroleum-gas-fueled cooking devices. LP-gas cooking devices having LP gas containers with a water capacity not greater than 2.5 pounds (nominal 1 pound (0.454 kg) LP-gas capacity) shall not be located on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exception: One- and two-family dwellings.

308.3.3 <u>308.1.5</u> Location near combustibles. Open flames such as from candles, lanterns, kerosene heaters, and gas-fired heaters shall not be located on or near decorative material or similar combustible materials.

308.5 (Supp) <u>308.1.6</u> Open-flame devices. Torches and other devices, machines or processes liable to start or cause fire shall not be operated or used in or upon wildfire risk areas, except by a permit in accordance with Section 105.6 secured from the fire code official.

Exception: Use within inhabited premises or designated campsites which are a minimum of 30 feet (9144 mm) from grass-, grain-, brush- or forest-covered areas.

308.5.1 (Supp) 308.1.6.1 Signals and markers. Flame-employing devices, such as lanterns or kerosene road flares, shall not be operated or used as a signal or marker in or upon wildfire risk areas.

Exception: The proper use of fuses at the scenes of emergencies or as required by standard railroad operating procedures.

308.5.2 308.1.6.2 Portable fueled open-flame devices. Portable open-flame devices fueled by flammable or combustible gases or liquids shall be enclosed or installed in such a manner as to prevent the flame from contacting combustible material.

Exceptions:

- 1. LP-gas-fueled devices used for sweating pipe joints or removing paint in accordance with Chapter 38.
- 2. Cutting and welding operations in accordance with Chapter 26.
- 3. Torches or flame-producing devices in accordance with Section 308.4.
- Candles and open-flame decorative devices in accordance with Section 308.3.

2. Add new text as follows:

308.2 Permits required. Permits shall be obtained from the fire code official in accordance with Section 105.6 prior to engaging in the following activities involving open flame, fire and burning:

- Use of a torch or flame-producing device to remove paint from a structure.
- Use of open flame, fire or burning in connection with Group A or E occupancies.
- <u>2.</u> <u>3.</u> Use or operation of torches and other devices, machines or processes liable to start or cause fire in or upon hazardous fire areas.

3. Revise as follows:

308.3.7 308.3 Group A occupancies. Open-flame, -devices fire and burning shall not be used allowed in a-Group A occupancy occupancies unless specifically permitted by the fire code official, and used in accordance with the requirements of Sections 308.1 and 308.3.

Exceptions:

- 1. Open-flame devices are allowed to be used in the following situations, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants:
 - Where necessary for ceremonial or religious purposes in accordance with Section 308.3.5. 1.1.
 - 1.2. On stages and platforms as a necessary part of a performance in accordance with Section 308.3.6.
 - Where candles on tables are securely supported on substantial noncombustible bases and the 1.3. candle flames are protected.
- 2. Heat-producing equipment complying with Chapter 6 and the International Mechanical Code.
- 3. Gas lights are allowed to be used provided adequate precautions satisfactory to the fire code official are taken to prevent ignition of combustible materials.

308.3.2 308.3.1 Candles and other open-flame decorative devices. Candles and other open-flame decorative devices in drinking and dining establishments shall comply with all of the following restrictions:

- 1. Class I and Class II liquids and LP-gas shall not be used.
- 2. Liquid- or solid-fueled lighting devices containing more than 8 ounces (237 ml) of fuel must self-extinguish and not leak fuel at a rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.
- 3. The device or holder shall be constructed to prevent the spillage of liquid fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) when the device or holder is not in an upright position.
- 4. The device or holder shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.

Exception: Devices that self-extinguish if tipped over and do not spill fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.

5. The flame shall be enclosed except where openings on the side are not more than 0.375 inch (9.5 mm) diameter or where openings are on the top and the distance to the top is such that a piece of tissue paper placed on the top will not ignite in 10 seconds.

6. Chimneys shall be made of noncombustible materials and securely attached to the open-flame device.

Exception: A chimney is not required to be attached to any open-flame device that will self-extinguish if the device is tipped over.

- 7. Fuel canisters shall be safely sealed for storage.
- 8. Storage and handling of combustible liquids shall be in accordance with Chapter 34.
- 9. Shades, where used, shall be made of noncombustible materials and securely attached to the open-flame device holder or chimney.
- 10. Candelabras with flame-lighted candles shall be securely fastened in place to prevent overturning, and shall be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.

308.3.5 <u>308.3.1.1</u> **Religious ceremonies.** When, in the opinion of the fire code official, adequate safeguards have been taken, participants in religious ceremonies are allowed to carry hand-held candles. Hand-held candles shall not be passed from one person to another while lighted.

308.3.4 308.3.1.2 Aisles and exits. Candles shall be prohibited in areas where occupants stand, or in an aisle or exit.

308.6 <u>308.3.2</u> Flaming food and beverage preparation. The preparation of flaming foods or beverages in places of assembly and drinking or dining establishments areas, dining areas of restaurants and drinking establishments shall be in accordance with Sections 308.6.1 <u>308.3.2.1</u> through 308.6.5 <u>308.3.2.5</u>.

308.6.1 <u>308.3.2.1</u> **Dispensing.** Flammable or combustible liquids used in the preparation of flaming foods or beverages shall be dispensed from one of the following:

- 1. A 1-ounce (29.6 ml) container; or
- 2. A container not exceeding 1-quart (946.5 ml) capacity with a controlled pouring device that will limit the flow to a 1-ounce (29.6 ml) serving.

308.6.2 308.3.2.2 Containers not in use. Containers shall be secured to prevent spillage when not in use.

308.6.3 <u>308.3.2.3</u> Serving of flaming food. The serving of flaming foods or beverages shall be done in a safe manner and shall not create high flames. The pouring, ladling or spooning of liquids is restricted to a maximum height of 8 inches (203 mm) above the receiving receptacle.

308.6.4 <u>308.3.2.4</u> Location. Flaming foods or beverages shall be prepared only in the immediate vicinity of the table being serviced. They shall not be transported or carried while burning.

308.6.5 <u>308.3.2.5</u> Fire protection. The person preparing the flaming foods or beverages shall have a wet cloth towel immediately available for use in smothering the flames in the event of an emergency.

308.3.6 <u>308.3.3</u> Theatrical performances. Where approved <u>permitted</u>, open-flame devices used in conjunction with theatrical performances are allowed to be used when adequate safety precautions have been taken in accordance with NFPA 160.

4. Add new text as follows:

308.4 Group R Occupancies. Open flame, fire and burning in Group R occupancies shall comply with the requirements of Sections 308.1 through 308.1.6.2 and 308.4.1.

5. Revise as follows:

308.3.8 <u>308.4.1</u> Group R-2 dormitories. Candles, incense and similar open-flame-producing items shall not be allowed in sleeping units in Group R-2 dormitory occupancies.

Reason: This proposal creates consistency within Section 308, consistency with the language in Sections 105.6.30, 105.6.31, and 105.6.32 (permits), and with the rest of the fire code. Specifically, it cleans up inconsistent code language, reformats the section to provide more consistency with the rest of the code as well as improving the logical flow of the section, moves open-flame cooking devices out from underneath Group A and E occupancy requirements, and allows for sections related to open flame, fire and burning in other areas of the code (e.g. Sections 1503.2.2. and 1103.1).

Justification for revisions and new text is as follows:

Section 308.1 This language specifies all of the subsections in section 308, as is consistent with other IFC code language. Provisions are added for required compliance with the remainder of the code.

Sections 308.1.1 through 308.1.6.2 All of the general code sections have been moved to 308.1, which is appropriately named "General." Sections containing special requirements according to occupancies groups contain language requiring compliance with the specific and general requirements. This language is consistent with the remainder of the fire code (e.g. Section 2704.1).

Section 308.1.4 has been moved from 308.3.1. It was originally a subsection of 308.3, which contained requirements for obtaining a permit for open flame in Group A and E occupancies. Section 308.3.1 and 308.3.1.1 should not only apply to open-flame cooking devices within Group A and E occupancies, especially with exceptions for one- and two-family dwellings.

Section 308.2 New text was added for permits. The ".2" subsection is consistent within the code for permit information.

Section 308.3 The language was modified for consistency with Section 308.1. The revised language also ensures compliance with both the general and specific requirements.

Section 308.3.1 The addition of candles in the language provides clarity to the requirements without diminishing them. The more general reference to drinking and dining establishments is appropriate, as there should not be the differentiation between the kitchen and dining areas of the restaurant in this case. The differentiation is appropriate when addressing flaming food and beverage preparation, which is appropriately conducted in the kitchen.

Section 308.3.2 The differentiation between assembly, drinking and dining areas of restaurants and drinking establishments, and the kitchen or preparation areas.

Section 308.4 The added language ensures compliance with both the general and specific requirements of Section 308, and is also consistent with the rest of the fire code language.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F52-07/08

310

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Revise as follows:

SECTION 310 SMOKING

310.1 General. The smoking or carrying of a lighted pipe, cigar, cigarette or any other type of smoking paraphernalia or material is prohibited in the areas indicated in this section. Where required by the fire code official, a written smoking policy shall be developed. The smoking policy shall include, but not be limited to, the requirements in 310.2 through 310.7.

310.2 Prohibited areas. Smoking shall be prohibited where conditions are such as to make smoking a <u>fire</u> hazard and in spaces where flammable or combustible materials are stored or handled.

310.2.1 Medical oxygen. Smoking shall be prohibited in rooms or areas where medical oxygen is in use.

310.3 "**No Smoking**" **signs.** The fire code official is authorized to order the posting of "No Smoking" signs in a conspicuous location in each structure or location in which smoking is prohibited. The content, lettering, size, color and location of required "No Smoking" signs shall be approved.

310.4 Removal of signs prohibited. A posted "No Smoking" sign shall not be obscured, removed, defaced, mutilated or destroyed.

310.5 Compliance with "No Smoking" signs. Smoking shall not be permitted nor shall a person smoke, throw or deposit any lighted or smoldering substance in any place where "No Smoking" signs are posted.

310.6 Ash trays. Where smoking is permitted, suitable noncombustible ash trays or match receivers shall be provided on each table and at other appropriate locations. <u>Metal trash containers with self-closing lids shall be available for emptying ashtrays in areas where smoking is permitted.</u>

310.7 Burning objects. Lighted matches, cigarettes, cigars or other burning object shall not be discarded in such a manner that could cause ignition of other combustible material.

310.8 Hazardous environmental conditions. When the fire code official determines that hazardous environmental conditions necessitate controlled use of smoking materials, the ignition or use of such materials in mountainous, brush-covered or forest-covered areas or other designated areas is prohibited except in approved designated smoking areas.

Reason: Smoking can be an extremely hazardous situation. There are specific times when smoking must be prohibited based on the hazard and the location. This proposal enhances the smoking requirements in the IFC and clarifies the requirements.

In 310.1 the fire code official can require a written smoking policy when necessary. This typically would occur in a facility where smoking is allowed in some areas and not in others, and there is a higher fire hazard or life hazard present.

310.2 is revised to simplify the requirement and states that if smoking is a fire hazard, for whatever reason, then smoking is not allowed.

310.1 is added to address the use of medical oxygen. This would be applicable to either patients in a health care facility or elsewhere. 310.6 is revised to clarify that not only are the ashtrays to be noncombustible, but also the trash container that the ashtrays are dumped into

needs to be noncombustible.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F53-07/08

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Revise as follows:

311.2.2 Fire protection. Fire alarm, sprinkler and standpipe systems shall be maintained in an operable condition at all times.

Exceptions:

- 1. When the premises have been cleared of all combustible materials and debris and, in the opinion of the fire code official, the type of construction, fire separation distance and security of the premises do not create a fire hazard.
- 2. Where <u>approved</u>, buildings <u>that</u> will not be heated and <u>where</u> fire protection systems will be exposed to freezing temperatures, fire alarm and sprinkler systems are permitted to be placed out of service and standpipes are permitted to be maintained as dry systems (without an automatic water supply) provided the building has no contents or storage, and windows, doors and other openings are secured to prohibit entry by unauthorized persons.

Reason: This proposal will require that the allowance to place either a fire sprinkler system or a fire alarm system out of service must be approved. It will not be an automatic allowance and acceptable practice. This proposal only indicates "approval" which will require that the use of this exception is approved by what ever process the local jurisdiction determines to be appropriate. It may need to include the fire code official, building code official, and fire chief, or any combination of these positions.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F54-07/08

311.5.4

Proponent: Sean DeCrane, Fire Department, Cleveland, OH, representing International Association of Fire Fighters, Local 93

Revise as follows:

311.5.4 Placard symbols. The design of the placards shall use the following symbols:

- 1. [] This symbol shall mean that the structure had normal structural conditions at the time of marking.
- 2. [\] This symbol shall mean that structural or interior hazards exist and interior fire-fighting or rescue operations should be conducted with extreme caution.
- 3. [X] This symbol shall mean that structural or interior hazards exist to a degree that consideration should be given to limit fire fighting to exterior operations only, with entry only occurring for known life hazards.

- 4. <u>Vacant Marker Hazard Identification Symbols: The following symbols shall used to designate known hazards</u> on the Vacant Building Marker. They shall be painted directly above the symbol.
 - 4.1. <u>R/O Roof Open</u>
 - 4.2. S/M Stairs, Steps and Landing Missing
 - 4.3. F/E Avoid Fire Escapes
 - 4.4. <u>H/F Holes in Floor</u>

Reason: There are a number of cities that are now requiring their fire departments to identify, and label, vacant buildings and the hazards they present to fire fighters. A vacant building can contain many hazards and unknowns to a responding fire fighter. During normal fire company operations, or after a response to a fire in a vacant structure, the fire department can simply paint, or use a placard, to designate the hazards encountered in the structure. By labeling the various degrees of hazards, the incident commanders can restrict operations to strictly defensive or cautious offensive operations. Simply identifying the known hazards allows the Incident Commander to have a clearer picture of the hazards contained in the building.

Cost Impact: The code change proposal will increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F55-07/08

313.1

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Revise as follows:

313.1 General. Fueled equipment, including but not limited to motorcycles, mopeds, lawn-care equipment, <u>portable</u> <u>generators</u> and portable cooking equipment, shall not be stored, operated or repaired within a building.

Exceptions:

- 1. Buildings or rooms constructed for such use in accordance with the International Building Code.
- 2. Where allowed by Section 314.
- Storage of equipment utilized for maintenance purposes is allowed in approved locations when the aggregate fuel capacity of the stored equipment does not exceed 10 gallons (38 L) and the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

Reason: This revision is needed to clarify that portable generators are not allowed for use inside buildings based on the current code text. The only exception to this is when utilized in accordance with one of the exceptions. This provision clarifies the current intent of the code. As the result of recent tragic hurricanes it was documented that multiple fatalities occurred as the result of the improper use and location of portable generators.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee	: AS	AM	D
Assembly:	ASF	AMF	DF

F56– 07/08 315.3.1

Proponent: Ernest Little, Captain-Code Compliance, Prince William County, VA Fire Marshals Office

Revise as follows:

315.3.1 Storage beneath overhead projections from buildings. Combustible materials stored or displayed outside of buildings that are protected by automatic sprinklers shall not be stored or displayed under nonsprinklered eaves, canopies or other projections or overhangs. Where buildings are required to be protected by automatic sprinklers, the outdoor storage, display, and handling of combustible materials under eaves, canopies or other projections or overhangs is prohibited except where automatic sprinklers are installed under such eaves, canopies or other projections or other projection

Reason: The purpose of this code language change is to clarify the requirement for automatic sprinklers, where automatic sprinklers are "required" to be installed to protect the building, to protect the space <u>under</u> eaves, canopies, or other projections or overhangs when combustibles are stored, displayed, or handled there. When a building is "required" to have an automatic sprinkler system installed throughout, NFPA 13, the standard for installation of sprinkler systems, has clear intention to have this space protected by automatic sprinklers. This NFPA standard has been the adopted reference in the past by the BOCA Basic Building Code and IBC for installation of automatic sprinklers. NFPA 13- 02 section 8-14.7.4 states "Sprinklers shall be installed under roofs or canopies over areas where combustibles are stored and handled." The intent of this requirement is to prevent a fire involving the combustible materials stored or handled under a roof or canopy, from entering the overhead area and getting above the sprinkler system protecting the structure, thus overwhelming the fire protection system preventing control and extinguishment of the fire. The NFPA 13 standard requires automatic sprinklers "in" the canopy or an overhead structure when it contains combustible construction <u>and</u> under the canopy or overhead structure when combustibles are stored, displayed, or handled under it. The current language contained in the IFC is not clear as to the need for automatic sprinklers "under" the overhead structure. When challenged, the current code section, as written, could be interpreted as only requiring automatic sprinklers "under" the conopy. The code change provides the necessary clarification of the code requirement.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F57–07/08 316 (New), 302.1 (New), 202 (New)

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Add new text as follows:

SECTION 316 WILDLAND-URBAN INTERFACE AREAS

316.1 General. Buildings, structures or premises within wildland-urban interface areas shall comply with the *International Wildland-Urban Interface Code*.

SECTION 302 DEFINITIONS

302.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

WILDLAND-URBAN INTERFACE AREA. That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

SECTION 202 DEFINITIONS GENERAL DEFINITIONS

WILDLAND-URBAN INTERFACE AREA. See Section 302.1.

Reason: This code change:

1. Provides a definition for a "Wildland-Urban Interface Area" in the IFC Section 302 extracted from the definition in the IWUIC.

2. Provides a referral to the "Wildland-Urban Interface Area" definition in Section 302 from the General Definitions Section 202.

3. Provides a direct referral to the "Wildland-Urban Interface Code" in a new Section 316 within the IFC.

This code change will integrate the designation of a "Wildland-Urban Interface Area" and the reference International Wildland-Urban Interface Code as an integral part of the IFC. Rather than forcing a local jurisdiction to adopt the IWUIC separately, the IWUIC will be adopted as a reference when the IFC is adopted. The reason for this is two fold:

- 1. The base IFC should contain Wildland-Urban Interface requirements as an integral part of the document due to the expanding prevalence of these types of hazards that are confronted by the fire official. Users should not be forced to adopt a second document to be able to utilize the IWUIC. Wildland-urban interface fire prevention is no different from the other base fire prevention requirements of the IFC.
- Adding the direct reference to the IWUIC into the IFC will not burden any jurisdiction with the requirement of the document unless there is an actual "Wildland-Urban Interface Area" within the jurisdiction. If there is a "Wildland-Urban Interface Area" within the jurisdiction, then the code should be specifying that the WUIA needs to be protected appropriately and set the standard of protection.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F58-07/08

316 (New)

Proponent: James Everitt, Everitt and Associates, representing McClure Industries

Add new section as follows:

SECTION 316 LAUNDRY CARTS

316.1 Laundry carts in commercial laundries. Laundry carts used for commercial laundries shall be constructed of noncombustible materials or materials having a peak rate of heat release not exceeding 300 kW/m² at a flux of 50 kW/m² when tested in a horizontal orientation in accordance with ASTM E 1354. Such laundry carts shall be permanently labeled indicating capacity and peak rate of heat release.

Exceptions:

- 1. Laundry carts in buildings protected with an approved automatic sprinkler system in accordance with Sections 903.3.1.1 or 903.3.1.2.
- 2. Laundry carts in coin-operated laundries.

Reason: The change from cooking with animal fat to vegetable oil has increased the amount of spontaneous ignition fires. These fires occur outside due to external heating form the sun or by insufficient cool down time in the laundry process and have been known to ignite in freshly folded linen.

Polyethylene laundry carts have a fuel value equal to gasoline and the continued use of these carts is inappropriate. The City of Portland has experienced three recent fires two of which were \$400k+ each with extensions \$100k+ each, due to spontaneous ignition. Last year the Oregon State Coffey Creek Correction Facility had a commercial dryer fire with no loss using the ASTME 1354 container. The commercial dryer fire was emptied in to the container and taken outside and overhauled without evacuation, loss to the structure or damage the container.

These laundry carts are currently available. This revision is supported by the Oregon Laundry Association and is now part of the Oregon amended IFC.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F59-07/08 403.3 (New)

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Add new text as follows:

403.3 Crowd manager. Trained crowd managers shall be provided for facilities or events where more than 1000 persons congregate. The minimum number of crowd managers shall be established at a ratio of one crowd manager to every 250 persons. Where approved by the fire code official, the ratio of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an approved automatic sprinkler system or based upon the nature of the event.

Reason: The only requirement for crowd managers is in Section 2404.20 for tents. Large assemblies of people create the need for crowd management due to panic and fear in emergency situations in numerous other locations than just tents. It is the intent of this proposal for crowd managers to be personnel already assigned and employed by the facility. Current employees can be trained as crowd managers to fulfill this requirement. At the time of an emergency, the trained crowd managers would take on these additional responsibilities to control and direct the audience or attendees in a safe manner.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F60–07/08 404.2, Table 405.2

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Revise as follows:

404.2 Where required. An approved fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings.

- 1. Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an occupant load less than 2,000.
- 2. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
- 3. Group E.
- 4. Group F.
- 4. <u>5.</u> Group H.
- 5. <u>6.</u> Group I.
- 6. 7. Group R-1.
- 7. 8. Group R-2 college and university buildings.
- 8. <u>9.</u> Group R-4.
- 9.<u>10.</u> High-rise buildings.
- 10.11. Group M buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
- 11.12. Covered malls exceeding 50,000 square feet (4645 m²) in aggregate floor area.
- 12.13. Underground buildings.
- 13.14. Buildings with an atrium and having an occupancy in Group A, E or M.

GROUP OR OCCUPANCY	GROUP OR OCCUPANCY FREQUENCY PARTICIPATION					
Group A	Quarterly	Employees				
Group B ^c	Annually	Employees				
Group E	Monthly ^a	All occupants				
Group F	Annually	Employees				
Group I	Quarterly on each shift	Employees ^b				
Group R-1	Quarterly on each shift	Employees				
Group R-2 ^d	Four annually	All occupants				
Group R-4	Quarterly on each shift	Employees ^b				
High-rise buildings	Annually	Employees				

TABLE 405.2 FIRE AND EVACUATION DRILL FREQUENCY AND PARTICIPATION

(Footnotes remain unchanged)

Reason: The IFC currently requires fire-safety plans in practically every occupancy group with the exception of Group F occupancies. Under the Code, the only "manufacturing" occupancy that requires a fire-safety plan is Group H occupancies. The only difference between a Group F and a Group H occupancy is the aggregate amount of hazardous materials present in the facility and some of the manufacturing processes. In many Group F occupancies, there can be processes and hazards that theoretically make them just as hazardous as a Group H occupancy. But because these facilities fall short of the aggregate amount of chemicals, they are not classified as Group H.

Group F manufacturing facilities should have written fire safety and evacuation plans to protect the workers. Under 29 CFR 1910.39(b), OSHA requires that any workplace with more than ten (10) employees shall have a written fire prevention plan. The code should at least parallel the OSHA Standard.

Manufacturing facilities should be required to have at least annual emergency evacuation drills due to the size and complexity of some of these facilities. It will increase the life safety of the occupants to practice evacuation procedures.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F61–07/08 404.1, 404.3.3 through 404.3.3.3 (New), 406.3.3 (New), 402.1 (New)

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

1. Revise as follows:

404.1 General. Fire safety, evacuation and <u>lockdown</u> plans <u>and associated drills</u> shall comply with the requirements of this section. <u>The plans shall not conflict with other sections of this code</u>.

2. Add new text as follows:

404.3.3 Lockdown plans. Where facilities develop a lockdown plan, the lockdown plan shall be in accordance with Sections 404.3.3.1 through 404.3.3.3.

404.3.3.1 Lockdown plan contents. Lockdown plans shall be approved by the fire code official and shall include the following:

- 1. Initiation. The plan shall include instructions for reporting an emergency that requires a lockdown.
- 2. Accountability. The plan shall include accountability procedures for staff to report the presence or absence of occupants.
- 3. Recall. The plan shall include pre-arranged signal for returning to normal activity.
- 4. <u>Communication and coordination. The plan shall include an approved means of two-way communication</u> <u>between a central location and each secured area.</u>
- 5. <u>The plan shall be in accordance with the National Incident Management System and applicable state and federal laws or regulations.</u>

404.3.3.2 Training frequency. The training frequency shall be included in the lockdown plan. The lockdown drills shall not substitute for any of the fire and evacuation drills required in Section 405.2.

404.3.3.3 Lockdown notification. The method of notifying building occupants of a lockdown shall be included in the plan. The method of notification shall be separate and distinct from the fire alarm signal.

406.3.3 Emergency lockdown training. Where a facility has a lockdown plan, employees shall be trained on their assigned duties and procedures in the event of an emergency lockdown.

(Renumber remaining sections)

3. Add new definition as follows:

402.1 Definition. The following word and term shall, for the purposes of this chapter and as used elsewhere in this code, have the meaning shown herein.

LOCKDOWN. An emergency situation requiring that the occupants be sheltered and secured in place within a building when normal evacuation would put occupants at risk.

Reason: Buildings are developing "lockdown" plans in response to security threats. This proposal will add requirements to the IFC on lockdown plans, lockdown drills and lockdown operations, not only in schools, but in all buildings where a lockdown plan is desired.

The code does not require a lockdown plan, however if a plan is to be developed, the plan must maintain the integrity of the egress system to an acceptable level. These lockdown plans include procedures for locking occupants into individual rooms within the building, and typically do not consider the impact of lockdowns on fire safety. This proposal is intended to establish the conditions for lockdown plans so that they will not decrease the level of life safety in the event of fires.

Many facilities are adopting procedures that can significantly affect fire safety, such as using the fire alarm system to signal a security emergency, locking doors with devices that prevent egress, and chaining exit discharge doors from the inside to prevent occupants from leaving the building. It is important that plans for security threats do not include procedures that result in violations of life safety and actually increase the hazard to the occupants.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F62-07/08

Proponent: Jeffrey M. Shapiro, PE, International Code Consultants, representing The Chlorine Institute

Revise as follows:

407.2 Material safety data sheets. Material Safety Data Sheets (MSDS) for all hazardous materials shall be <u>either</u> readily available on the premises <u>as a paper copy, or where approved, shall be permitted to be readily retrievable by</u> electronic access.

Reason: Use of electronic databases as a means to make MSDSs available is common all along the hazardous materials supply chain. This proposal seeks only to update the code to recognize this longstanding common practice.

The use of electronic means to handle MSDSs is a far more efficient method of keeping this material up to date, organized and readily accessible from many locations. It also makes the information electronically searchable and avoids the enormous administrative effort required to maintain paper copies MSDSs in binders or file cabinets duplicated at many sites.

To address concerns expressed by some individuals when a similar proposal was considered last cycle, such as power interruptions that might make MSDSs inaccessible at times, a condition of local approval has been added to limit the permissible use of electronic systems. With this addition, jurisdictions desiring hard copies on site will still have these, while jurisdictions desiring to permit electronic databases will have a means of encouraging such systems without requiring the owner to submit an alternate method proposal.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F63-07/08 408.3

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Revise as follows:

408.3 Group E occupancies and Group R-2 college and university buildings. Group E occupancies <u>and Group R-2 college and university buildings</u> shall comply with the requirements of Sections 408.3.1 through 408.3.4 and Sections 401 through 406. Group R 2 college and university buildings shall comply with the requirements of Sections 408.3.1 and 408.3.3 and Sections 401 through 406.

Reason: The revision addresses the fact that the current IFC does not require assembly points for R-2 college and university buildings. With the increased emphasis on accountability during campus emergencies, assembly points are necessary for colleges and universities as well as schools. It makes sense to require assemble points for college and university level occupants just the same as high school occupants.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F64–07/08 408.4 (New), Chapter 45 (New)

Proponent: William Winslow, representing Washington State Association of Fire Marshals

1. Add new text as follows:

<u>408.4 Group H-1, H-2, H-3, and H-4 occupancies and facilities with outdoor storage or use.</u> Group H-1, H-2, H-3, and H-4 occupancies and facilities with outdoor storage or use that exceeds the maximum allowable quantity per control area indicated in Section 2703 shall comply with Sections 401 through 407 and Sections 408.4.1 through 408.4.3.

408.4.1 Plan. An approved hazardous materials emergency plan shall be maintained on-site.

408.4.2 Training. Where required by the fire code official, a minimum of two facility employees or other approved personnel shall be available on-site or by call-in. Such personnel shall be trained to the hazardous materials technician level in accordance with DOL 29 CFR 1910.120(q)(6)iii and be knowledgeable with the hazardous materials emergency plan, the locations of hazardous installations, and the operation of safety systems, and shall assist the fire department when requested.

408.4.3 Emergency drill. An annual emergency drill shall be conducted to test the hazardous materials emergency plan. Where required by the fire code official, the emergency drill shall include facility personnel and the fire department.

Exception: Where approved by the fire code official, an actual incident that included fire department involvement shall satisfy the requirement for the annual drill.

(Renumber subsequent sections.)

2. Add standard to Chapter 45 as follows:

DOL

29 CFR 1910.120(q)(6)iii-2007 Hazardous Materials Technician

Reason: Facilities with hazardous materials above maximum allowable quantities should have an approved hazardous materials emergency plan and should test the plan with a drill at least once a year. In addition, where the fire code official determines it is necessary, personnel trained to the technician level should be available to accompany fire department hazmat emergency responders while they attempt to stop leaks or mitigate other hazardous conditions. After all, plant personnel know their facilities better than the fire department, and their hands-on assistance is critical to ensure the safety of everyone involved with the emergency response. Section 408.4.2 allows non-employee personnel to be used if they are adequately trained. Examples might be environmental contractors with specific training on the site.

Cost Impact: The approximate cost to train and equip 2 hazmat technicians is \$10,000. The cost of contract services with site specific training would be in the same range.

Analysis: A review of the standard proposed for inclusion in the code, DOL 29 CFR 1910.120(q)(6)iii-2007, for compliance with ICC criteria for referenced standards given in Section 3.6 of Council Policy #CP 28 will be posted on the ICC website on or before January 15, 2008.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F65-07/08 501.3

Proponent: Steven L. Schoon, Golder Ranch Fire District, Arizona Fire Marshals Association

Revise as follows:

501.3 Construction documents. Construction documents for proposed fire apparatus access, location of fire lanes, <u>security gates across fire apparatus access</u> and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

Reason: Section 501.3 requires fire apparatus access to have construction documents submitted to the fire department for review and approval prior to construction. Section 503.6 requires the installation of security gates across a fire apparatus access road be approved by the fire chief. Adding the proposed language ties these two sections together and requires the security gate to have a construction document for the fire department to review. Furthermore, if a security gate was not on the original construction plans for the fire apparatus access, this new text reinforces that a security gate installed at a later time does require a construction plan to be submitted and approved prior to construction.

Public Hearing: (Committee:	AS	AM	D
- A	Assembly:	ASF	AMF	DF

F66–07/08 503.1, 503.1.4 (New), 503.1.4.1 (New), 503.1.4.2 (New), 503.1.5 (New), 503.2.8(New), Appendix D104.3, D106, D107

Proponent: Steven Orlowski, National Association of Home Builders

Revise as follows:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 <u>503.1.5</u>.

503.1.4 Multiple-family residential developments. Fire apparatus access roads for multiple-family residential developments shall be in accordance with Section 503.1.4.1 and 503.1.4.2.

D106.1 503.1.4.1 Projects having more than 100 dwelling units. Multiple-family residential projects having no more than 100 dwellings units shall be equipped throughout with two separate and approved fire apparatus access roads.

Exception: Projects up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including non residential occupancies, are equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3.

D106.2 <u>503.1.4.2</u> **Projects having more than 200 dwelling units.** Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

D107.1 <u>503.1.5</u> **One- or two-family dwelling residential developments.** Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of Section <u>D104.3</u> <u>503.2.8</u>.

Exceptions:

- 1. Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, access from two directions will not be required.
- 2. The number of dwelling units on a single fire apparatus access road shall not be increased unless the fire apparatus access roads will connect with future development, as determined by the fire code official.

D104.3 <u>503.2.8</u> **Remoteness.** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

Reason: The purpose of this proposal is to address the concerns of when fire apparatus access is required. As the IFC is currently written the number of fire apparatus accesses is determined by the local fire official. In jurisdictions which require the installation of an approved automatic sprinkler system, these exceptions should be implemented without requiring jurisdictions to adopt the complete appendix.

Cost Impact: The code change proposal will decrease the cost of construction.

Public Hearing: Co	ommittee:	AS	AM	D
As	sembly:	ASF	AMF	DF

F67-07/08 503.2.1, Appendix D103.1, D105.2

Proponent: Edwin M. Berkel, CFI, Mehlville Fire Protection District, representing himself

Revise as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), <u>exclusive of shoulders</u>, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders. See Figure D103.1.

D105.2 Width. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm). exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet (9144 mm) in height.

Reason: The intent of the width requirements for fire apparatus access roads is that the all-weather surface capable of supporting the expected imposed loads of apparatus be applicable to the full 20 foot width of the road to provide space for fire apparatus to pass one another during fireground operations. The need to pass may occur when engines are parked for hydrant hookup or laying hose or when trucks are performing aerial ladder operations. Including adjacent road shoulders in the 20 foot width measurement could yield sub-standard and inadequate driving surfaces for apparatus. This proposal will make it clear that the shoulders are not to be included in the minimum fire apparatus access road width.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	3	A	M		D
Ū	Assembly:	AS	SF	A	MF	ļ	DF

F68-07/08 503.2.8 (New)

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

Add new text as follows:

503.2.8 Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall be within the limits established by the fire code official based on the fire department's apparatus.

Reason: The Angle of Approach is the angle between the ground and a line running from the bottom of the front tire to the lowest-hanging point directly in front of it, which is usually the front bumper. This angle gives an indication of how steep an incline the vehicle can clear when approaching that angle.

The Angle of Departure is the angle between the ground and a line running from the bottom of the rear tire to the lowest-hanging point directly behind it, which is usually the rear step. Similar to the approach angle, this angle indicates how steep an incline the vehicle can clear when departing from that angle.

Currently, no language exists in the IFC regarding angles of approach and departure. This design aspect of a fire apparatus access road is crucial to successful navigation by apparatus.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Commi	ittee: AS	AM	D
Assem	bly: ASF	AMF	DF

F69-07/08 503.3

Proponent: Daniel Najera, University of California, Davis Fire Department, representing California Fire Chief's Association (CFCA)

Revise as follows:

503.3 Marking. Where required by the fire code official, approved signs or other approved <u>notices markings that</u> <u>include the words NO PARKING - FIRE LANE</u> shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs or notices <u>The means by which fire lanes are designated</u> shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

Reason: This code revision replaces the word "notices" with "marking" and adds the words "NO PARKING FIRE LANE". Marking is more consistent code language and is reflected in the title of this section. Notices is an ambiguous term that does not reflect permanency but allows for floating fire lanes and handed out paper notices. The existing language leaves too much room for interpretation that may not reflect the original intent of this section.

The addition of the words NO PARKING FIRE LANE assists the fire department, local law enforcement authority's and the judicial system in upholding fire lane enforcement. It is common code language that is easily understood and is commonly used in vehicle codes around the country.

This proposal does not mention size, color or material to be used for fire lane markings. It is understood by the word approved that fire lane markings have to be approved by the local authority having jurisdiction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F70–07/08 503.5, 503.6, Appendix D103.5, Chapter 45 (New)

Proponent: Joseph R. Hetzel, PE, Thomas Associates, Inc., representing Door & Access Systems Manufacturers Association

1. Revise as follows:

503.5 Required gates or barricades. The fire code official is authorized to require the installation and maintenance of gates or other approved barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways. <u>Electric gate openers, where provided, shall be listed in accordance with UL 325.</u> <u>Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.</u>

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be approved by the fire chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. <u>Electric gate openers, where provided, shall be listed in accordance with UL 325.</u> Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

Appendix D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

- 1. The minimum gate width shall be 20 feet (6096 mm).
- 2. Gates shall be of the swinging or the sliding type.
- 3. Construction of gates shall be of materials that allow manual operation by one person.
- 4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- 5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.
- 6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.
- 7. Locking device specifications shall be submitted for approval by the code official.
- 8. Electric gate openers, where provided, shall be listed in accordance with UL 325.
- 9. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

2. Add standards to Chapter 45 as follows:

ASTM

	<u>ASTM F 2200-05</u>	Standard Specification for Automated Vehicular Gate Construction
UL	- <u>UL 325-02</u>	Door, Drapery, Gate, Louver, and Window Operators and Systems, with revisions through
		February, 2006

Reason: The purpose of the proposed code change is to provide requirements for automatic vehicular gates, which are not currently addressed in the Code.

The current Code provisions are inadequate because public safety needs are not addressed regarding automatic operation of vehicular gates. Protection is needed from potential entrapment of individuals between an automatically moving gate and a stationary object, or surface, in close proximity to such gate. Gates intended for automation require specific design, construction and installation to accommodate entrapment protection to minimize or eliminate certain excessive gate gaps, openings and protrusions identified as contributing to the hazard of entrapments that have historically caused numerous serious injuries and deaths.

The Code will be improved by including provisions referencing UL 325 and ASTM F 2200. UL 325 is an ANSI recognized safety standard containing provisions governing gate openers. Gate openers listed to the requirements of UL 325 provide the public with assurance that safety requirements have been met for such openers. ASTM F 2200 is a consensus document containing provisions governing the construction of vehicular gates intended for automation, and has been harmonized with the applicable provisions of UL 325.

Death and injury data does exist associated with automated vehicular gates. A previous related proposal on the topic, submitted in 2002 by the Consumer Product Safety Commission and designated as E34-02, pointed out the following information compiled by the CPSC from 1985 to that time:

- 1. Reports of 32 deaths relating to automatically operated vehicular gates were received, many as a result of entrapment between a moving gate and a stationary object.
- Data from the National Electronic Injury Surveillance System estimated that approximately 2,000 people are treated annually in hospital emergency rooms due to injuries in such gates. Many of these injuries have been identified as serious, involving amputation, broken arms and broken legs.

With regard to security, both UL 325 and ASTM F 2200 make consideration for restricted access gates by recognizing gate openers and operators for such applications as a particular Class (IV) out of four different classifications.

Cost Impact: The code change proposal will increase the cost of construction. However, the resulting safety benefits will outweigh the increased cost.

Analysis: A review of the standards proposed for inclusion in the code, ASTM F 2200-05 and UL 325-02, for compliance with ICC criteria for referenced standards given in Section 3.6 of Council Policy #CP 28 will be posted on the ICC website on or before January 15, 2008.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F71-07/08 503.6, Appendix D103.5

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Delete and substitute as follows:

503.6 Security gates The installation of security gates across a fire apparatus access road shall be approved by the fire chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. **D103.5 Fire apparatus access road gates.** Gates securing the fire apparatus access roads shall comply with all of the following criteria:

- 1. The minimum gate width shall be 20 feet (6096 mm).
- 2. Gates shall be of the swinging or sliding type.
- 3. Construction of gates shall be of materials that allow manual operation by one person.
- 4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- 5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.
- Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.
- 7. Locking device specifications shall be submitted for approval by the fire code official.

Reason: The current language in Appendix D103.5 is more specific and appropriate to be included in the core code text of Section 503. The language in D103.5 should be imported into the core code as it is not onerous and contains basic gate requirements for every fire apparatus access road. The language to be replaced in the current 503.6 is very generic and leaves very little guidance to the designer, owner and fire code official. The language in D103.5 covers all of the issues currently covered the existing Section 503.6.

Cost Impact: The code change will increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F72-07/08

Proponent: Steven Orlowski, National Association of Home Builders

Revise as follows:

504.1 Required access. Exterior doors and openings required by this code or the *International Building Code* shall be maintained readily accessible for emergency access by the fire department. An approved access walkway leading from fire apparatus access roads to exterior openings shall be provided when required by the fire code official.

Exception: Required access shall not be applicable to structures built to the requirements of the *International Residential Code*.

Reason: The purpose of the added exception is to clarify that readily accessible routes to a structure from the fire apparatus road are only applicable to commercial and residential occupancies that are governed by the IBC and does not apply to one- and two-family dwellings.

Public Hearing:	Committee:	AS	AM	D
0	Assembly:	ASF	AMF	DF

F73-07/08 504.3, 2703.8.3.4

Proponent: Philip Brazil, PE, Reid Middleton, Inc., representing himself

Revise as follows:

504.3 Stairway access to roof. New buildings four or more stories in height above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3 percent slope), shall be provided with a stairway to the roof. Stairway access to the roof shall be in accordance with Section 1009.12. Such stairway shall be marked at street and floor levels with a sign indicating that the stairway continues to the roof. Where roofs are used for roof gardens or for other purposes, stairways shall be provided as required for such occupancy classification.

2703.8.3.4 Fire-resistance rating requirements. The required fire-resistance rating for fire barriers shall be in accordance with Table 2703.8.3.2. The floor construction of the control area and the construction supporting the floor of the control area shall have a minimum 2-hour fire-resistance rating.

Exception: The floor construction of the control area and the construction supporting the floor of the control area is allowed to be 1-hour fire-resistance rated in buildings of Type IIA, IIIA and VA construction, provided that both of the following conditions exist:

- 1. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1; and
- 2. The building is three stories or less in height above grade plane.

Reason: The changes are proposed for consistency with the actions taken by the membership on Proposals G6-06/07-AS and G8-06/07-AMPC1. Refer to IBC (and IFC) Section 1009.11 in Proposal G8-06/07-AMPC1 for Section 504.3 on stairway access to the roof. Refer to IBC Section 414.2.4 in Proposal G6-06/07-AS for Section 2703.8.3.4 on control areas.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F74–07/08 505.1.1 (New), 505.1.1.1 (New), 505.1.2 (New)

Proponent: Daniel Najera, University of California, Davis Fire Department, representing California Fire Chiefs' Association (CFCA)

Add new text as follows:

505.1.1 Multi-tenant buildings. Numbers or letters as specified in Section 505.1 shall be designated for all tenant spaces within a building. Directional address numbers or letters shall be provided. Numbers or letters required by this section shall be internally or externally illuminated.

505.1.1.1 Multi-tenant directory signs. An illuminated directory sign displaying travel paths to all tenant spaces shall be located at all driveway entrances to the property.

505.1.2 Additional addressing. Where required by the fire code official, additional numbers or addresses sized in accordance with Section 505.1, shall be placed on the rear or sides of all buildings in such a position as to be plainly legible and visible.

Reason: The added code sections provide the code official authority to require additional addressing in facilities, campuses, or strip malls where identification of multi-tenant buildings is essential to first responders.

The additional addressing proposed by these sections will assist emergency responders in identifying specific addresses in larger multi-tenant buildings when the response must be approached from access roads other than the street-side of the building.

Addressing features for tenants are relied upon by emergency responders (fire, police, EMS) for purposes other than fire. Responders cannot always rely on smoke/fire showing or that responsible persons will be waiting at the curb to escort personnel to the scene of the incident.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F75–07/08 505.3 (New); IBC 501.3 (New)

Proponents: Sean DeCrane, Cleveland, OH Fire Department representing International Association of Fire Fighters Local #93, Cleveland, OH; Kirk Grundahl, WTCA Representing the Structural Building Component Industry

THESE PROPOSALS ARE ON THE AGENDA OF THE IFC AND THE IBC GENERAL CODE DEVELOPMENT COMMITTEES AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I – IFC

Add new text as follows:

505.3 Building information sign. Building information signs shall comply with Sections 505.3.1 through 505.3.7.

505.3.1 Sign location. The Building information sign shall be placed on a minimum of two exterior walls containing a means of access to a building or facility, no lower than 42" or no higher than 60" inches, and no further than six (6) feet from main entry point's unhinged side, or right side if non-hinged opening. Local jurisdictions shall have the authority to require additional locations.

505.3.1.2 Sign features. The building information sign shall consist of:

- 1. White reflective background with red letters;
- 2. Durable material;
- 3. Numerals shall be Roman or Latin numerals, as required, and/or alphabet letters;
- 4. Permanently affixed to the building or structure in an approved manner.

505.3.1.3 Sign shape. The building information sign shall be a Maltese Cross as shown in Figure 505.3.1.3



FIGURE 505.3.1.3 BUILDING INFORMATION SIGN

505.3.1.4 Sign size and lettering. The minimum size of the building information sign and lettering shall be in accordance with the following:

- 1. The width and height shall be 6 inches by 6 inches
- 2. The height or width of each Maltese cross wing area shall be 1 1/8 inches and have a stroke width of ½ inch;

- 3. The center of the Maltese cross a circle of oval 3 ¹/₈ inches in diameter and has a stroke width of ¹/₂ inch;
- 4. All roman numerals and/or alphabetic designations, shall be 1 ¼ inch height and have a stroke width of ¼ inch.

505.3.2 Sign Designations. Designations shall be made based upon the construction type, content, hazard, fire protection systems, life safety and occupancy. Where multiple designations occur within a classification Category, the designation used shall be based on the greatest potential risk.

505.3.3 Construction type (top wing). The construction types shall be designated by assigning the appropriate Roman numeral, and letter, placed inside the top wing of the Maltese cross. The hourly rating provided is for the structural framing in accordance with Table 601 of the *International Building Code*.

Construction Type	Hourly Rating
Fire Resistive Construction -	3 Hour Rating
IB – Fire Resistive Construction -	2 Hour Rating
IIA – Non-Combustible Construction -	1 Hour Rating
IIB – Non-Combustible Construction -	0 Hour Rating
IIIA – Ordinary Construction -	1 Hour Rating
IIIB – Ordinary Construction -	0 Hour Rating
IV – Heavy Timber Construction	
V – Combustible Construction –	0 Hour Rating

505.3.4 Hazards of content (left wing). The hazards of building contents shall be designated by one of the following classifications as defined in NFPA 13 and the appropriate designation shall be placed inside the left wing of the Maltese cross:

- <u>1 Light Hazard</u>
- 2 Moderate Hazard
- <u>3 High Hazard</u>

505.3.5 Fire protection systems (right wing). The fire protection systems shall be designated by determining its level of protection and assigning the appropriate designation to the right wing of the Maltese cross. Where multiple systems are provided, all shall be listed:

AS – Automated Fire Sprinkler System installed throughout; PS – Partial Automatic Fire Sprinkler System, and designate floor; CS – Combination Sprinkler and Standpipe System; S – Standpipe System; NS – No system installed

505.3.6 Occupancy type (bottom wing). The occupancy of a structure can accompany particular hazards related to the stated occupancy. Identifying the occupancy of a structure will allow fire fighters to make informed tactical assumptions and decisions. Occupancies shall be designated in accordance with the occupancy classification found in Section 302.1 of the *International Building Code* and the corresponding designation shall be placed in the bottom wing of the Maltese cross.

- A Assembly
- <u>B Business</u>
- <u>E Educational</u>
- F Factory or Industrial
- H High Hazard
- I Institutional
- M Mercantile
- R Residential
- <u>S Storage</u>
- <u>U Utility or Miscellaneous</u>

505.3.7 Tactical considerations (center circle). The building identification marker is designed to provide key information in the initial stages of a fire ground incident. The information contained on this sign will allow the initial response fire fighters on the initial response group to make more well informed and quicker tactical decisions.

505.3.7.1 Additional Information. Where fire fighters conduct pre-plan operations, unique situations shall be identified and placed under within the center section of the sign to allow the initial response fire fighters to identify that there are special considerations for this occupancy. Special consideration designations include, but are not limited to:

- 1. Protect in place
- 2. Limited mobility
- 3. Handicapped occupants
- 4. Impact resistant drywall
- 5. Impact resistant windows;
- 6. All types of roof and floor structural members including but not limited to post tension concrete, bar joists, joists, rafters, trusses, I-joists and I-beams);
- 7. Chemicals;
- 8. Plastics;
- 9. Explosives

Inspectors are authorized to use NFPA 1620 as a guide.

505.3.8 Sign classification maintenance. Sign classification maintenance shall comply with all of the following:

- 1. Fire departments in the jurisdiction shall define the designations to be placed within the sign.
- 2. Fire departments in the jurisdiction shall conduct annual inspections to verify compliance with this section of the code.
- 3. The owner of a building shall be responsible for the maintenance and updates to the sign in accordance to fire department designations.
- 4. The owner of a building shall notify the fire department of any changes that possibly effect the classifications, of the system, within thirty (30) days of the changes and the Fire Department shall conduct an inspection.
- 5. <u>The owner of a building shall change the effected classification posted on the sign within thirty (30) days of the changes.</u>

505.3.9 Training. Jurisdictions shall train all fire department personnel on the building identification marker.

(Renumber subsequent sections.)

2. Add standard to Chapter 45 as follows:

NFPA

1620-03 Recommended Practice for Pre-Incident Planning

PART II – IBC GENERAL

1. Add new text as follows:

501.3 Building information sign. Building information signs shall comply with Sections 501.3.1 through 501.3.7.

501.3.1 Sign location. The Building information sign shall be placed on a minimum of two exterior walls containing a means of access to a building or facility, no lower than 42" or no higher than 60" inches, and no further than six (6) feet from main entry point's unhinged side, or right side if non-hinged opening. Local jurisdictions shall have the authority to require additional locations.

501.3.1.2 Sign features. The building information sign shall consist of:

- 1. White reflective background with red letters;
- 2. Durable material;
- 3. Numerals shall be Roman or Latin numerals, as required, and/or alphabet letters;
- 4. Permanently affixed to the building or structure in an approved manner.

501.3.1.3 Sign shape. The building information sign shall be a Maltese Cross as shown in Figure 501.3.1.3



FIGURE 501.3.1.3 **BUILDING INFORMATION SIGN**

501.3.1.4 Sign size and lettering. The minimum size of the building information sign and lettering shall be in accordance with the following:

- The width and height shall be 6 inches by 6 inches
- <u>2,</u> 3. The height or width of each Maltese cross wing area shall be 1 1/8 inches and have a stroke width of ½ inch;
- The center of the Maltese cross a circle of oval 3 ½ inches in diameter and has a stroke width of ½ inch;
- 4. All roman numerals and/or alphabetic designations, shall be 1 ¼ inch height and have a stroke width of ¼ inch.

501.3.2 Sign Designations. Designations shall be made based upon the construction type, content, hazard, fire protection systems, life safety and occupancy. Where multiple designations occur within a classification Category, the designation used shall be based on the greatest potential risk.

501.3.3 Construction type (top wing). The construction types shall be designated by assigning the appropriate Roman numeral, and letter, placed inside the top wing of the Maltese cross. The hourly rating provided is for the structural framing in accordance with Table 601 of the International Building Code,

Construction Type	Hourly Rating
Fire Resistive Construction -	3 Hour Rating
IB – Fire Resistive Construction -	2 Hour Rating
IIA – Non-Combustible Construction -	1 Hour Rating
IIB – Non-Combustible Construction -	0 Hour Rating
IIIA – Ordinary Construction -	1 Hour Rating
IIIB – Ordinary Construction -	0 Hour Rating
IV – Heavy Timber Construction	-
V – Combustible Construction –	<u>0 Hour Rating</u>

501.3.4 Hazards of content (left wing). The hazards of building contents shall be designated by one of the following classifications as defined in NFPA 13 and the appropriate designation shall be placed inside the left wing of the Maltese cross:

- 1 Light Hazard
- 2 Moderate Hazard
- 3 High Hazard

501.3.5 Fire protection systems (right wing). The fire protection systems shall be designated by determining its level of protection and assigning the appropriate designation to the right wing of the Maltese cross. Where multiple systems are provided, all shall be listed:

AS - Automated Fire Sprinkler System installed throughout; PS - Partial Automatic Fire Sprinkler System, and designate floor; CS - Combination Sprinkler and Standpipe System; S – Standpipe System; NS – No system installed

501.3.6 Occupancy type (bottom wing). The occupancy of a structure can accompany particular hazards related to the stated occupancy. Identifying the occupancy of a structure will allow fire fighters to make informed tactical assumptions and decisions. Occupancies shall be designated in accordance with the occupancy classification found in Section 302.1 of the International Building Code and the corresponding designation shall be placed in the bottom wing of the Maltese cross.

- A Assembly B – Business E – Educational F – Factory or Industrial H – High Hazard I – Institutional M – Mercantile
- R Residential
- S Storage
- U Utility or Miscellaneous

501.3.7 Tactical considerations (center circle). The building identification marker is designed to provide key information in the initial stages of a fire ground incident. The information contained on this sign will allow the initial response fire fighters on the initial response group to make more well informed and guicker tactical decisions.

501.3.7.1 Additional Information. Where fire fighters conduct pre-plan operations, unique situations shall be identified and placed under within the center section of the sign to allow the initial response fire fighters to identify that there are special considerations for this occupancy. Special consideration designations include, but are not limited to:

- Protect in place <u>1.</u>
- Limited mobility
- <u>2.</u> 3. Handicapped occupants
- Impact resistant drywall
- Impact resistant windows;
- <u>4.</u> <u>5.</u> 6. All types of roof and floor structural members including but not limited to post tension concrete, bar joists, joists, rafters, trusses, I-joists and I-beams);
- <u>7.</u> Chemicals;
- 8. Plastics;
- 9. Explosives

Inspectors are authorized to use NFPA 1620 as a guide.

501.3.8 Sign classification maintenance. Sign classification maintenance shall comply with all of the following:

- 1. Fire departments in the jurisdiction shall define the designations to be placed within the sign.
- <u>2.</u> Fire departments in the jurisdiction shall conduct annual inspections to verify compliance with this section of the code.
- The owner of a building shall be responsible for the maintenance and updates to the sign in accordance to fire 3. department designations.
- The owner of a building shall notify the fire department of any changes that possibly effect the classifications, 4. of the system, within thirty (30) days of the changes and the Fire Department shall conduct an inspection.
- The owner of a building shall change the effected classification posted on the sign within thirty (30) days of the 5. changes.

501.3.9 Training. Jurisdictions shall train all fire department personnel on the building identification marker.

(Renumber subsequent sections.)

2. Add standard to Chapter 35 as follows:

NFPA

1620-03 Recommended Practice for Pre-Incident Planning **Reason:** This Building Information Sign (BIS) is designed to be utilized in the crucial initial response of fire fighters to a structure fire. Similar to the Emergency Response Guidebook, published by the Department of Transportation, the BIS is designed to be utilized in the initial fifteen (15) to thirty (30) minutes of an incident. Fire fighters are trained to size up a situation as early as notification, sometimes appearances can be deceiving, a type of construction may not appear to be what it really is. This is becoming an occurrence with urban renewal. As communities try to design neighborhoods and maintain structural consistency, what may appear to be a traditional form of construction is now a designed lightweight system. In the dark, or to mutual aid crews, this is not always apparent. Having the BIS will allow responding companies to make an informed tactical decision. The responding company will be able to identify the type of construction, hazard level of the contents, occupancy of the building and whether the building is protected with automatic suppression and the extent of the protection.

In Tactical Considerations, we will allow fire fighters to identify additional considerations and prepare for them. Just by seeing that there are additional considerations would give fire fighters pause to consider additional aspects of the situation. Are there Protect in Place, Handicap or Limited Mobility concerns of the occupants. Is the interior constructed using impact resistant dry wall which will make wall breeching very difficult, is there lexan glazing? These are a sample of concerns that would cause a fire fighter to consider options at an incident. Does the building contain lightweight construction in the roof or floors. This can be identified and placed in the Tactical Considerations. The National Institute for Occupational Safety and Health released a report, 'Preventing Injuries and Deaths of Fire Fighters Due to Truss System Failures¹ recommends identifying structures by suggesting that building owners and managers "Consider placing building construction information outside the building. Include information about roof and floor type (presence of trusses, materials used), roof loads (heating, ventilation, and air conditioning (HVAC) units, displays), sprinkler systems, utilities, chemicals on site and contact numbers. Use and follow the proper building codes." Tactical Considerations, allows fire fighters to identify the type of construction that puts them at risk. The author also recommends the use of NFPA 1620 as a guide for Pre-Plan operations.

Bibliography:

1. NIOSH Alert – "Preventing Injuries and Deaths of Fire Fighters due to Truss System Failures" April 2005

Cost Impact: The code change proposal will have a minimal increase to the cost of construction.

Analysis: A review of the standard proposed for inclusion in the code, NFPA 1620-03, for compliance with ICC criteria for referenced standards given in Section 3.6 of Council Policy #CP 28 will be posted on the ICC website on or before January 15, 2008.

PART I – IFC			
Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF
PART II – IBC GENERAL			
Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F76-07/08 506.1, 2701.5

Proponent: Daniel Najera, University of California, Davis Fire Department, representing California Fire Chief's Association (CFCA)

Revise as follows:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary or life-saving for fire-fighting purposes, <u>or where reports are required by Section</u> <u>2701.5.1 or 2701.5.2</u> the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official <u>or hazardous materials reports necessary to emergency response personnel</u>.

When required by the fire code official, permittees shall apply for approval to permanently close a storage, use or handling facility. Such application shall be submitted at least 30 days prior to the termination of the storage, use or handling of hazardous materials. The fire code official is authorized to require that the application be accompanied by an approved facility closure plan in accordance with Section 2701.6.3

2701.5 Permits. Permits shall be required as set forth in Sections 105.6 and 105.7.

Where required by the fire code official, reports required by Section 2701.5.1 or 2701.5.2, shall be maintained in a key box in accordance with Section 506.1 so as to be available to emergency response personnel.

When required by the fire code official, permittees shall apply for approval to permanently close a storage, use or handling facility. Such application shall be submitted at least 30 days prior to the termination of the storage, use or handling of hazardous materials. The fire code official is authorized to require that the application be accompanied by an approved facility closure plan in accordance with Section 2701.6.3.

Reason: Section 2701.5.2 contains the requirement for an HMIS report. There is no provision that indicates where the HMIS report must be maintained. Under normal operations, there may not be a need to keep this information readily available, however, in an emergency, this information is necessary in order to determine the safest course of action for firefighting/rescue personnel.

Responses to a hazardous material incident ideally include three sources of information for determining the type and quantity of material involved. Many times, HMIS are unavailable or are located inside the "hot zone" of the buildings to which emergency personnel are responding.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: C	committee:	AS	AM	D
A	ssembly:	ASF	AMF	DF

F77–07/08 507.4 (New); IBC 604 (New)

Proponent: Sean DeCrane, Cleveland Fire Fighters Association, IAFF Local #93, Cleveland, OH

THESE PROPOSALS ARE ON THE AGENDA OF THE IFC AND THE IBC GENERAL CODE DEVELOPMENT COMMITTEES AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I – IFC

Add new text as follows:

507.4 Lightweight truss identification. Lightweight truss construction shall be identified in accordance with Sections 507.4.1 through 507.4.3.4.

Exception. Detached one and two family dwellings unless otherwise required by other laws or ordinance.

507.4.1 Lightweight steel trusses. Where the roof or any floor of a building does not have a fire-resistance rating, and the non-rated assembly is constructed of a pre-fabricated steel truss system consisting of cold-formed steel chord and web sections using 10 gauge or thinner elements, identifying emblems complying with Section 507.4.3 shall be permanently affixed to the building.

507.4.2 Lightweight wood trusses. Where the roof or any floor of a building does not have a fire-resistance rating, and the non-rated assembly is constructed of a pre-fabricated wood truss with members connected using light gauge (16, 18 or 20 gauge) metal truss plates, identifying emblems complying with Section 507.4.3 shall be permanently affixed to the building.

507.4.3 Identifying emblems. Identifying emblems shall comply with Sections 507.4.3.1 through 507.4.3.4.

507.4.3.1 Color. The emblem shall be of a bright and reflective color, or made of reflective material.

507.4.3.2 Dimensions. The dimensions of the emblem shall be a minimum of 12 inches (305 mm) horizontally by 6 inches (152 mm) vertically.

507.4.3.3 Identification Letters. Letters of an approved size and color shall be printed on the emblem as follows:

- 1. "F" to signify a floor with truss construction;
- 2. "R" to signify a roof with truss construction;
- 3. "F/R" to signify both a floor and roof with truss construction.

507.4.3.4 Location. The emblem shall be permanently affixed on or to the left of the main entrance door on the side of the building from which responding firefighters are most likely to enter, as approved and shall be located at a height between 4 feet (1219 mm) and 6 feet (1829 mm) above the ground.

PART II – IBC

Add new text as follows:

SECTION 604 IDENTIFICATION OF UNPROTECTED LIGHTWEIGHT TRUSS CONSTRUCTION

604.1 Lightweight steel trusses. If the roof or any floor of a building does not have a fire-resistance rating, and the non-rated assembly is constructed of a pre-fabricated steel truss system consisting of cold-formed steel chord and web sections using 10 gauge or thinner elements, identifying emblems complying with Section 604.3 shall be permanently affixed to the building.

Exception. Detached one and two family dwellings unless otherwise required by other laws or ordinance.

604.2 Lightweight wood trusses. If the roof or any floor of a building does not have a fire-resistance rating, and the non-rated assembly is constructed of a pre-fabricated wood truss with members connected using light gauge (16, 18 or 20 gauge) metal truss plates, identifying emblems complying with Section 604.3 shall be permanently affixed to the building.

Exception. Detached one and two family dwellings unless otherwise required by other laws or ordinance

604.3 Identifying emblems. Identifying emblems shall comply with Sections 604.3.1 through 604.3.4.

604.3.1 Color. The emblem shall be of a bright and reflective color, or made of reflective material.

604.3.2 Dimensions. The dimensions of the emblem shall be a minimum of 12 inches (305 mm) horizontally by 6 inches (152 mm) vertically.

604.3.3 Identification Letters. Letters of an approved size and color shall be printed on the emblem as follows:

- <u>1.</u> <u>"F" to signify a floor with truss construction;</u>
- 2. "R" to signify a roof with truss construction;
- 3. <u>"F/R" to signify both a floor and roof with truss construction.</u>

604.3.4 Location. The emblem shall be permanently affixed on or to the left of the main entrance door on the side of the building from which responding firefighters are most likely to enter, as approved and shall be located at a height between 4 feet (1219 mm) and 6 feet (1829 mm) above the ground.

Reason: One significant threat facing fire fighters today is the wide use of lightweight non-fire rated construction, specifically lightweight truss construction. We have witnessed numerous occasions where fire fighters have been injured and killed in structures using lightweight truss construction. Many of the collapses have occurred in the first few minutes of the incident.

It is acknowledged the use of truss construction, due to its great load bearing ability, has allowed for buildings to be constructed cheaper and with many benefiting features. The issue needing to be addressed is when that building is compromised by fire. Due to the lightweight material these buildings fail far quicker putting the fire fighters at greater risk.

The Intent of the code indicates the intention to provide safety to fire fighters and emergency responders during emergency operations. Simply identifying the structures where truss construction is used will actually allow all the IBC to comply with that specific intent.

This proposal deals with specifically Lightweight Steel non-rated assembly and Lightweight Wood Trusses. It does not require every building with truss construction to be labeled. With the ever widening use of lightweight truss construction, we are endangering the lives of fire fighters who enter the structure to extinguish the fire. The intent of this proposal is to notify responding fire fighters of the use of non-rated truss construction and to identify the risks involved. This knowledge will indicate the need for extreme caution, and if no lives are at risk, a defensive attack. While opponents discuss the need for pre-planning, there are times where it would not be of use. In times of Mutual Aid response, a responding company from an outside jurisdiction may be one of the first arriving companies. This company would not necessarily have been informed of the known risk. In larger Departments, city neighborhoods can have drastically different types of construction inherent to the particular populace. Non-rated truss construction identification placards would notify these responding companies of the building construction hazard they are facing.

Lightweight truss construction is economically attractive. The proponent's intent is not to eliminate lightweight construction but rather force the industry to protect the structural members from the effects of fire for a defined time period or notify the responding fire fighters of the risk they face when responding to the respective structure.

This requirement is already required statewide in the States of New Jersey and New York.

<u>Bibliography</u>

Special Data Package, Fire Fighter Casualties as a Result of Roof or Floor Collapses in Wood-Frame Buildings, Fire Analysis and Research Division, National Fire Protection Association, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101, March 1998

Cost Impact: The code change proposal will have a minimal (low) effect on the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F78–07/08 507.4 (New), 502.1 (New)

Proponent: Scott Poster, Fire Department, Los Angeles County, CA

Add new text as follows:

507.4. Structures and outdoor storage underneath high-voltage transmission lines. Structures and outdoor storage underneath high-voltage transmission lines shall comply with Section 507.4.1 and 507.4.2.

507.4.1 Structures. Structures shall not be constructed within the utility easement underneath high-voltage transmission lines.

Exception: Restrooms and unoccupied telecommunication structures of non-combustible construction less than 15 feet in height.

507.4.2 Outdoor storage. Outdoor storage within the utility easement underneath high-voltage transmission lines shall be limited to noncombustible material. Storage of hazardous materials including, but not limited to, flammable and combustible liquids is prohibited.

Exception: Combustible storage, including vehicles, is allowed provided that a plan indicating the storage configuration is submitted and approved.

502.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

HIGH-VOLTAGE TRANSMISSION LINE. An electrical power transmission line operating at or above 66 kilovolts

Reason: Structure fires underneath high-voltage transmission lines could cause arcing and shock hazard. Firefighting operations involve the use of elevated aerial apparatus and other emergency equipment, personnel aboveground and hose streams that may come in close proximity to high-voltage transmission lines. According to nationally recognized utility companies, manual de-energization of lines may take 20 minutes or longer to accomplish. A history of problems with structure fires underneath high voltage lines does not exist, due to the fact that the utility companies have set internal policies that until recently allowed only low-intensity use of the property underneath high-voltage transmission lines.

From NIOSH Hazard ID #15, January 2002, Firefighters Exposed to Electrical Hazards During Wildland Fire Operations

"Dense smoke can obscure energized electrical lines or equipment and can become charged and conduct electrical current."

From Bonneville Power Administration, Living and Working Safely Around High Voltage Power Lines

p.7, 2001, DOE/BP-1821, "Smoke and hot gases from a large fire can create a conductive path for electricity. When a fire is burning under a transmission line, electricity could arc from the conductor to the ground, endangering people and objects near the arc"

From SP-Ausnet, Corporate Communications Team, Melbourne, Victoria. "Excessive exposure to "electric fields" and "magnetic fields" is deemed harmful to humans or animals. Powerlines are designed such that the electric and magnetic fields at ground level and at the boundaries of easements are kept within these standards. If one was to change the conditions on the ground under a high voltage line, such as building a structure or raise the ground level, etc. then the persons in the vicinity of these higher levels are exposed to higher than accepted electric and magnetic fields. It should be noted that the effect of these fields are proportional to the field strength as well as the duration of exposure."

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F79-07/08 508.2

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

508.2 Type of water supply. A water supply shall consist of <u>approved</u> reservoirs, pressure tanks, elevated tanks, water mains, <u>fire department mobile water supply resources</u> or other fixed systems capable of providing the required fire flow.

Reason: The current code language in 508.2 does not allow the fire code official to consider fire department rural water supply operations involving tanker shuttles as a means of meeting the required fire flow. For a vast majority of rural areas, the only means of providing a water supply is via a tanker shuttle type operation. This code change will recognize this capability as a reasonable alternative to providing the required water supply. The term "approved" is also added to provide an oversight by the fire code official /Fire Chief in determining if a water supply is appropriate for utilization in providing the needed fire flow.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F80-07/08 508.3.1 (New), Appendix B105.1

Proponent: Steven Orlowski, National Association of Home Builders

Revise as follows:

B105.1 (Supp) <u>508.3.1</u> One- and two-family dwellings. The minimum fire-flow and flow duration requirements for one- and two family dwellings having a fire-flow calculation area which does not exceed <u>5,000</u> 3,600 square feet (344.5 <u>464.5</u> m²) shall be 1,000 gallons per minute (3785 L/min) for 1 hour. Fire flow and flow duration for <u>one- and two- family</u> dwellings having a fire-flow calculation area in excess of <u>5,000</u> 3,600 square feet (344.5 <u>464.5</u> m²) shall be 1,000 gallons per minute (3785 L/min) for 1 hour. Fire flow and flow duration for <u>one- and two- family</u> dwellings having a fire-flow calculation area in excess of <u>5,000</u> 3,600 square feet (344.5 <u>464.5</u> m²) shall not exceed 1,500 gallons per minute (5678 L/min) be less than that specified in Table B105.1.

Exception: A reduction in required fire flow of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system.

Reason: During the recent Uniform Fire Code revision cycle, the allowable fire-flow calculated area was increased from 3,600 square feet to 5,000 square feet. This proposal will keep the requirements consistent for one- and two- family dwellings constructed in jurisdictions where there is an overlap in authority by the Building Official and the Fire Marshal. By increasing the square footage from 3,600 to 5,000 it will relieve the designer and reviewer from having to perform burdensome calculations for each individual dwelling. Allowing for a 50 % reduction in fire flow for dwellings should be permitted where the dwelling is equipped with an automatic sprinkler system and rated exterior walls in accordance with IRC Table R302.1.

Cost Impact: The code change proposal will decrease the cost of construction.

Public Hearing: Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

F81–07/08 508.5, 508.5.1 through 508.5.1.4 (New); Appendix C

Proponent: Anthony C. Apfelbeck, City of Altamonte Springs, FL

Revise as follows:

508.5 Fire hydrant systems. Where the fire code official has determined that fire hydrant systems are available, fire hydrant systems shall comply with Sections 508.5.1 through 508.5.6.

508.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on site fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

- 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
- 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

C102.1 <u>508.5.1</u> Fire hydrant locations. Where a facility, building or portion of a building is hereafter constructed or moved into the jurisdiction, fire hydrants shall be provided along required fire apparatus access roads, and adjacent public streets and on the proposed site in accordance with Sections 508.5.1.1 through 508.5.1.4.

C103.1 Fire hydrants available. <u>508.5.1.1 Number of fire hydrants.</u> The minimum number of fire hydrants available to a building shall not be less than that listed in Table <u>C105.1</u> <u>508.5.1.1</u>. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table <u>C105.1</u> <u>508.5.1.1</u> when applied to fire apparatus access road and perimeter public streets from which fire operations could be conducted.

C104.1 <u>508.5.1.2</u> **Existing fire hydrants.** Existing fire hydrants on public streets are allowed to be considered as available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads.

C105.1 508.5.1.3 Hydrant spacing. The average spacing between fire hydrants shall not exceed that listed in Table C105.1 508.5.1.1.

Exception: The fire <u>chief</u> <u>code official</u> is authorized to accept a deficiency of up to 10 percent where existing fire hydrants provide all or a portion of the required fire hydrant service.

Regardless of the average spacing, fire hydrants shall be located such that all points on streets and access roads adjacent to a building are within the distances listed in Table-C105.1 508.5.1.1.

TABLE C105.1 [Supp] <u>508.5.1.1</u> NUMBER AND DISTRIBUTION OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS ^{a,b,c} (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT ^d
1,750 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	260	150
6,500-7,000	7	250	150
7,500 or more	8 or more ^e	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

a. Reduce by 100 feet for dead-end streets or roads.

- b. Where streets are provided with median dividers which cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.
- c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
- d. Reduce by 50 feet for dead-end streets or roads.
- e. One hydrant for each 1,000 gallons per minute or fraction thereof.

508.5.1.4 On-site fire hydrants. On-site fire hydrants shall be provided so that no portion of a facility or building is more than 400 feet (122m) from a fire hydrant.

Exceptions:

- 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
- 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

2. Delete without substitution:

C101.1 Scope. Fire hydrants shall be provided in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed.

Reason: The current Appendix C, Fire Hydrant Locations and Distribution, is inserted into Section 508.5.1. The current Section 508.5.1 is relocated to a new Section 508.5.1.4. The current hydrants spacing language has a number of faults that are corrected by this action:

- The current language in Section 508.5.1 conflicts with optional adoptable language in appendix C. While 508.5.1 states that, "on-site hydrants shall be provided where required by the fire code official" when a building is more than 400 feet from a fire hydrant, Appendix C would require additional hydrants over and above the 508.5.1 language. To correct this, the current 508.5.1 language is now moved under a new 508.5.1 where the hydrant spacing language is in better context with the overall "fire hydrant system" criteria.
- 2. Appendix C is designed as a performance standard rather than a prescriptive approach. As the hazard (and required fire flow) increases, the number of fire hydrants necessary to protect the property also increases. This approach for hydrant spacing design is more appropriate to the protected property.
- 3. A straight reading of the 508.5.1 requires fire hydrants only when a building is more than 400 feet from a hydrant on a fire apparatus access road. Since there is no reference to public hydrants or a requirement that hydrants be provided in a general manner, it is unclear as to the intended application.
- 4. It is important to note that the inclusion of the new Appendix C text into 508.5.1 does not change the original scope language of "508.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 508.5.1 through 508.5.6." The imported language from Appendix C just provides additional design criteria for fire hydrant systems.
- 5. The language "Where the fire code official has determined that fire hydrant systems are available" has been added to the first line in 508.5 as a scoping clarification. It does not appear to be the intent of the original language to required hydrants when no water distribution system is available to supply the hydrants. This is more of a function of Section 508.1. The authority to determine if availability is reasonable is vested with the fire code official.
- 6. The term "fire chief" in Section 508.5.1.3 is revised to "fire code official" in order to match the existing text contained in Section 508.
- 7. Lastly, this proposed change will bring needed nationwide clarity to design professionals, contractors, owners and enforcement officials via a common fire hydrant location and spacing approach via this performance design.

Cost Impact: The code change will increase the cost of construction.

Public Hearing: Comr	nittee:	AS	AM	D
Asse	mbly:	ASF	AMF	DF

F82-07/08 509.1 (IBC [F] 911.1)

Proponent: Phillip Brazil, PE, Reid Middleton, Inc., representing himself

Revise as follows:

509.1 (IBC [F] 911.1) (Supp) Features. Where required by other sections of this code and in all buildings classified as high-rise buildings by the *International Building Code*, a fire command center for fire department operations shall be provided. The location and accessibility of the fire command center shall be approved by the fire department. The fire command center shall be separated from the remainder of the building *Code* or horizontal assembly constructed in accordance with Section 706 of the *International Building Code*, or both. The room shall be a minimum of 96 square feet (9 m²) with a minimum dimension of 8 feet (2438 mm). A layout of the fire command center and all features required by this section to be contained therein shall be submitted for approval prior to installation. The fire command center shall comply with NFPA 72 and shall contain the following features:

- 1. The emergency voice/alarm communication system unit.
- 2. The fire department communications system.
- 3. Fire-detection and alarm system annunciator system.
- 4. Annunciator <u>unit</u> visually indicating the location of the elevators and whether they are operational.
- 5. Status indicators and controls for air-handling systems.
- 6. The fire-fighters control panel required by Section 909.16 for smoke control systems installed in the building.
- 7. Controls for unlocking stairway doors simultaneously.
- 8. Sprinkler valve and water-flow detector display panels.
- 9. Emergency and standby power status indicators.
- 10. A telephone for fire department use with controlled access to the public telephone system.
- 11. Fire pump status indicators.
- 12. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, fire-fighting equipment and fire department access.
- 13. Work table.
- 14. Generator supervision devices, manual start and transfer features.
- 15. Public address system, where specifically required by other sections of this code.
- 16. Elevator fire recall switch in accordance with ASME A17.1.
- 17. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.

Reason: The features contained in a fire command center are typically served by electrical systems that are required to be protected by shaft enclosures or to be self-protecting, for example, by the installation of listed electrical circuit protective systems or equivalent systems. Fire command centers are typically required in buildings where shaft enclosures and electrical circuit protective systems are required to be 2-hour fire-resistance-rated (i.e., high-rise buildings). The fire-resistance rating of the fire barrier protecting the fire command center, however, is required to be 1-hour. The level of protection typically required of the electrical systems that serve the fire command center is diminished by the lack of an equivalent level of protection. The purpose of the proposal is to establish equivalent protection for the fire command center.

The other proposed changes are editorial. For examples of listed electrical circuit protective systems, refer to UL Category FHIT, Electrical Circuit Protective Systems, which covers systems incorporating cable protected with electrical circuit protective materials (Category FHIY) and systems constructed with fire-resistive cable (Category FHJR).

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F83-07/08

508.5.1

Proponent: Steven Orlowski, National Association of Home Builders

Revise as follows:

508.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant or a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

- 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
- 2. For Group R-3 occupancies that are equipped throughout with an approved automatic sprinkler system, the distance requirement shall be 1000 (304.8 m) feet.
- <u>3.2.</u> For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

Reason: The purpose of the following modification is to allow greater distances between hydrant spacing in residential developments where all the dwelling units are equipped with an automatic sprinkler system. The justification for allowing the 1000 foot spacing is based on the allowance of 1000 feet from the water source as required in the WUIC Section 404 and the NFPA 1 requirement for when hydrants are not required to protect structures, a hydrant shall be spaced no more than 1000 feet apart for assisting vehicular or transportation hazards.

Cost Impact: The code change proposal will decrease the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

F84-07/08 509.1 (IBC [F] 911.1)

Proponent: Ken Kraus, Fire Department, Los Angeles, CA

Revise as follows:

509.1 (IBC [F] 911.1) (Supp) Features. Where required by other sections of this code and in all buildings classified as high-rise buildings by the *International Building Code*, a fire command center for fire department operations shall be provided. The location and accessibility of the fire command center shall be approved by the fire department. The fire command center shall be separated from the remainder of the building *Code* or horizontal assembly constructed in accordance with Section 706 of the *International Building Code*, or both. The room shall be a minimum of 96 250 square feet ($9 23 \text{ m}^2$) with a minimum dimension of 8 10 feet (2438 3048 mm). A layout of the fire command center and all features required by this section to be contained therein shall be submitted for approval prior to installation. The fire command center shall comply with NFPA 72 and shall contain the following features:

- 1. The emergency voice/alarm communication system unit.
- 2. The fire department communications system.
- 3. Fire-detection and alarm system annunciator system.
- 4. Annunciator <u>unit</u> visually indicating the location of the elevators and whether they are operational.
- 5. Status indicators and controls for air-handling systems.
- 6. The fire-fighters control panel required by Section 909.16 for smoke control systems installed in the building.
- 7. Controls for unlocking stairway doors simultaneously.
- 8. Sprinkler valve and water-flow detector display panels.
- 9. Emergency and standby power status indicators.
- 10. A telephone for fire department use with controlled access to the public telephone system.
- 11. Fire pump status indicators.
- 12. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, fire-fighting equipment and fire department access.
- 13. Work table.
- 14. Generator supervision devices, manual start and transfer features.
- 15. Public address system, where specifically required by other sections of this code.
- 16. Elevator fire recall switch in accordance with ASME A17.1.
- 17. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.

Reason: This proposal is intended to increase the minimum size of the Fire Command Center to a size and configuration that is conducive to effective use of the facility by emergency responders.

The current minimum requirement for the size of a Fire Command Center is impractical. Fire Command Centers (FCC) not only need to be designed to accommodate a significant number of emergency responders wearing full personel protective equipment. FCC's are also used to review building emergency plans during incidents, co-locate decision makers within the Incident Command System (ICS) and interpret fire protection system information. Given the multiple uses of the FCC, it is extremely likely that the limitations of a 10'by 10' room would serve to compromise the effectiveness of Incident management.

The current minimum size has proven in both exercise and emergency incident scenarios to be too small and confining.

A minimum size of 250 square feet allows for the necessary personnel to effectively perform the required tasks associated with a Fire Command Center.

Cost Impact: The code change proposal will increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
_	Assembly:	ASF	AMF	DF

F85-07/08 509.1 (IBC [F] 911.1)

Proponent: Lawrence G. Perry, AIA, representing Building Owners and Managers Association International (BOMA)

Revise as follows:

509.1 (IBC [F] 911.1) (Supp) Features. Where required by other sections of this code and in all buildings classified as high-rise buildings by the *International Building Code*, a fire command center for fire department operations shall be provided. The location and accessibility of the fire command center shall be approved by the fire department. The fire command center shall be separated from the remainder of the building *Code* or horizontal assembly constructed in accordance with Section 706 of the *International Building Code*, or both. The room shall be a minimum of 96 square feet (9 m2) with a minimum dimension of 8 feet (2438 mm). A layout of the fire command center and all features required by this section to be contained therein shall be submitted for approval prior to installation. The fire command center shall comply with NFPA72 and shall contain the following features:

- 1. The emergency voice/alarm communication system unit.
- 2. The fire department communications system.
- 3. Fire-detection and alarm system annunciator system.
- 4. Annunciator visually indicating the location of the elevators and whether they are operational.
- 5. Status indicators and controls for air-handling systems.
- 6. The fire-fighter=s control panel required by Section 909.16 for smoke control systems installed in the building.
- 7. Controls for unlocking stairway doors simultaneously.
- 8. Sprinkler valve and water-flow detector display panels.
- 9. Emergency and standby power status indicators.
- 10. A telephone for fire department use with controlled access to the public telephone system.

- 11. Fire pump status indicators.
- 12. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, fire-fighting equipment and fire department access, and the location of fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions.
- 13. Work table.
- 14. Generator supervision devices, manual start and transfer features.
- 15. Public address system, where specifically required by other sections of this code.
- 16. Elevator fire recall switch in accordance with ASME A17.1.
- 17. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.

Reason: This proposal will add additional information to first responders in buildings having fire command centers. It will require that the schematic building plans, which are already required, include the location of fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions. BOMA believes this is a far better method of providing this information to fire inspectors and responding fire fighters than providing stencils or stickers on walls throughout the building. BOMA has submitted a separate proposal to delete the requirement for marking of rated walls (newly added to Section 703.6 of the IBC).

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
0	Assembly:	ASF	AMF	DF

F86–07/08 509.1, 509.2 (New) [IBC [F] 911.1, [F] 911.2 (New)]

Proponent: Gary Lewis, Chair, representing ICC Ad Hoc Committee on Terrorism Resistant Buildings

1. Revise as follows:

509.1 (IBC [F] 911.1) (Supp) Features. Where required by other sections of this code and in all buildings classified as high-rise buildings by the *International Building Code*, a fire an emergency command center for fire department emergency operations shall be provided. The location and accessibility of the fire emergency command center shall be approved by the fire department. The fire emergency command center shall be separated from the remainder of the building by not less than a 1-hour fire barrier constructed in accordance with Section 706 of the *International Building Code*, or both. In buildings that are more than 420 feet (128 m) in height, the emergency command center shall be separated from the remainder of the building by not less than a 2-hour fire-resistance-rated fire barrier constructed in accordance with Section 706 of the *International Building Code* or 2-hour horizontal assembly constructed in accordance with Section 706 of the *International Building Code*, or both. In buildings that are more than 420 feet (128 m) in height, the emergency command center shall be separated from the remainder of the building by not less than a 2-hour fire-resistance-rated fire barrier constructed in accordance with Section 706 of the *International Building Code* or 2-hour horizontal assembly constructed in accordance with Section 711 of the *International Building Code*, or both. The room shall be a minimum of 96 square feet (9 m²) with a minimum dimension of 8 feet (2438 mm). A layout of the fire emergency command center and all features required by this section to be contained therein shall be submitted for approval prior to installation. The fire emergency command center shall comply with NFPA 72 and shall contain the following features:

- 1. The emergency voice/alarm communication system unit.
- 2. The fire department communications system.
- 3. Fire-detection and alarm system annunciator system.
- 4. Annunciator visually indicating the location of the elevators and whether they are operational.
- 5. Status indicators and controls for air-handling systems.
- 6. The fire-fighter=s control panel required by Section 909.16 for smoke control systems installed in the building.
- 7. Controls for unlocking stairway doors simultaneously.
- 8. Sprinkler valve and water-flow detector display panels.
- 9. Emergency and standby power status indicators.
- 10. A telephone for fire department use with controlled access to the public telephone system.
- 11. Fire pump status indicators.
- 12. Schematic Building Emergency resource manual approved by the fire department that includes emergency operation instructions and building plans indicating the typical floor plan and detailing the building core, means of egress, as well as the layout and operating instructions for the emergency aspects of fire protection systems, <u>HVAC systems, elevator controls, communication systems, utilities,</u> fire-fighting equipment and fire department access.
- 13. Work table.
- 14. Generator supervision devices, manual start and transfer features.
- 15. Public address system, where specifically required by other sections of this code.
- 16. Elevator fire recall switch in accordance with ASME A17.1.
- 17. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.

2. Add new text as follows:

509.2 (IBC [F] 911.2) Location. The emergency command center shall be located at least 25 feet from uncontrolled building entrances and loading docks, shall not be visible from the street, and shall be at a location approved by the fire chief.

Reason: The purpose of this change is to increase the ability of firefighters, and other emergency responders, to develop a clear picture of conditions throughout the building which will enable them to better manage evacuation, fire suppression and other emergency response activities. It will also enhance the safety of emergency responders, in buildings greater than 420 feet in height, by requiring a two-hour fire resistance rated enclosure for the emergency command center, the same as is required for the exit stair enclosure.

The value of the fire control center already required by the Code is enhanced by a strengthened "Emergency Resource Manual" which will now include operating instructions for emergency systems as well as information on the emergency aspects of HVAC systems, elevator controls, communication systems and utilities. The center is re-titled the emergency command center to reflect its role in managing emergencies other than fire emergencies.

New Section 509.2 will establish a minimum distance the command center must be located from any uncontrolled building entrance or loading dock, thus reducing the possibility of access or damage to the command center from outside influences.

Cost Impact: The code change proposal will increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
-	Assembly:	ASF	AMF	DF

F87-07/08 511 (New), 907.2.12.2 (IBC [F] 907.2.12.2), Appendix I (New)

Proponent: Tom Lariviere, Fire Department, Madison, MS, representing Joint Fire Service Review Committee

1. Add new text as follows:

SECTION 511 EMERGENCY RESPONDER RADIO COVERAGE

511.1 Emergency responder radio coverage in new buildings. All new buildings shall have approved radio coverage for emergency responders within the building.

511.2 Emergency responder radio coverage in existing buildings. Existing buildings that do not have approved radio coverage for emergency responders within the building shall be equipped with such coverage within 18 months of receiving notice of such deficiency from the fire code official.

2. Revise as follows:

907.2.12.2 (IBC [F] 907.2.12.2) (Supp) Fire department communication system. An approved two-way, fire department communication emergency responder radio coverage system designed and installed in accordance with NFPA 72 shall be provided for fire department use. It shall operate between a fire command center complying with Section 509 and elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside enclosed exit stairways. The fire department communication device shall be provided at each floor level within the enclosed exit stairway.

Exception: Fire department radio systems where approved by the fire department.

3. Add new appendix as follows:

APPENDIX I EMERGENCY RESPONDER RADIO COVERAGE

SECTION I101 GENERAL

I101 Scope. Systems, components, and equipment required to provide emergency responder radio coverage shall be in accordance with this appendix.

I101.1 Permit. A construction permit is required for installation of or modification to emergency responder radio coverage systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

SECTION I102 DEFINITIONS

I102.1 Definitions. For the purpose of this appendix, certain terms are defined as follows:

AGENCY. Any emergency responder department within the jurisdiction that utilizes radio frequencies for communication. This could include, but not be limited to, various public safety agencies such as fire department, emergency medical services and law enforcement.

SECTION I103 TECHNICAL REQUIREMENTS

I103.1 Radio signal strength. The building shall be considered to have acceptable emergency responder radio coverage when signal strength measurements in 90 percent of all areas on each floor of the building meet the signal strength requirements in Sections I103.1.1 and I103.1.2.

<u>I103.1.1 Minimum signal strength into the building</u>. A minimum signal strength of -95 dBm shall be receivable within the building.

I103.1.2 Minimum signal strength out of the building. A minimum signal strength of -100 dBm shall be received by the agency's radio system when transmitted from within the building.

I103.2 System design. The emergency responder radio coverage system shall be designed in accordance with Sections I103.2.1 through I103.2.5.

I103.2.1 Amplification Systems Allowed. Buildings and structures which cannot support the required level of radio coverage shall be equipped with a radiating cable system, a distributed antenna system with FCC certified signal boosters, or other system approved by the fire code official in order to achieve the required adequate radio coverage.

I103.2.2 Technical criteria. The fire code official shall maintain a document providing the specific technical information and requirements for the emergency responder radio coverage system. This document shall contain, but not be limited to, the various frequencies required, the location of radio sites, effective radiated power of radio sites, and other supporting technical information.

1103.2.3 Secondary power. The emergency responder radio coverage system shall be equipped with a secondary source of power. The secondary source of power shall be either a battery system or an emergency generator. The secondary power supply shall supply power automatically when the primary power source is lost. The secondary source of power shall be capable of operating the emergency responder radio coverage system for a period of at least twelve hours.

1103.2.3.1 Battery Systems. The active components of the installed system or systems shall be capable of operating on an independent battery system for a period of at least twelve hours without external power input. The battery system shall automatically charge in the presence of external power input.

1103.2.4 Signal Booster requirements. If used, signal boosters shall meet the following requirements:

- 1. All signal booster components shall be contained in a NEMA4 type water proof cabinet.
- <u>The battery system shall be contained in a NEMA4 type water proof cabinet.</u>
 <u>The system shall include automatic alarming of malfunctions of the signal boo</u>
- 3. The system shall include automatic alarming of malfunctions of the signal booster and battery system. Any resulting trouble alarm shall be automatically transmitted to an approved central station or proprietary supervising station as defined in NFPA 72 or, when approved by the fire code official, shall sound an audible signal at a constantly attended location.
- 4. Equipment shall have FCC Certification prior to installation.

I103.2.5 Additional frequencies and change of frequencies. The emergency responder radio coverage system shall be capable of modification or expansion in the event frequency changes are required by the FCC or additional frequencies are made available by the FCC.

I103.3 Installation requirements. The installation of the public safety radio coverage system shall be in accordance with Sections I103.3.1 through I103.3.5.

I103.3.1 Approval prior to installation. No amplification system capable of operating on frequencies licensed to any public safety agency by the FCC shall be installed without prior coordination and approval of the fire code official.

I103.3.2 Permit required. A construction permit as required by Section 105.7.11 shall be obtained prior to the installation of the emergency responder radio coverage system.

I103.3.3 Minimum qualifications of personnel. The minimum qualifications of the system designer and lead installation personnel shall include:

- 1. A Valid FCC issued General Radio Operators License, and
- 2. Certification of in-building system training issued by a nationally recognized organization, school or a certificate issued by the manufacturer of the equipment being installed.

The agency may waive these requirements upon successful demonstration of adequate skills and experience satisfactory to the fire code official.

I103.3.4 Acceptance test procedure. When an emergency responder radio coverage system is required, and upon completion of installation, the building owner shall have the radio system tested to ensure that two-way coverage on each floor of the building is a minimum of 90 percent. The test procedure shall be conducted as follows:

- 1. Each floor of the building shall be divided into a grid of 20 approximately equal areas.
- 2. The test shall be conducted using a calibrated portable radio of the latest brand and model used by the agency talking through the agency's radio communications system.
- 3. A maximum of two nonadjacent areas will be allowed to fail the test.
- 4. In the event that three of the areas fail the test, in order to be more statistically accurate, the floor may be divided into 40 equal areas. A maximum of four nonadjacent areas will be allowed to fail the test. If the system fails the 40-area test, the system shall be altered to meet the 90 percent coverage requirement.
- 5. A test location approximately in the center of each grid area will be selected for the test, then the radio will be enabled to verify two-way communications to and from the outside of the building through the public agency's radio communications system. Once the test location has been selected, that location shall represent the entire area. If the test fails in the selected test location, that grid area shall fail, and prospecting for a better spot within the grid area will not be allowed.
- 6. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified during annual tests. In the event that the measurement results become lost, the building owner will be required to rerun the acceptance test to reestablish the gain values.
- 7. As part of the installation a spectrum analyzer or other suitable test equipment shall be utilized to insure spurious oscillations are not being generated by the subject signal booster. This test will be conducted at time of installation and subsequent annual inspections.

I103.3.5 FCC compliance. The emergency responder radio coverage system installation and components shall also comply with all applicable Federal regulations, including but not limited to, Federal Communications Rules (47 CFR 90.219).

I103.4 Maintenance. The emergency responder radio coverage system shall be maintained in accordance with Sections I103.4.1 through I103.4.5.

1103.4.1 Maintenance. The public radio coverage system shall be maintained operational at all times.

1103.4.2 Permit required. A permit as required by Section 105.7.4 shall be obtained prior to the modification or alteration of the emergency responder radio coverage system.

I103.4.3 Testing and proof of compliance. The emergency responder radio coverage system shall be inspected and tested annually or whenever structural changes occur including additions or remodels that could materially change the original field performance tests. Testing shall consist of the following:

- 1. In-building coverage test as described in Section I103.3.4.
- 2. Signal boosters shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance.
- 3. Backup batteries and power supplies shall be tested under load of a period of one hour to verify that they will properly operate during an actual power outage. If within the one hour test period the battery exhibits symptoms of failure, the test shall be extended for additional one hour periods until the integrity of the battery can be determined.
- 4. All other active components shall be checked to verify operation within the manufacturer's specifications.
- 5. <u>At the conclusion of the testing a report shall be submitted to the fire code official which shall verify compliance</u> with Section 1103.3.4.

I103.4.4 Additional frequencies. The building owner shall modify or expand the emergency responder radio coverage system at their expense in the event frequency changes are required by the FCC or additional frequencies are made available by the FCC. Prior approval of a public safety radio coverage system on previous frequencies does not exempt this section.

I103.4.5 Field testing. Agency personnel shall have the right to enter onto the property at any reasonable time to conduct field-testing to verify the required level of radio coverage.

Reason: Large buildings have historically provided barriers to radio communications within them. This is the reason high rise buildings are required to install hard wired, two-way communications systems. The typical system has phone jacks strategically located throughout the building (in stairways, elevator lobbies, and inside elevators), with hand sets available to emergency responders in the lobby or the fire control room. However, problems with this solution include:

- Handset availability even if they don't get stolen or misplaced, the typical building will only have five handsets, far too few for the dozens
 to hundreds of firefighters required to successfully bring a high rise fire under control
- Lack of training for responders while some fire departments routinely train on these systems, each one is different, presenting problems remembering the special considerations necessary to operate successfully in each high rise building; other responders (law enforcement, EMS) don't train on these systems at all, and many times don't even know they exist
- Buildings other than high-rise interfere with routine radio communications, but aren't required to provide an alternative.

When this requirement was implemented, it was the best alternative available. Now, technology has progressed to a point where there are multiple solutions with multiple technologies to address virtually any situation. These solutions support emergency responders' radio systems so that no additional training is required by the responders; the same communication system that they use every day can be used in any building in a jurisdiction.

Emergency response agencies use radio communications routinely and lives depend on the adequacy of the radio communication system. Communications must be able to go both into and out of the buildings in times of emergency. Whether it be someone inside the building requesting assistance, or even worse calling May Day, or the Incident Commander outside the building trying to obtain a status report to make a determination on deployment of additional resources, communications is critical.

Some will complain of the cost of these systems, which range from the relatively inexpensive to very expensive, depending upon the solution chosen by the building owner or developer (one estimate is from \$.40/ft to \$1.25/ft). The fact is that tax payers have invested billions of dollars in their public safety communications systems. It isn't unusual for a mid-size jurisdiction to spend millions of dollars to equip emergency responders with communications systems, only to have a developer construct a building that defeats the entire system inside their facility. Good public policy dictates that these owners/developers bear the cost of upgrading their facilities to allow emergency responders to utilize the tools that tax payers have provided. This is in keeping with the philosophy inherent in the I-Codes that, when a facility grows too large or complex for effective fire response, that fire protection features be provided within the building at the owner's expense.

This proposal provides that an adequate level of communication is available within the building. Once a deficiency is noted in a building, the installation and technical criteria in Appendix I can be utilized to design and install a system to enhance the radio communications. There are several types of systems that can be utilized to enhance radio traffic and under this proposal any of these systems can be used.

This proposal also includes existing buildings in Section 511.2. While modeling and other techniques may provide a good prediction as to whether a building will interfere with radio communications, the reality is that it is unknown if a building will need to install any type of radio system enhancements until after the building is constructed. These issues are dependent on the construction type, shadows of other buildings, size of structure, etc. This proposal includes existing structures so that once the building is built, the system can be installed at any time, when and if it becomes necessary; it also provides a reasonable amount of time for existing buildings to come into conformance (18 months after notification).

The proposed Appendix I includes design, construction, maintenance and testing criteria. This provides guidance to the code official and ensures that the emergency responder radio coverage system will be operational throughout the life of the building.

Cost Impact: The code change proposal will increase the cost of construction.

Public Hearing: Comm	nittee: AS	AM	D
Assem	nbly: ASF	AMF	DF

F88-07/08 603.3.2; IRC M2201.2

Proponent: John Levy, Oilheat Associates, Inc., representing National Oilheat Research Alliance

THESE PROPOSALS ARE ON THE AGENDA OF THE IFC AND THE IRC MECHANICAL CODE DEVELOPMENT COMMITTEES AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I – IFC

Revise as follows:

603.3.1 (Supp) Fuel oil storage in outside, aboveground tanks. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31.

603.3.2 (Supp) Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 603.3.2.1 through 603.3.2.5 or Chapter 34.

Exception: The storage of fuel oil used for space or water heating inside buildings in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31.

PART II - IRC MECHANICAL

Revise as follows:

M2201.2 Above-ground tanks. The maximum amount of fuel oil stored above ground or inside of a building shall be 660 gallons (2498 L). The supply tank shall be supported on rigid noncombustible supports to prevent settling or shifting.

Exception: The storage of fuel oil, used for space or water heating, above ground or inside buildings in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31.

Reason: In 603.3.1, the current code refers to NFPA-31 for storage exceeding 660 gallons.

Our proposal is to use similar language in 603.3.2 for tanks that are used for space/water heating only.

To reduce the possibility of environmental releases, the Oil heat industry encourages customers with large underground tanks to replace them with aboveground storage whenever possible.

Limiting the inside storage to 660 gallons will leave a large numbers of building owners with significantly less on-site storage than is acceptable. While average annual consumption of fuel oil is just under 1,000 gallons, many larger homes consume well over 2,000 gallons per year.

Of the approximately 10 million US households that currently use oil to heat their home, approximately 20% have underground tanks and in some states the number of buried tanks is over 50%.

It is a common practice in many areas for two and three level homes to have a separate oil furnace and tank for each floor.

The proposed change is intended to address the need for larger inside storage capacities than currently permitted, without the additional financial and logistical burdens involved with the installation of protected tanks.

"Protected" tanks (double wall, insulated tanks) are not practical for inside fuel oil storage in most locations due to size and weight constraints. A 300 gallon "protected" tank weighs 1,874 pounds and is 52" in diameter. A typical 330 gallon tank weighs 320 pounds and is 27" wide. Installers must lift and move these tanks as access to machinery and elevators to move them is unlikely.

"Protected" tanks typically require an investment that is approximately ten times the investment for unprotected tanks. We believe this will discourage the proactive replacement of aging tanks and lead to additional releases of product and the resulting environmental consequences.

In jurisdictions that previously followed NFPA 31, four (4) 330 tanks have been allowed for a number of years. The replacement of these tanks will require that the storage capacity be downsized, providing a disincentive to proactive replacement.

Properly installed standard UL listed fuel oil storage tanks (UL 80 and UL 2258), installed in accordance with NFPA-31 have a well established safety record. There is no loss history to substantiate the current 660 gallon limit and merely changing the storage capacity for fuel oil should not cause additional fire hazards.

Cost Impact: The code change proposal will not increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF