## 2006/2007 INTERNATIONAL FIRE CODE DEVELOPMENT COMMITTEE

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**Bill Rehr** Senior Technical Staff International Code Council Country Club Hills, IL

### INTERNATIONAL FIRE CODE HEARING RESULTS

## F1-06/07

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**102.6 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 45 and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.

**Exception**: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions shall apply.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** The exception would allow the listing or manufacturer's instructions to supercede the code even if they were less restrictive than the code.

**Assembly Action:** 

None

## F2-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal would create conflict with current Section 102.1 and 102.2 and the retroactive provisions of current Section 907.3. The reference to the IPMC is not appropriate or needed.

Assembly Action:

None

## F3-06/07

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

### SECTION 103 DEPARTMENT OF FIRE PREVENTION

103.1 General. (No change to current text)

**103.2 Appointment.** The fire code official shall be appointed by the chief appointing authority of the jurisdiction; and the fire code official shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.

**103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the fire code official shall have the authority to appoint a deputy(<del>3)</del> fire code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the fire code official.

**103.4 Liability.** The fire code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance shall

not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

**103.4.1 Legal defense.** (No change to current text)

**Committee Reason:** The proposal will provide enhanced liability protection, especially to volunteer board of appeals members. The modification reflects the committee's position that current Sections 103.2 and 103.3 are adequate and preferred.

Assembly Action:

None

## F4-06/07

### **Committee Action:**

Disapproved

**Committee Reason:** The proposal's language is vague and could lead to arbitrary enforcement. Current Section 102.8 already provides the fire code official with the authority sought by the proposal.

Assembly Action:

None

## F5-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposed revisions to Section 104.6 would create problems for the fire department because its records retention procedures must, out of necessity, be different which may or may not correspond to state public records retention laws. The proposed revision to Section 104.1 was also disapproved in WUIC2-06/07.

Assembly Action:

None

## F6-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal provides no guidance as to what might constitute "insufficient evidence" in Section 104.9.1. In Section 104.9.1.2, tests may be performed only by an approved agency which would preclude registered design professionals with testing expertise from being accepted. IBC Section 104.11.2 might be less problematic.

Assembly Action:

#### None

Disapproved

F7-06/07

Withdrawn by Proponent

## F8-06/07

### Committee Action:

**Committee Reason:** The proposal is inconsistent with other Ad Hoc Committee proposals with regard to the retention of records. It is also internally inconsistent in Sections 105.4.1 and 105.4.4 regarding the number of sets of plans required, e.g. one set in the former section and two sets in the latter section. Section 105.4.4.1 would allow previous errors to continue. It is unclear as to how the IFC's Operational Permits fit into the proposed process. The term "shop drawing" is not defined.

### Assembly Action:

### **Assembly Action:**

# F11-06/07

**Committee Action:** 

F9-06/07

appropriate.

**Committee Action:** 

Assembly Action:

F10-06/07

**Committee Action:** 

clarifies the intent of the code.

Committee Reason: The proposal could conflict with IFGC permit requirements. It is internally inconsistent since, while no installation permit would be required, current IFC Section 105.6.27 still requires an operational permit. 60 gallons was considered too large a capacity not to require a permit.

Committee Reason: The proposed sections would conflict with current Section 901.7. There is no inspection component included in the proposal. Rather than a lengthy list of entities to whom an annual permit might be issued, use of the defined term "owner" would be more

Committee Reason: Based on the proponent's reason statement. The proposal provides a more appropriate term with a definition and

Assembly Action:

## F12-06/07

**Committee Action:** 

Disapproved

Committee Reason: The proponent requested disapproval in order to make improvements to the change based on testimony heard.

### Assembly Action:

F13-06/07

**Committee Action:** 

Committee Reason: The code official should be authorized to observe the tests rather than mandating that he or she do so. In Section 106.1.4.1, it is unclear exactly where test requirements are prescribed "herein". The proposal could be in conflict with IFC Sections 901.5 and 901.6 on fire protection system installation testing.

## F14-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement and for consistency with the action on WUIC9-06/07 that includes the text proposed here. The added text will reflect current practice.

Assembly Action:

None

## F15-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal will improve the regulations on premature concealment of work requiring inspection.

**Assembly Action:** 

None

## F16-06/07

**Committee Action:** 

Disapproved

Committee Reason: The proposal just transfers responsibility and does not maintain the fire code official's authority to require exposure of uninspected concealed work. The current text, as revised by F15-06/07, is preferred.

**Assembly Action:** 

None

## F17-06/07

Committee Action:

Disapproved

Committee Reason: Based on the committee action on similar code change WUIC12-06/07, the proponent requested disapproval for further work.

Assembly Action:

None

## F18-06/07

**Committee Action:** 

Disapproved

Committee Reason: The current text establishes the degree of hazard and helps the fire code official in interpreting the text.

**Assembly Action:** 

None

## F19-06/07

**Committee Action:** 

### Disapproved

Committee Reason: The subject matter of the proposal is adequately addressed in the current text of IFC Section 311.5

Assembly Action:

None

Disapproved

Approved as Submitted

None

Disapproved

Disapproved

None

None

## F20-06/07

**Committee Action:** 

Modify the proposal as follows:

#### **SECTION 112** FEES

Approved as Modified

112.1 Fees. A permit shall not be issued until the fees have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

112.2 Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

112.3 Work commencing before permit issuance. Any person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to an additional fee established by the applicable governing authority fire code official, which shall be in addition to the required permit fees.

112.4 Related fees. The payment of the fee for the construction, alteration, removal, or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law

112.5 Refunds. The applicable governing authority fire code official is authorized to establish a refund policy.

Committee Reason: For consistency with the action on WUIC15-06/07. The proposal provides a means for the fire code official to recoup the costs of departmental operations. The modification will correlate the terminology of Sections 112.3 and 112.5 with Section 112.2.

Assembly	Action:	
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## F21-06/07

**Committee Action:** 

Disapproved

None

Committee Reason: The fire code official should not have the responsibility of authorizing the connection of utilities. The proposal could cause conflict with trade or contractor licensing laws.

Assembly Action:

None

## F22-06/07

**Committee Action:** 

Committee Reason: The proponent requested disapproval to revise the proposal for consistency with testimony on code change IWUIC13-

**Assembly Action:** 

06/07

None

Disapproved

## F23-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. Any dictionary referenced in the code should be readily available.

Assembly Action:

None

## F24-06/07

### **Committee Action:**

### Disapproved

Committee Reason: There was inadequate substantiation provided. The proposal would allow diesel fueled devices on the roof with placing limitations on the quantity of fuel. The exception literally would allow the devices to block means of egress from the roof. It is unclear how electrically heated devices would be powered. The devices could be a potential fire hazard. The additional material sent to the committee by the proponent indicated that jurisdictions that have allowed these devices have placed additional restrictions on their use.

Assembly Action: None

## F25-06/07

**Committee Action:** 

Disapproved

Committee Reason: Section 308.3.1 could be interpreted to require a permit for every candle used indoors. Deletion of the word "candle" will create nothing but confusion and could lead to occupancy group issues. The meaning of the term "decorative" is unclear and could be construed to include aroma therapy

**Assembly Action:** 

None

## F26-06/07

**Committee Action:** 

Committee Reason: While the proposal has merit, it could be used to regulate constructed fireplaces and should be revised to be more specific as to the fireplaces to be regulated, e.g. open flame type.

None

Disapproved

## F27-06/07

Assembly Action:

**Committee Action:** 

Disapproved

Committee Reason: For consistency with the action on F26-06/07.

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## F28-06/07

**Assembly Action:** 

Committee Action:

Approved as Submitted

Committee Reason: The proposal clarifies the intent and application of the section and eliminates redundancy.

**Assembly Action:** 

F29-06/07

None

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal clarifies the fire code official's authority in posting buildings.

**Assembly Action:** 

**Committee Action:** 

## F30-06/07

**Committee Action:** 

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal clarifies the intent of the code by focusing on structural and interior hazards that may not otherwise be readily apparent to arriving fire companies.

**Assembly Action:** 

None

## F31-06/07

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides needed clarification of the code's minimum size requirements for sign and lettering.

**Assembly Action:** 

None

## F32-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal would be cumbersome to enforce and the added text is too vague. It is unclear as to what constitutes an "approved storage area". Changing the use of a small room could require specific approval.

Assembly Action:

None

## F33-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal provides no guidance as to what an effective "approved method" might be and makes no distinction between stored commodities. Since regulation of storage heights is personnel-intensive, provisions for employee training should be included. The current code text already provides the fire code official with the authority to regulate storage height.

### Assembly Action:

None

## F34-06/07

### **Committee Action:**

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal clarifies the intent of the section and relocates an emergency plan action item to a more appropriate text location.

**Assembly Action:** 

None

## F35-06/07

**Committee Action:** 

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal reaffirms that the required number of evacuation drills must be conducted, regardless of actual evacuations that may occur, to reinforce the evaluation of procedures and performance.

**Assembly Action:** 

None

## F36-06/07

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal will increase the likelihood of a successful evacuation plan by requiring distribution to all occupants.

Assembly Action:

None

## F37-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The current text of the section provides all the necessary means for information management required by SARA Title III.

**Assembly Action:** 

None

## F38-06/07

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal clarifies the intent of the code regarding the protected areas to be included in the lease plan.

### Assembly Action:

None

## F39-06/07

Committee Action:

Disapproved

**Committee Reason:** The proposal needs to be more specific. It contains a number of undefined terms, including "improved area", "unimproved area" and "undeveloped area" and is overly broad in its application. There are many undeveloped area that are intended to be exactly that way and requiring roadway access could create conflict with land use and preservation agencies. The proposal should include application criteria or a "trigger" for when the requirement would become applicable.

Assembly Action:

None

## F40-06/07

PART I - IFC Committee Action:

Disapproved

**Committee Reason:** The proposal would delete the current "approved building identification" text that provides enforcement flexibility. The intent of the last sentence of the proposed text is unclear. The proposal should also deal with multiple buildings and common driveways for multiple buildings.

### Assembly Action:

### PART II - IRC Committee Action:

### Disapproved

**Committee Reason:** There was no evidence brought forward to justify the code change proposal. It is important to preserve the consistency that currently exists between the IFC and the IRC as it relates to address identification and the size of the lettering.

Assembly Action	on	1
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None

## F41-06/07

PART I — IFC Committee Action:

### Disapproved

**Committee Reason:** The proposal does not address other types of light weight construction that could also be hazardous to fire fighters. It would apply equally to protected and unprotected types of construction and to both sprinklered and unsprinklered buildings which is questionable. The proposal should establish a minimum truss size to trigger the requirements. The committee acknowledged that this is an important safety issue but that the proposal does not deal with it comprehensively. There was discussion of requesting that the ICC appoint an ad hoc committee to study this issue and prepare a more comprehensive code change. At the end of the IFC hearing, the IFC Code Development Committee voted to request the formation of an ICC ad hoc committee.

Assembly A	ction:	None
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PART II — IBC GENERAL Withdrawn by Proponent

PART III — IPMC Withdrawn by Proponent

## F42-06/07

PART I — IFC Committee Action: Disapproved

Committee Reason: For consistency with the action on F41-06/07.

Assembly Action:

#### None

Disapproved

PART II — IBC GENERAL Committee Action:

**Committee Reason:** There were concerns that there were many hazards that Fire Departments should be made aware of beyond lightweight trusses. An ad hoc committee was requested to look at the overall issues addressed by this proposal. The IBC general Committee voted against establishing such a committee. The IBC general committee felt that the code change process was an adequate venue to address this subject. There was also concerns related to sign maintenance and how that related to the application of the *International Building Code*.

Assembly Action:

#### None

## F43-06/07

**Committee Action:** 

#### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal will provide additional needed information for fire/emergency scene commanders.

Assembly Action:

#### None

## F44-06/07

**Committee Action:** 

### Approved as Modified

Modify the proposal as follows:

**510.2 Equipment Access.** Approved access shall be provided and maintained for all fire protection <del>system</del> equipment to permit immediate safe operation and maintenance of such equipment. Storage, trash and other materials or objects shall not be placed or kept in such a manner that would prevent such equipment from being readily accessible.

**Committee Reason:** The proposal will provide a useful enforcement tool in keeping fire protection equipment of all kinds unobstructed and readily available. The modification deletes an unnecessary word.

Assembly Action:

None

## F45-06/07

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal corrects an omission from a previously approved storage battery code change by providing a needed definition covering lithium-ion battery technology.

Assembly Action:

None

## F46-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal's reason statement mentions generator tanks but the proposal does not. There needs to be better correlation with Table 2703.1.1(1).

Assembly Action:

None

## F47-06/07

Committee Action:

Committee Reason: Based on the proponent's reason statement. The

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides needed regulation of a very popular and widely utilized outdoor heating appliance.

Assembly Action:

None

## F48-06/07

### **Committee Action:**

### Disapproved

**Committee Reason:** The proposal is formatted similar to a handbook or information manual and contains a number of "laundry lists" which can become problematic if brought into code text. While the subject matter is important, this amount of material might serve better in an appendix.

Assembly Action:

## F55-06/07

Committee Action:

Committee Reason: Based on the proponent's reason statement. The

proposal will enhance the code and places requirements in a more appropriate location.

Assembly Action:

## F56-06/07

**Committee Action:** 

Committee Reason: The change is not needed. Current IFC Section 703.1 covers maintenance requirements adequately. The proposal introduces compartmentation which is outside the scope of Chapter 7. The code contains no definition for "structural fire protection systems".

Assembly Action:

## F57-06/07

**Committee Action:** 

Committee Reason: The proposed phrase "periodically inspected" offers no guidance as to inspection frequency. Requiring that a building be deemed unsafe for relatively minor deficiencies would be onerous. The proposal would be in conflict with current IFC Section 110 Unsafe Buildings which accomplishes the same thing in a more measured

## F58-06/07

### **Committee Action:**

Committee Reason: The proposal would be in conflict with current IFC Section 102.4 which references the IBC for the work contemplated by the proposed text.

**Assembly Action:** 

## F59-06/07

Errata: The following (published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings) replaced the original proposal:

Proponent: Vickie Lovell, representing Air Movement and Control Association

1. Revise as follows:

703.1.2 Smoke barriers and smoke partitions. Required smoke barriers and smoke partitions shall be maintained to prevent the passage of smoke. and All openings protected with approved smoke barrier doors or smoke dampers shall be maintained in accordance with NFPA 105.

## F50-06/07

**Committee Action:** Disapproved

Committee Reason: For consistency with the action on F49-06/07.

Assembly Action:

None

## F51-06/07

**Committee Action:** Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal provides an enhanced level of safety and notification.

Assembly Action:

None

## F52-06/07

**Committee Action:** Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal clarifies the intent of the emergency shutoff provisions.

Assembly Action:

## F53-06/07

**Committee Action:** 

Committee Reason: The proposal would exclude other Lithium Metal Polymer technologies, such as magnesium dioxide cathodes, and the hazards of thermal runaway have not been addressed. Also, the proposed definition includes text that is essentially commentary.

**Assembly Action:** 

F54-06/07

### **Committee Action:**

Disapproved

Approved as Submitted

Committee Reason: The proposal provides no justification as to why supervision should be required now after many years of battery operated equipment (e.g., golf carts, etc.) charging for prolonged periods. It also does not specify what aspects of the ventilation system are to be supervised.

Assembly Action:

### **Committee Action:**

Committee Reason: The exception is not warranted. The concern is for the safety of the occupants.

Assembly Action:

Disapproved

None

Approved as Submitted

Disapproved

None

None

None

Disapproved

None

Disapproved

manner. The cost impact could be excessive.

**Assembly Action:** 

None

Disapproved

#### 2. Add new text as follows:

**703.1.3 Fire walls, fire barriers and fire partitions.** Required fire walls, fire barriers and fire partitions shall be maintained to prevent the passage of fire. All openings protected with approved doors or fire dampers shall be maintained in accordance with NFPA 80.

#### 3. Add referenced standard to Chapter 45 as follows:

#### NFPA

105-03 - Standard for Installation of Smoke Door Assemblies

**Reason:** The maintenance for smoke doors and smoke dampers is covered by NFPA 105. Additionally the scope of NFPA 80 has been changed and expanded to include the maintenance requirements of fire dampers. This most recent editions of these standards will be voted on in June at the NFPA meeting. A copy of the final document will be provided to ICC staff and the committee if the document passes successfully and is authorized for publication by the NFPA standards Council.

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

### Committee Action: Approved as Modified

Modify the proposal as follows:

**703.1.2 Smoke barriers and smoke partitions.** Required smoke barriers and smoke partitions shall be maintained to prevent the passage of smoke. All openings protected with approved smoke barrier doors or smoke dampers shall be maintained in accordance with NFPA 105.

**703.1.3 Fire walls, fire barriers and fire partitions.** Required fire walls, fire barriers and fire partitions shall be maintained to prevent the passage of fire. All openings protected with approved doors or fire dampers shall be maintained in accordance with NFPA 80.

#### Add referenced standard to Chapter 45 as follows:

NFPA 105-03 - Standard for Installation of Smoke Door Assemblies

**Committee Reason:** The proposal will provide an important enforcement tool in maintaining the original integrity of smoke resistant and fire resistance rated assemblies. The modifications are due to the proposed updated referenced standards not having been submitted to the committee for review.

Assembly Action:

Disapproved

## F60-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal is unnecessary. Self-certification should not be a substitute for proper inspections and could result in falsifications.

Assembly Action:

None

## F61-06/07

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The stricken text is not needed here since textile tests are already addressed in IFC Sections 803.5.1.1 and 803.5.1.2.

Assembly Action:

None

## F62-06/07

**Committee Action:** 

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal eliminates the potential for conflict between Section 803.7.3 and Section 804.2.

Assembly Action:

None

## F63-06/07

### Committee Action:

**Approved as Modified** 

Modify the proposal as follows:

**804.1 Interior trim**. Material, other than foam plastic, used as interior trim shall have a minimum Class C flame spread index and smoke-developed index, when tested in accordance with ASTM E 84, as described in Section 803.1.1. Combustible trim, excluding handrails and guardrails, shall not exceed 10 percent of the aggregate wall or and ceiling areas in which it is located.

**804.2.3 Area limitation.** The interior trim shall not constitute more than 10 percent of the <del>aggregate</del> wall <u>or</u> <del>and</del> ceiling areas of a room or space.

**Committee Reason:** The committee believes that the correct intent of the code is that the area of trim shall not exceed 10% of the wall or ceiling area individually. The modification clarifies that position.

Assembly Action:

None

## F64-06/07

Committee Action:

Approved as Modified

Modify the proposal as follows:

**804.1.1 Alternate testing** When the interior trim material has been tested <u>as an interior finish</u> in accordance with NFPA 286 and complies with the acceptance criteria in 803.1.2.1 it shall not be required to be tested for flame spread index and smoke-developed index in accordance with ASTM E 84.

**804.2.4 Flame spread.** The flame spread index shall not exceed 75 where tested in accordance with ASTM E 84. The smoke-developed index shall not be limited.

**Exception:** 804.2.5 Heat release. When the interior trim material has been tested <u>as an interior finish</u> in accordance with NFPA 286 and complies with the acceptance criteria in 803.1.2.1, it shall not be required to be tested for flame spread index in accordance with ASTM E 84.

**Committee Reason:** Based on the proponent's reason statement. The proposal will provide clarification and an alternative testing means for interior trim materials. The modification clarifies how the material is to be tested and more properly makes proposed Section 804.2.5 into an exception to Section 804.2.4.

#### **Assembly Action:**

None

### F65-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides reasonable regulation of a commonplace installation practice as well as an appropriate testing standard for materials used in the floor-wall base application.

Assembly Action:

None

## F66-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal will clarify the ignition resistance testing options for Group I-1 occupancies.

Assembly Action:

None

## F67-06/07

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** Based on the proponent's reason statement. Deletion of the exception recognizes that sprinklers have no effect on a smoldering ignition scenario due to the lack of a temperature increase in the room. See also the action on F66-06/07.

Assembly Action:

None

## F68-06/07

Committee Action: Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement and for consistency with the action on F67-06/07.

Assembly Action:

None

## F69-06/07

Committee Action: Approved as Submitted

Assembly Action:

None

## F70-06/07

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement and for consistency with the action on F67-, F68- and F69-06/07.

### Assembly Action:

None

## F71-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The sprinklered building exception should not be allowed because fires in correctional institutions are often intentionally set by cell occupants in locations that may be shielded from sprinkler discharge, reducing sprinkler response time and increasing the danger to occupants.

Assembly Action:

None

## F72-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement and for consistency with the action on F67-, F68-, F69- and F70-06/07.

Assembly Action:

None

## F73-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal has not demonstrated that there is a problem. The concern over the magnitude of the fire load in Group R-1 is mitigated by the fact that all Group R-1 occupancies will be equipped throughout with automatic sprinklers. The proposal also would add mattress requirements to the code that will, based on testimony, be made moot in July, 2006 by a new federal furnishings law.

Assembly Action:

None

## F74-06/07

Committee Action:

Disapproved

**Committee Reason:** For consistency with the action on F73-06/07. The proposal would, by applying to all Group R-2 occupancies, be overly restrictive for, and have a negative impact on, apartment dwellers of limited means. Apartment managers would be responsible for compliance with no means of verification.

**Assembly Action:** 

None

Disapproved

## F75-06/07

### Committee Action:

**Committee Reason:** For consistency with the action on F74-06/07. The number of apparent problems with these proposals should be resolved by consensus among the various proponents during the public comment period.

**Assembly Action:** 

## F76-06/07

### **Committee Action:**

### **Approved as Submitted**

**Committee Reason:** Based on the proponent's reason statement. This proposal would be limited in applicability only to the higher-risk occupancy types within Group R-2 where the fire record has been poor. It will provide an important enforcement tool for both the fire code official as well as college and university campus housing authorities in limiting the combustibility of student -owned furnishings that they bring to school with them.

**Assembly Action:** 

None

## F77-06/07

**Note:** The following analysis was not in the Code Change Proposal book but was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did not comply with ICC standards criteria, Sections 3.6.2.1 and 3.6.2.8.

### **Committee Action:**

#### Disapproved

**Committee Reason:** The proposal puts the testing responsibility on the fire code official and could create liability exposure. The test is not appropriate as a baseline. NFPA 705 itself includes warnings that it is not correlated with NFPA 701.

Assembly Action:

None

## F78-06/07

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal clarifies the code by deleting unnecessary text which could cause conflict with IFC Section 804.2 if it remained.

**Assembly Action:** 

F79-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** There was no technical justification of the increase to 50% coverage or for expanding the scope of the section by applying the provisions to rooms.

Assembly Action:

#### None

None

## F80-06/07

**Note:** Both parts of the proposal were heard by the IFC Committee as a result of action by the ICC Code Correlation Committee.

PART I — IFC Committee Action:

Disapproved

**Committee Reason:** The proposal is counterproductive because it would penalize building owners by requiring fire area separations for voluntarily installing even a limited coverage sprinkler system. The current text works adequately to encourage sprinkler installations. Introducing a new, undefined term from NFPA 72 ("selective coverage") is inappropriate.

### Assembly Action:

PART II — IBC FIRE SAFETY Committee Action:

Disapproved

None

Committee Reason: See Committee Reason for Part I above.

Assembly Action: None

## F81-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal is formatted similar to a handbook or information manual and contains a number of "laundry lists" which can become problematic if brought into code text. While the subject matter is important, this amount of material might serve better in an appendix. Simple references to appropriate NFPA standards would also be more efficient.

Assembly Action:

None

## F82-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** There is no time frame associated with a voluntary recall under CPSC rules, so the proposal would not apply. It is inappropriate for the code to place a federal government enforcement mandate upon the local jurisdiction. The current text is preferred.

**Assembly Action:** 

None

## F83-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal clarifies the code by adding a needed definition from the legacy codes.

Assembly Action:

None

## F84-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides definition revisions to correlate with referenced standard NFPA 72.

**Assembly Action:** 

## F85-06/07

### **Committee Action:**

#### Disapproved

Committee Reason: The committee agreed that the noted sections are in need of clarification for buildings built on hilly terrain but pointed to the inconsistencies brought out in floor testimony that need to be fixed as the reason for disapproval. In Section 903.2.1, using the term "highest" could be problematic if a Group A occupancy is located below grade in that it could require more sprinklered levels than are actually necessary. The proponent's intent was to sprinkler levels to the first exit encountered, depending on whether the direction of travel is up or down and the proposal should clearly reflect that intent. It was also suggested that, since the intent is to identify exit discharge levels serving the occupancy, using the word "serving" might be useful. The proponent was encouraged to return with a public comment dealing with those issues.

Assembly Action:

None

## F86-06/07

**Committee Action:** 

### Disapproved

Committee Reason: The proposal's reason statement focuses on an entire facility being a participant sports area whereas the current exception focuses only on that area of the facility that is used for the participant sport. The exception should be retained to afford participant sport areas in Group A-4 the same exception as those in Group A-3.

Assembly Action:

## F87-06/07

**Committee Action:** 

### Disapproved

Committee Reason: This or very similar proposals have been heard and disapproved by this committee and the ICC membership during the last three code development cycles. This proposal would limit the size of nonsprinklered school buildings to 20,000 sq.ft. which is a significant and unwarranted change. This is a property protection issue and would have a negative impact in rural areas with limited water supplies. Walls that can currently be constructed as fire barriers would have to be constructed as fire walls, a significant cost impact. There has been no documentation submitted to show that fire areas do not work.

### Assembly Action:

### None

F88-06/07

### Withdrawn by Proponent

## F89-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal adds a needed and reasonable sprinkler threshold that was omitted during drafting of the code to correlate with Group S-1 and other 12,000 sq.ft thresholds.

### Assembly Action:

None

## F90-06/07

Committee Action:

### Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal provides needed clarification to the code based on published ICC interpretations on these sections.

### Assembly Action:

None

## F91-06/07

**Committee Action:** 

Disapproved

Committee Reason: The proposal is too broad in scope and the issue is adequately covered by current IFC Section 903.2.10.1.1.

Assembly Action:

None

## F92-06/07

**Committee Action:** 

### Disapproved

Committee Reason: The proposal would reduce the level of protection without justification. The hazard of these chutes is in what they transport and what piles up at the bottom, not the chute itself or the shaft that it is enclosed in. The IFC does not always need to mirror NFPA 13. The current text is preferred as clearer and easier to understand.

**Assembly Action:** 

None

## F93-06/07

Committee Action:

Disapproved

Committee Reason: The current text is clear and there should be no confusion since Section 903.3.1.1.1 a subsection of Section 903.3 and cannot be applied unless sprinklers are first required by Section 903.3. Another reference to NFPA 13 is not needed.

Assembly Action:

None

## F94-06/07

**Committee Action:** 

Disapproved

Committee Reason: The proposal would allow a virtually nonsprinklered building to be allowed to take full code credits for being equipped throughout. If the intent of the proposal is to be considered, it should be on a case basis by the fire code official under IFC Section 104.9.

**Assembly Action:** 

F95-06/07

Withdrawn by Proponent

## F96-06/07

### **Committee Action:**

### Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal will clarify the intent of the code on the need for a deck above the sprinkler to facilitate its operation.

Assembly Action:

None

## F97-06/07

Withdrawn by Proponent

## F98-06/07

### **Committee Action:**

Disapproved

Committee Reason: Deletion of the last sentence will create a problem with determining water supply based on the hazard classification. Using the density/area curve rather than the actual hydraulic calculations can result in a substantial discrepancy. Adding the reference to the density/area curves is redundant because that is how hydraulically calculated systems are designed.

Asse	mblv	Action:	
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## F99-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal will clarify the intent of the code as to how sprinkler systems are to be supervised.

**Assembly Action:** 

None

None

Disapproved

None

## F100-06/07

**Committee Action:** 

Committee Reason: The proposed exception is confusing and would waive the current requirement for an outside waterflow alarm device. In all likelihood, if the sprinkler system is out of service, the fire alarm will also be out of service, The current text is preferred.

Assembly Action:

## F101-06/07

**Committee Action:** 

Disapproved

Committee Reason: The proposal would add redundant and incorrect text since: a) the subject is adequately covered in Section 904.2.1 and, b) it is not the appliance that gets a fire extinguishing system but the hood.

**Assembly Action:** 

## F102-06/07

### **Committee Action:**

### Disapproved

Committee Reason: The committee generally agreed with the concept of the proposal but felt that it contains vague and subjective language that could result in inconsistent enforcement. In Section 904.11.6.3.1, it is unclear who would be considered "qualified individuals" and whether that would include the fire code official. In Section 904.11.6.3.2, cleaning would be required if hoods, etc. "have an accumulation of grease" but it is unclear what that means since there will always be a certain amount of grease in the system. In Section 904.11.6.3.3, the name of the cleaning firm should also be included. A concern was also expressed that having a fixed cleaning schedule could be problematic since some cooking operations could seasonally vary in the amount of grease produced and thus the inspection frequency needed.

### **Assembly Action:**

None

F104-06/07

F103-06/07

**Committee Action:** 

Approved as Submitted

Withdrawn by Proponent

Committee Reason: Based on the proponent's reason statement. The proposal improves correlation with NFPA 14, provides clarification of what type of system the hose connection must be connected to and improves the water supply to supply both hose station and sprinkler demand

**Assembly Action:** 

### None

## F105-06/07

**Committee Action:** 

**Approved as Submitted** 

Committee Reason: Based on the proponent's reason statement. The proposal will provide correlation with the referenced standard. NFPA 14, and provides flexibility regarding the location of standpipe riser interconnection.

Assembly Action:	None
F106-06/07	Withdrawn by Proponent
F107-06/07	Withdrawn by Proponent
F108-06/07	
Committee Action:	Disapproved

Committee Reason: The proponent requested disapproval in order to continue work on the NFPA 72 terms used in the proposal.

**Assembly Action:** 

## F109-06/07

### **Committee Action:**

Disapproved

**Committee Reason:** The proposed definition needs clarification to recognize that if just one of the listed features is absent, the building would no longer meet the definition, even though the hazard may be as great. The serving of alcohol may not always be a requisite for classification as a night club. The definition does not make any reference to occupant load. Based on the proposed definition, sports stadiums could qualify as night clubs as could most banquet rooms, depending on the activities present.

Assembly	Action:
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None

## F110-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal eliminates the exception for small schools without justification.

Assembly Action:

None

## F111-06/07

### PART I — IFC Committee Action:

Disapproved

**Committee Reason:** The committee was concerned about whether and how the owner of the detector would receive notification of the expiration of the 10 year battery life. The proposal has no testing standard reference for batteries with a 10 year life. Ten year old detectors would likely not be replaced in kind but with less expensive battery-operated types thus lowering the level of protection.

Assembly Action:	None
PART II— IRC	
Committee Action:	Disapproved

**Committee Reason:** The committee felt that battery-only smoke alarm devices should be restricted to use in existing structures only. In addition, the requirement for a battery capable of lasting 10 years was considered not to be a practical requirement.

Assembly Action:	None

## F112-06/07

Withdrawn by Proponent

## F113-06/07

PART I — IFC Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal will provide correlation with the IMC and improve the level of protection against filter fires in air-handling systems. The threshold values will better correlate with the IMC and NFPA 90A as well as return them to the level of the legacy codes.

### **Assembly Action:**

None

### PART II — IMC Committee Action:

Approved as Submitted

**Committee Reason:** This proposed change will correlate with the requirements found in NFPA 90A, resulting in only requiring a smoke detector in the supply duct. Many jurisdictions use both NFPA 90A and the I-codes which causes contractors to have to install detectors in both the return and supply ducts. This will alleviate that problem. The proponent cited many examples where the detector failed to shut down the fans because the fire was in the filter and the detector was in the return. The committee also wanted to be consistent with the action taken by the Fire Code committee.

**Assembly Action:** 

Disapproved

## F114-06/07

PART I — IFC Committee Action:

Disapproved

**Committee Reason:** The committee felt that approval of the proposal would encourage remodeling and renovation without permits.

PART II — IRC Committee Action:

**Assembly Action:** 

Disapproved

None

**Committee Reason:** The current code requirement for interconnection of residential smoke alarms is an important code requirement that should not be deleted. There was concern over the possibility of other appliances interfering with smoke alarms that were not interconnected.

**Assembly Action:** 

None

## F115-06/07

PART I — IFC Committee Action:

Disapproved

**Committee Reason:** For consistency with the action on F111-06/07, Part I.

Assembly Action: None

PART II — IRC Committee Action:

Disapproved

**Committee Reason:** The committee felt that battery-only smoke alarm devices should be restricted to use in existing structures only. In addition, the requirement for a battery capable of lasting 10 years was not a practical requirement.

Assembly Action:	None
F116-06/07	Withdrawn by Proponent

F117-06/07

Withdrawn by Proponent

## F118-06/07

### **Committee Action:**

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal will provide clarification regarding where visible alarm notification appliances are not required and will also provide better correlation with NFPA 72.

Assembly	Action:
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None

## F119-06/07 Withdrawn by Proponent

## F120-06/07

PART I — IFC Committee Action:

**Approved as Submitted** 

**Committee Reason:** Based on the proponent's reason statement. The proposal clarifies the intent of the code and correlates IFC Sections 907.12 and 907.11.

Assembly Action:	None
PART II — IMC Committee Action:	Approved as Submitted

**Committee Reason:** The proposed change provides a reference to the appropriate section of the *International Fire Code* for guidance on when a fire alarm is required.

Assembly Action:

None

## F121-06/07

PART I - IFC

### Withdrawn by Proponent

PART II - IBC FIRE SAFETY Committee Action:

### Disapproved

**Committee Reason:** The committee was told that the proponent had withdrawn the proposal. Because the proponent was not available to confirm this, the testimony of proponents encouraged the committee to simply disapprove the item. This item is also being addressed by FS163-06/07 and by F122-06/07 Part II. The committee action on F122-06/07 Part II will accomplish the same thing and was approved as submitted.

**Assembly Action:** 

None

## F122-06/07

PART I — IFC Committee Action:

Approved as Modified

Modify the proposal as follows:

**907.1 General.** This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 are applicable to new buildings and structures. The requirements of Section 907.3 are applicable to existing buildings and structures. <u>as follows:</u>

- 1. The requirements of Section 907.2 are applicable to new buildings and structures.
- The requirements of Section 907.3 are applicable to existing buildings and structures.

**907.1.1** <u>Construction documents</u> <u>Shop drawings.</u> <u>Construction</u> <u>documents Shop drawings</u> for fire alarm systems shall be submitted for review and approval prior to system installation. <u>Construction</u> <u>documents</u> <u>shop drawings</u> shall include, but not be limited to, all of the following:

- 1. A floor plan which indicates the use of all rooms.
- 2. Locations of alarm-initiating and notification appliances.
- 3. Location of fire alarm control unit, transponders, and notification power supplies.
- 4. Annunciators.
- 5. Power connection.
- 6. Battery calculations.
- 7. Conductor type and sizes.
- 8. Voltage drop calculations.
- 9. Manufacturer data sheets indicating model numbers and listing information for equipment, devices and materials.
- 10. Details of ceiling height and construction.
- 11. The interface of fire safety control functions.
- 12. Classification of the supervising station.

**07.2.8.1 Manual fire alarm system.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in Group R-1 occupancies.

#### Exceptions:

- A manual fire alarm system is not required in buildings not more than two stories in height where all individual dwelling units or sleeping units and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by at least 1-hour fire partitions and each individual dwelling unit or sleeping unit has an exit directly to a public way, exit court or yard.
- 2. Manual fire alarm boxes are not required throughout the building when the following conditions are met:
  - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
  - 2.2. The notification appliances will activate upon sprinkler water flow; and
  - 2.3. At least one manual fire alarm box is installed at an approved location.

**907.2.8.2 Automatic fire alarm system.** An automatic fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed throughout all interior corridors serving dwelling units or sleeping units.

**Exception:** An automatic fire detection system is not required in buildings that do not have interior corridors serving <del>dwelling units or</del> sleeping units and where each <del>dwelling unit or s</del>leeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

**907.2.10.1 Group R-1.** Single- or multiple-station smoke alarms shall be installed in all of the following locations in Group R-1:

- 1. In sleeping areas.
- In every room in the path of the means of egress from the sleeping area to the door leading from the dwelling unit or sleeping unit.
- 3. In each story within the dwelling unit or sleeping unit, including basements. For dwelling units or sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

907.2.17.3 907.2.18 Deep underground buildings. (Proposed text is unchanged)

907.2.17.3.1 907.2.18.1 Public address system. (Proposed text is unchanged)

907.2.18 907.2.19 Covered mall buildings. (Proposed text is unchanged)

907.2.19 907.2.20 Residential aircraft hangars. (Proposed text is unchanged)

907.2.20 907.2.21 Airport traffic control towers. (Proposed text is unchanged)

907.2.21 907.2.22 Battery rooms. (Proposed text is unchanged)

**907.3** Where required—retroactive in existing buildings and structures. An approved manual, automatic or manual and automatic fire alarm system shall be installed in existing buildings and structures in accordance with Sections 907.3.1 through 907.3.1.8 and provide occupant notification in accordance with Section 907.6 unless other requirements are provided by other sections of this code.

**Exception:** Occupancies with an existing, previously approved fire alarm system.

**907.3.3.1 Group R-1 hotels and motels.** An automatic or manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in existing Group R-1 hotels and motels more than three stories or with more than 20 dwelling units or sleeping units.

**Exception:** Buildings less than two stories in height where all dwelling units or sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each dwelling unit or sleeping unit has direct access to a public way, exit court or yard.

**907.4 Fire safety functions.** Automatic fire detectors utilized for the purpose of performing fire safety functions shall be connected to the building's fire alarm control unit where a fire alarm system is <u>required by Section 907.2 provided</u>. Detectors shall, upon actuation, perform the intended function and activate the alarm notification appliances or activate a visible and audible supervisory signal at a constantly attended location. In buildings not equipped with a fire alarm system, the automatic fire detector shall be powered by normal electrical service and, upon actuation, perform the intended function. The detectors shall be located in accordance with NFPA 72.

**<u>907.4.1</u> Duct smoke detectors.** Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is <u>required by Section 907.2</u> provided. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location. Duct smoke detectors shall not be used as a substitute for required open area detection.

#### Exceptions:

- 1. The supervisory signal at a constantly attended location is not required where duct smoke detectors activate the building's alarm notification appliances.
- 2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

**907.6 Alarm notification systems.** A fire alarm system shall annunciate at the panel and shall initiate occupant notification upon activation, in accordance with this section. Where a fire alarm system is required by another section of this code provided, it shall be activated by:

- 1. Automatic fire detectors.
- 2. Sprinkler water-flow devices.
- 3. Manual fire alarm boxes.
- 4. Automatic fire-extinguishing systems.

### Exceptions:

 Occupant notification is not required for fire detectors used to control fire safety functions in accordance with Section 907.4.

- 2. Where notification systems are permitted elsewhere in this section to annunciate at a constantly attended location.
- 3. Where a dedicated function fire alarm system is installed exclusively to transmit waterflow signals to a remote monitoring location, a single audible alarm notification device, in accordance with Section 903.4.2, shall be installed in the vicinity of the manual fire alarm box to activate upon detection of waterflow or upon activation of the manual fire alarm box.

**907.6.2.3.4 Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, the notification appliance circuits serving all dwelling units and sleeping units shall be initially designed with a minimum of 20% spare provided with the capability to support visible alarm notification appliances in accordance with ICC A117.1.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** Based on the proponent's reason statement. The proposal achieves the proponent's stated goals and is a substantial improvement over the current Section 907. The committee felt that the proposal as modified is a good starting point for future improvements. The modifications, which deal with concerns brought up in testimony and committee discussion, delete redundant text (907.1), retain use of a defined term (907.1.1), correct an error in including the term "dwelling units" in Group R-1 requirements (907.2.8.1, 907.2.8.2, 907.2.10.1, 907.3.3.1), clarify applicability to all deep underground buildings (907.2.18), retain a reasonable exception (907.3), retain applicability only to required systems (907.4.1), clarify applicability only with a required alarm system (907.6), correlate with the action on F100-06/07 (907.6, Ex. 3), and recognize that the requirement can be met by simple installation of a relay in the unit (907.6.2.3).

#### Assembly Action:

#### None

### PART II — IBC FIRE SAFETY Committee Action: Approved as Submitted

**Committee Reason:** This proposal brings the reference into both the IBC and also the IEBC. This will provide a helpful reference where new work is being done within an existing building. An additional benefit will be that it will help coordinate the numbering between Chapter 9 of the IBC and IFC and help eliminate confusion that sometimes occurs because of the difference in the numbering.

**Assembly Action:** 

None

## F123-06/07

Committee Action:

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides correlation with the terminology used in the referenced standard, NFPA 92B.

Assembly Action:

None

## F124-06/07

#### Committee Action:

### Disapproved

**Committee Reason:** Neither the proposal's reason statement nor the testimony offered presented any new information on this topic over that presented in previous code change cycles. There was no definitive information presented that smoke and heat vents do not contribute to fire control. The issues of interaction between smoke and heat vents and sprinklers have not been examined in detail and solutions proposed, such as was done with the issue of ESFR sprinklers vs smoke and heat vents. As they become known and solutions

developed, the issues should be brought to the IFC process rather than waiting while the NFPA 204 committee takes action. In cases where the sprinkler system does not suppress the fire but, rather, controls it, smoke continues to be generated. The discussions have focused on everything but the safety of the occupants, including firefighters. Smoke and heat vents provide the fire department with an important tool to remove the smoke for occupant safety and enhanced fire attack access, especially in very large area buildings where access from the exterior is limited at best. Firefighter safety is also improved by providing a faster, safer method of fire ventilation than cutting one or more holes in the roof. The current text presents a balanced approach between firefighter safety and building safety. The proposal could also inhibit international adoption of the code in countries where very large area buildings are often not sprinklered and they rely on smoke and heat vents for a basic level of protection.

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## F125-06/07

**Committee Action:** 

Disapproved

Committee Reason: For consistency with the action on F124-06/07.

**Assembly Action:** 

None

None

## F126-06/07

**Committee Action:** 

### Disapproved

**Committee Reason:** The proposal takes a reverse approach to the code development process by expecting the code to justify it's own current text, which has been in the code for years, rather than the proponent making the case why the code change proposal is superior to the current text. This is essentially a means of egress issue and should be left to the IBC-Means of Egress Committee action on this proponent's code change E124-06/07 (Section 1016.2) which would, in effect, render this section moot.

**Assembly Action:** 

## F127-06/07

**Committee Action:** 

Disapproved

None

**Committee Reason:** The proposal would remove without adequate justification valuable guidance to the fire code official provided by the current text and a reference to a standard that complies with the ICC Standards policy whereas the other proposed standards (i.e., FM4430, UBC 15-7) do not. The possibility of increased cost of compliance with UL 793 is not sufficient reason to delete the standard. The fire code official always has the provisions of IFC Section 104.9 as an alternative approval means if costs are, in fact, justified as unreasonable.

Assembly Action:

None

## F128-06/07

**Note:** The following analysis was not in the Code Change Proposal book but was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did not comply with ICC standards criteria, Sections 3.6.2.11 and 3.6.3.2.

Committee Action:

Disapproved

**Committee Reason:** The proposed referenced standard is 26 years old and does not comply with ICC standards criteria.

Assembly Action:

## F129-06/07

Committee Action:

**Approved as Submitted** 

**Committee Reason:** Based on the proponent's reason statement. The proposal provides needed criteria to prevent conflict between the timing of operation of the smoke and heat vents and the automatic sprinklers.

**Assembly Action:** 

None

None

## F130-06/07

Committee Action:

Disapproved

**Committee Reason:** For consistency with the action on F124- and F125-06/07. The proposal could inhibit international adoption of the code in countries where very large area buildings are often not sprinklered and they rely on smoke and heat vents for a basic level of protection.

Assembly Action:

None

## F131-06/07

Committee Action:

Disapproved

**Committee Reason:** Based on testimony, the committee attempted to modify the proposal to satisfy some of the concerns expressed, which included changing "explosion control" to "explosion prevention" and relocating the table note indicator from Class IA and IB to the column head entitled "Explosion...venting or explosion...prevention systems". It was also noted that approved engineering methods are already covered by the code and that the alternatives listed in the footnote could be handled as alternative methods under current IFC Section 104.9. However, consensus among the committee could not be reached on all of the modifications needed and it was suggested that the proponent submit a public comment to provide the needed revisions.

Assembly Action:

None

Approved as Modified

## F132-06/07

Committee Action:

Modify the proposal as follows:

**912.2 Location.** With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of fire department connections shall be approved by the fire <u>chief</u> code official.

**Committee Reason:** The proposal will provide the desired correlation with Sections 912.2.1 and 912.2.2. The modification reflects the fact that FDC location is a matter of operational concern for the fire department.

Assembly Action:

None

## F133-06/07

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**912.3 Access.** Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other fixed or moveable object. Access to fire department connections shall be approved by the fire <u>chief</u> code official.

**Exception:** Fences, where provided with an access gate equipped with a sign complying with the legend requirements of Section 912.4 and a means of emergency operation. The gate and the means of emergency operation shall be approved by the fire <u>chief</u> code official and maintained operational at all times.

**912.3.2 Clear space around connections.** A working space of not less than 36 inches (762 mm) in width, 36 inches (914 mm) in depth and 78 inches (1981 mm) in height shall be provided and maintained in front of and to the sides of wall-mounted fire department connections and around the circumference of free-standing fire department connections, except as otherwise required or approved by the fire <u>chief</u> <del>code official</del>.

(Portions of proposal not shown remain unchanged.)

**Committee Reason:** The proposal clarifies the intent of the code with respect to maintaining FDC's accessible and unobstructed at all times. The modifications reflect the fact that access to FDC's is a matter of operational concern for the fire department.

Assembly Action:

None

## F134-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt that extending the dead-end distance in Group E and I-1 was unsafe and also that correlation with the IEBC could be achieved through changing that code, not the IFC.

Assembly Action:

None

## F135-06/07

### **Committee Action:**

### Disapproved

**Committee Reason:** The proposal provides no guidance as to what is intended by the term "exit path", what types of obstacles are to be marked or what the "material" bands are that are intended to be alternated with black. The dimensions of the warning markings and obstruction height appear to be subjective and are without substantiation. This proposal needs correlation with code change E84-06/07 that has proposed photoluminescent exit markings.

Assembly Action:

None

## F136-06/07

**Committee Action:** 

### Disapproved

**Committee Reason:** The committee felt that the proposal adds nothing to the code and that the current text is adequate.

Assembly Action:

## F137-06/07

Committee Action:

Disapproved

**Committee Reason:** The current text is needed to prevent confusion of exits, such as when an exit door does not look like it is an exist door.

Assembly Action:

None

## F138-06/07

Committee Action:

Approved as Modified

Modify the proposal as follows:

**1028.5 Non-exit identification.** When in the opinion of the fire code official, Where a door is adjacent to arranged, constructed similar to, and or can be confused with a means of egress an exit door, that door shall be identified with an approved sign that identifies the room name or use of the room. reading "No Exit."

**Committee Reason:** The proposal will provide an important enforcement tool for the enhancement of egress safety. The modification removes potential confusion that could be caused by signage that uses the word "exit"

**Assembly Action:** 

None

## F139-06/07

Committee Action:

Disapproved

**Committee Reason:** The proposal contains subjective terminology which could lead to confusion and inconsistent enforcement. The proposal is also in the format of a "laundry list" which can become problematic if brought into code text and could create unwanted liability issues. The unsafe conditions listed in the proposal are already regulated by current text.

Assembly Action:

None

## F140-06/07

### Committee Action:

### Disapproved

**Committee Reason:** There was no technical substantiation provided for the proposal. Changing the technical term from aircraft fueling vehicles to aircraft fuel servicing vehicles would be inconsistent with the term used in the referenced standard, NFPA 407.

**Assembly Action:** 

## F141-06/07

### **Committee Action:**

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides needed clarification of the text and improved correlation between Sections 905 and 1413 of the code by deletion of an arbitrary threshold of 4 stories.

Assembly Action:

None

## F142-06/07

Committee Action: Approved as Modified

Modify the proposal as follows:

**1417.1 General.** Roofing operations utilizing heat-producing systems or other ignition sources shall be conducted in accordance with <u>this</u> section and Chapter 26.

**Committee Reason:** Based on the proponent's reason statement. The proposal relieves the fire code official of responsibility for verifying roofing contractors licenses. The modification retains the applicability of the fire extinguisher and tar kettle requirements.

None
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## F143-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** There was insufficient technical justification for making the proposed change. Opposing testimony suggested that the problem is not with the limited size of spray booths but with the unlimited size of spray areas or spray spaces and that perhaps those areas should be reviewed and limitations applied.

Assembly Action:

## F144-06/07

**Committee Action:** 

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides a needed clarification of the text and clarifies the separation between the operational provisions and construction provisions of Chapter 15.

Assembly Action:

#### None

None

## F145-06/07

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**1507.2 Location and clear space.** A space of at least twice the sparking distance shall be maintained between goods being painted or deteared and electrodes, electrostatic atomizing heads or conductors. A sign stating the sparking distance shall be conspicuously posted near the assembly.

**Exception:** Portable electrostatic paint-spraying apparatus <u>listed</u> approved for use in Class I, Division 1 locations.

**1507.3 Construction of equipment.** Electrodes and electro-static atomizing heads shall be of approved construction, rigidly supported in permanent locations and effectively insulated from ground. Insulators shall be nonporous and non-combustible.

**Exception:** Portable electrostatic paint-spraying apparatus <u>listed</u> approved for use in Class I, Division 1 locations.

**1507.3.1 Barriers.** Booths, fencing, railings or guards shall be placed about the equipment such that either by their location or character, or both, isolation of the process is maintained from plant storage and personnel. Railings, fencing and guards shall be of conductive material, adequately grounded, and shall be at least 5 feet (1524 mm) from processing equipment.

**Exception:** Portable electrostatic paint-spraying apparatus <u>listed</u> approved for use in Class I, Division 1 locations.

**1507.5.1 Maintenance.** Insulators shall be kept clean and dry. Drip plates and screens subject to paint deposits shall be removable and taken to a safe place for cleaning. Grounds and bonding means for the paint-spraying apparatus and all associated equipment shall be periodically cleaned and maintained free of overspray.

**Committee Reason:** Based on the proponent's reason statement. The proposal addresses the use of tested portable electrostatic paint spraying devices which should be acceptable within the context of the IFC. The modification reflects the typical phraseology of how devices are recognized as being suitable for use in electrically classified locations.

### Assembly Action:

None

## F146-06/07

Committee Action:

Disapproved

**Committee Reason:** While there may be problems with the definition, to remove it completely would be inappropriate. Also, the proponent requested disapproval to further refine the proposal.

**Assembly Action:** 

None

## F147-06/07

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**1803.13.2 Gas detection system operation.** The continuous gas detection system shall be capable of monitoring the room, area or equipment in which the gas is located at or below <u>all</u> the following gas concentrations:

- Immediately dangerous to life and health (IDLH) values when the monitoring point is within an exhausted enclosure, ventilated enclosure or gas cabinet.
- 2. Permissible exposure limit (PEL) levels when the monitoring point is <u>in</u> an area outside an exhausted enclosure, ventilated enclosure or gas cabinet.
- For flammable gases, the monitoring detection threshold level shall be vapor concentrations in excess of 25 percent of the lower flammable limit (LFL) when the monitoring is within or outside an exhausted enclosure, ventilated enclosure or gas cabinet.
- 4. <u>Except as noted in this section</u>, <u>Mm</u>onitoring for highly toxic and toxic gases shall also comply with Chapter 37.

3704.2.2.10 Gas detection system. A gas detection system shall be provided to detect the presence of gas in the room, area or equipment in which the gas is located at or below the PEL or ceiling limit of the gas for which detection is provided. following gas concentrations:

- 1. Immediately dangerous to life and health (IDLH) values when the monitoring point is with an exhausted enclosure, ventilated enclosure or gas cabinet.
- 2. Permissible exposure limit (PEL) levels when the monitoring point is an area outside an exhausted enclosure, ventilated enclosure or gas cabinet.
- 3. The system shall be capable of monitoring the discharge from the treatment system at or below one-half the IDLH limit.

Exception: A gas detection system is not required for toxic gases when the physiological warning threshold level for the gas is at a level below the accepted PEL for the gas.

Committee Reason: The proposal will provide better correlation with the IMC and industry standards. The modification makes the change applicable only to semiconductor facilities by retaining the current text of Section 3704.2.2.10, clarifying that the other provisions of Chapter 37 still apply and clarifying that the intent of the proposal was not to change the monitoring requirements in occupied spaces, which could include exhausted enclosures.

Assembly Action:

None

## F148-06/07

### **Committee Action:**

Disapproved

Committee Reason: The proposed definitions contain commentary, which is inconsistent with code style. Type I SAGS may, under certain specified standard conditions, be at less than atmospheric pressure and thus not leak, however under changing ambient conditions, this may not be true. There also appear to be proprietary issues that indicate that there is an industry fight going on over SAGS. The proposal could create a greater hazard by increasing the amounts of gas allowed in fabrication areas. The scope of the proposed modification (ruled out of order) plus the arrival of last-minute information sent by the proponent to the committee are indicative of the extent of the work that still needs to be done on this proposal.

### Assembly Action:

## F149-06/07

Withdrawn by Proponent

## F150-06/07

### **Committee Action:**

Disapproved

Committee Reason: The proposal does not deal with gas storage pressures. The definition is overbroad and ambiguous and does not deal with performance criteria of how sub-atmospheric pressure delivery is achieved. Control devices could be inside or outside the container, so virtually any container could qualify. The broadening of the definition could include any compressed gas defined in Section 3002.1 to qualify, which could be problematic. While NFPA may have adopted the definition in this proposal, NFPA also allows SAGS to be exempt from being treated as a compressed gas. The proposal would also increase the maximum allowable quantities.

**Assembly Action:** 

None

## F151-06/07

Committee Action:

### Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal will reduce the hazard associated with frequent cylinder exchanges.

Assembly	Action:
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None

## F152-06/07

Committee Action:

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal will reduce the exposure of personnel to frequent cylinder changes and will facilitate operations.

Assembly Action:

None

## F153-06/07

Committee Action:

Approved as Modified

Modify the proposal as follows:

1903.2 Dust control. Equipment or machinery located inside buildings which generates or emits combustible dust shall be provided with an approved dust collection and exhaust system installed in accordance with Chapter 13 of this code and Chapter 5 of the International Mechanical Code. Equipment or systems that are used to collect, process or convey combustible dusts shall be provided with an approved explosion control system.

Committee Reason: The proposal as modified provides only an editorial modification to the section. The modification removes the specific reference to IMC Chapter 5 because it was felt that the proposed change would bypass the important provisions in IMC Chapter 3, notably Section 301.4.

**Assembly Action:** 

None

## F154-06/07

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides a provision that is already in NFPA 52 to provide protection for vehicle tanks when they are connected for refilling.

Assembly Action:

None

F155-06/07

Committee Action:

Disapproved

Committee Reason: The proponent requested disapproval to work through a number of technical issues with the proposal.

Assembly Action:

## F156-06/07

**Note:** The following analysis was not in the Code Change Proposal book but was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did not comply with ICC standards criteria, Sections 3.6.2.11 and 3.6.3.2.

PART I — IFC	
Committee Action:	Disapproved

**Committee Reason:** In was unclear how the proposed standard for resilient floor coverings would apply to non-coated concrete.

Assembly Action:

PART II — IBC GENERAL	
Committee Action:	Disapproved

**Committee Reason:** The standard proposed for inclusion had not been provided for review by the committee.

Assembly Action:	None
Assembly Action:	None

## F157-06/07

**Committee Action:** 

Approved as Modified

None

Modify the proposal as follows:

**2211.7.2 Gas detection system.** Repair garages used for repair of vehicles fueled by nonodorized gases, such as hydrogen and nonodorized LNG, shall be provided with a flammable gas detection system.

**2211.7.2.1 System design.** The flammable gas detection system shall be listed <u>or approved</u> and shall be calibrated to the types of fuels or gases used by vehicles to be repaired. The gas detection system shall be designed to activate when the level of flammable gas exceeds 25 percent of the lower flammable limit (LFL). Gas detection shall also be provided in lubrication or chassis repair pits of repair garages used for repairing nonodorized LNG-fueled vehicles.

**Committee Reason:** The proposal adds consistency to the gas detection system requirements. The modification will provide an alternative approval to listing.

Assembly Action:

## F158-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** For consistency with the action on F124- and F125-06/07.

Assembly Action:

None

None

F159-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal would remove too many tents from the scope of the chapter.

Assembly Action:

None

F160-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal adds a needed duration factor for sign illumination consistent with Section 1011.5.3.

Assembly Action:

None

## F161-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal adds needed clarity as to the applicability of Chapter 24.

Assembly Action:

### None

## F162-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal provides needed correlation of terminology among the several sections on the same subject.

Assembly Action:

None

## F163-06/07

**Committee Action:** 

Disapproved

Committee Reason: For consistency with the action on F162-06/07.

Assembly Action: None

## F164-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal corrects an apparent error in the 2003/2004 cycle rewrite of Chapter 24.

+Assembly Action: None

## F165-06/07

Committee Action:

Approved as Submitted

2006 ICC PUBLIC HEARING RESULTS

**Committee Reason:** Based on the proponent's reason statement. The proposal provides reasonable storage requirements for cylinders connected for use, as on welding carts.

### Assembly Action:

None

## F166-06/07

### **Committee Action:**

Disapproved

**Committee Reason:** Testimony indicated that a roof torch applicator training program is still being developed. The committee should be able to review details of such a program before considering adding it to the code.

**Assembly Action:** 

None

## F167-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal would expand the exception to all occupancies and remove all safeguards and control of quantities, thereby increasing the hazard.

**Assembly Action:** 

None

## F168-06/07

**Errata**: The following was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

F168-06/07, Item 5: The correct edition of the proposed referenced standard is "UL 1313-93 – with revisions through May 2003"

**Note:** The following analysis was not in the Code Change Proposal book but was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

### **Committee Action:**

### Approved as Modified

Modify the proposal as follows:

#### TABLE 2703.1.1(1) [IBC [F] TABLE 307.1(1)] MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS المجمع (شربة) A PHYSICAL HAZARD a.j

e. Maximum allowable quantities shall be increased 100 percent when stored in approved <u>storage cabinets</u>, gas cabinets, exhausted enclosures, <del>listed storage cabinets</del> or listed safety cans. Where Note d also applies, the increase for both notes shall be applied accumulatively.

(Portions of table and footnotes not shown remain unchanged)

#### TABLE 2703.1.1(2) [IBC [F] TABLE 307.1(2)] MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A HEALTH HAZARD <sup>a, b, c, j</sup>

f. Maximum allowable quantities shall be increased 100 percent when stored in approved <u>storage cabinets</u>, gas cabinets, <u>or</u> exhausted enclosures or listed storage cabinets. Where Note e also applies, the increase for both notes shall be applied accumulatively.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** Based on the proponent's reason statement. The proposal adds an important requirement that safety cans be listed to specific standards, depending on their use. The modifications recognize that listed storage cabinets are only listed for flammable and combustible liquid storage and that the current use of the phrase "approved storage cabinets" is more appropriate.

#### Assembly Action:

None

## F169-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal revises the tables to reflect a more accurate, standardized measurement of liquefied gases.

Assembly Action:

None

## F170-06/07

### **Committee Action:**

Disapproved

**Committee Reason:** The proposal reduces the emergency or standby power requirements for mechanical ventilation without technical justification.

### Assembly Action:

None

## F171-06/07

Committee Action:

**Approved as Submitted** 

**Committee Reason:** Based on the proponent's reason statement. The proposal will provide correlation between Sections 2704.7 and 3007.2.

**Assembly Action:** 

None

## F172-06/07

**Note:** The following analysis was not in the Code Change Proposal book but was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did not comply with ICC standards criteria, Sections 3.6.2.11 and 3.6.3.2.

### Committee Action:

### Disapproved

**Committee Reason:** Chapter 30 is a general compressed gas chapter. The proposed provisions more appropriately belong in the material-specific chapter for flammable gas, Chapter 35. The proposal would allow telecommunication cabinets to be used as hazardous materials storage cabinets with no apparent approval guidance for the fire code official. The proposed standard does not comply with ICC standards criteria and it is unclear whether it would be suitable if applied to the subject matter of this proposal. The standard discussed hydrogen off-gassing in battery charging applications but it is unclear how that relates to cylinder storage.

### Assembly Action:

## F173-06/07

**Committee Action:** 

### Approved as Modified

Modify the proposal as follows:

3006.2 Interior supply location. Medical gases shall be stored in areas dedicated to the storage of such gases without other storage or uses. Where containers of medical gases in quantities greater than the permit amount are located inside buildings, they shall be in a 1-hour exterior room, a 1-hour interior room or a gas cabinet in accordance with Section 3006.2.1, 3006.2.2 or 3006.2.3. Rooms or areas where Storage of hazardous medical gases are stored or used in quantities exceeding the maximum allowable quantity per control area as set forth in Section 2703.1 shall also be in accordance with Chapter 27 and the appropriate material specific chapters the International Building Code for high hazard Group H occupancies.

Committee Reason: Based on the proponent's reason statement. The proposal clarifies that when the maximum allowable quantity of hazardous medical gases is reached, all provisions of the code for Group H apply. The modification further clarifies the code by indicating that it is the application of the IBC that determines Group H construction requirements.

Assembly Action:	
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None

## F174-06/07

**Committee Action:** 

#### Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal provides a needed definition for a term currently used in the code.

**Assembly Action:** 

#### None

## F175-06/07

**Committee Action:** 

### Disapproved

Committee Reason: The scope of the proposal exceeds the nature of the LH<sub>2</sub> hazard since it would take an extremely large and rapid leak to get a pool of LH<sub>2</sub> large enough to warrant such site work.

Assembly Action:

#### None

None

## F176-06/07

Committee Action:

### Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal clarifies the intent of the code in using the term "displays".

**Assembly Action:** 

## F177-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal provides sounder wording that should cover all variations of other applicable laws.

**Assembly Action:** 

### Disapproved

## F178-06/07

### **Committee Action:**

Disapproved

Committee Reason: The proponent requested disapproval to improve the proposal.

**Assembly Action:** 

## F179-06/07

**Committee Action:** 

**Approved as Submitted** 

Committee Reason: Based on the proponent's reason statement. The proposal adds specific guidance for the fire code official in determining sufficient natural light for blasting.

**Assembly Action:** 

None

None

## F180-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal provides improved clarity and correlation of the code provisions applicable to fireworks displays, including the referenced NFPA standards.

### **Assembly Action:**

### None

None

## F181-06/07

**Committee Action:** 

**Approved as Submitted** 

Committee Reason: Based on the proponent's reason statement. The proposal represents a consensus of industry and the fire service that the section is not needed.

**Assembly Action:** 

F182-06/07

Withdrawn by Proponent

## F183-06/07

Committee Action:

Disapproved

Committee Reason: NFPA 1124 is too lenient concerning mixed occupancy buildings and is over-generous in its maximum allowable quantities. The document has numerous references to NFPA 101 and the construction provisions would conflict with the IBC.

**Assembly Action:** 

None

## F184-06/07

**Committee Action:** 

### Disapproved

Committee Reason: The proposal did not address the perceived need to change the current text. The current text provides an acceptable effective concentration of alcohol.

**Assembly Action:** 



## F186-06/07

### **Committee Action:**

#### Disapproved

None

Committee Reason: Adding the exception could lead to the unsafe condition that the section is intended to protect against. The exception contains the undefined term "chemical process facilities" which is not mentioned in Section 3406.

Assembly	Action:		

## F187-06/07

**Committee Action: Approved as Submitted** 

Committee Reason: Based on the proponent's reason statement. The proposal brings code terminology into correlation with industry standards.

Assembly Action:	None

## F188-06/07

Disapproved **Committee Action:** 

Committee Reason: The proponent requested disapproval to revise the proposal.

Assembly Action: None

## F189-06/07

**Committee Action:** 

Disapproved

Committee Reason: The proponent requested disapproval.

Assembly Action:

None

## F190-06/07

**Committee Action:** 

Disapproved

Committee Reason: The committee did not feel that aerosols of any level should be installed in corridors without more history in the successful application of current Section 3405.5. Since the corridor is an egress element, a quantity limit for aerosols should be included since there is none in Chapter 28

Assembly Action:

None

## F191-06/07

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

3501.1 Scope. The storage and use of flammable gases shall be in accordance with this chapter. Compressed gases shall also comply with Chapter 30 and cryogenic fluids shall also comply with Chapter 32. Bulk hydrogen compressed gas systems and bulk liquefied hydrogen gas systems shall also comply with NFPA 55.

### Exceptions:

- 1. Gases used as refrigerants in refrigeration systems (see Section 606).
- 2. Liquefied petroleum gases and natural gases regulated by Chapter 38.
- 3. Fuel-gas systems and appliances regulated under the International Fuel Gas Code.
- 4. Hydrogen motor fuel-dispensing stations and repair garages and their associated above ground hydrogen storage systems designed and constructed in accordance with Chapter 22. 5. Pyrophoric gases in accordance with Chapter 41.

(Portions of proposal not shown remain unchanged)

Committee Reason: Based on the proponent's reason statement. The proposal will continue Chapter 32 as the general cryogens chapter while Chapter 35 will continue to develop as the material-specific chapter for flammable gases and cryogenic fluids. Additional correlation of in-code references is also provided along with clearer direction on the application of the referenced standard, NFPA 55, to bulk systems. The modification clarifies that the exception is only applicable to tanks associated with fuel dispensing.

### Assembly Action:

None

## F192-06/07

Committee Action:

Disapproved

Committee Reason: As written, the proposal would allow storage in any other part of a Group B occupancy, including closets and corridors. If the intent of the proposal is to focus on laboratories, as indicated in the reason statement, the proposal should specifically state that. Also, current Section 3503.1.1, Exception 1 limits cylinders to 250 ft<sup>3</sup> but the proposal would allow larger cylinders in laboratories.

### **Assembly Action:**

None

## F193-06/07

**Committee Action:** 

Disapproved

Committee Reason: For consistency with the action on F172-06/07.

Assembly Action:

None

## F194-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal will add needed code provisions on metal hydride storage systems for the absorption and storage of hydrogen.

Assembly Action:

None

## F195-06/07

**Committee Action:** 

### Disapproved

**Committee Reason:** The proposed provides no correlation between magnesium and other combustible metals, terms which are used throughout the chapter. The definition contains no guidance as to under what conditions the metal will burn.

**Assembly Action:** 

## F196-06/07

### **Committee Action:**

Disapproved

**Committee Reason:** The proposal would apply the current magnesium provisions to all combustible metals with no justification as to why all combustible metals should be treated the same as magnesium.

**Assembly Action:** 

None

## F197-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The current provisions need to be retained. The standard was not provided and switching to NFPA 484 would create additional problems, such as the use of NFPA 101 for means of egress requirements, etc.

### **Assembly Action:**

None

## F198-06/07

**Committee Action:** 

Approved as Modified

Replace the proposal with the following:

**3704.2.2.7 Treatment systems.** The exhaust ventilation from gas cabinets, exhausted enclosures and gas rooms, and local exhaust systems required in Sections 3704.2.2.4 and 3704.2.2.5 shall be directed to a treatment system. The treatment system shall be utilized to handle the accidental release of gas and to process exhaust ventilation. The treatment system shall be designed in accordance with Sections 3704.2.2.7.1 through 3704.2.2.7.5 and Section 510 of the *International Mechanical Code*.

#### Exceptions:

- Highly toxic and toxic gases—storage. A treatment system is not required for cylinders, containers and tanks in storage when all of the following controls are provided:
  - 1.1. Valve outlets are equipped with gas-tight outlet plugs or caps.
  - 1.2. Handwheel-operated valves have handles secured to prevent movement.
  - Approved containment vessels or containment systems are provided in accordance with Section 3704.2.2.3.
- Toxic gases—use. Treatment systems are not required for toxic gases supplied by cylinders or portable tanks not exceeding <u>1,700 pounds (772 kg) water 660 gallons (2498 L)</u> liquid capacity when the following are provided:
  - 2.1. A <u>listed or approved</u> gas detection system with a sensing interval not exceeding 5 minutes.
  - 2.2 An listed or approved automatic-closing fail-safe valve located immediately adjacent to cylinder valves. The fail-safe valve shall close when gas is detected at the permissible exposure limit (PEL) by a gas detection system monitoring the exhaust system at the point of discharge from the gas cabinet, exhausted enclosure, ventilated enclosure or gas room. The gas detection shall comply with Section 3704.2.2.10.

**Committee Reason:** Based on the proponent's reason statement. The proposal as modified provides more enforcement flexibility by allowing either listed or approved devices. The modification also corrects a typographical error in the proposal, i.e. the difference in units of measure in Exception 2.

Assembly Action:

None

F199-06/07

Withdrawn by Proponent

## F200-06/07

### **Committee Action:**

Disapproved

**Committee Reason:** The proposal would nullify previously added safeguards. The proponent requested disapproval in order to resolve that issue and others brought up to him by the semiconductor industry.

Assembly Action:

None

## F201-06/07

**Committee Action:** 

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal adds a needed definition that will draw the distinction between LP-gas containers and the more general term "container" used elsewhere in the code.

Assembly Action:

None

## F202-06/07

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal is an ownership and contractual issue that does not belong in the IFC. The proposal gives the impression that only the container owner can do the filling, even if not trained or qualified. It is also unclear as to how the provision could be reasonably enforced.

Assembly Action:

None

## F203-06/07

Committee Action:

Approved as Modified

Modify the proposal as follows:

**4001.1 Scope.** The storage and use of oxidizing materials shall be in accordance with this chapter and Chapter 27. Compressed Oxidizing gases shall also comply with Chapter 30. Oxidizing cryogenic fluids shall also comply with Chapter 32.

#### SECTION 4006 OXIDIZING CRYOGENIC FLUIDS

4006.1 General. The storage and use of oxidizing cryogenic fluids shall be in accordance with Section 4006 and Chapter 32.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** Based on the proponent's reason statement. The proposal adds clarity to the section by making a distinction between different terms applicable to oxidizing materials. The modification simplifies the proposal by moving the required reference back to Chapter 32 to the beginning of the chapter and deleting an unneeded new section.

Assembly Action:

None

## F204-06/07

Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal definition provides a point of reference for the property of oxidizing gas to support combustion and will resolve the need to separate compressed air from oxidizing gases.

Assembly Action:

None

## F205-06/07

### Committee Action:

Approved as Modified

Modify the proposal as follows:

#### SECTION 4006 LIQUID OXYGEN IN HOME HEALTH CARE

**4006.1 General.** The storage and use of liquid oxygen (LOX) in home health care shall comply with Sections 4006.2 through 4006.10.3 4006.3.7, as applicable.

**4006.2 Information and instructions to be provided.** (Proposed text is unchanged)

**4006.3 Liquid oxygen home care containers.** (Proposed text is unchanged)

**4006.4 4006.3.1 Manufacturer's instructions and labeling.** (Proposed text is unchanged)

4006.5 4006.3.2 Locating containers. (Proposed text is unchanged)

**4006.6 4006.3.3 No smoking.** (Proposed text is unchanged)

4006.7 4006.3.4 Signs. (Proposed text is unchanged)

**4006.8 4006.3.5 Restraining containers.** Liquid oxygen home care containers shall be restrained while in storage or use to prevent falling caused by contact, vibration or seismic activity. Containers shall be restrained by one of the following methods:

- 1. Restraining containers to a fixed object with one or more restraints.
- Restraining containers within a framework, stand or assembly designed to secure the container.
- Restraining containers by locating a container against two points of contact like the walls of a corner of a room or a wall and a secure furnishing or object like a desk.

4006.9 4006.3.6 Container movement. (Proposed text is unchanged)

**4006.10 4006.3.7 Filling of containers.** The filling of containers shall be in accordance with Sections 4006.10 <u>4006.3.7.1</u> through 4006.10.3 4006.3.7.3.

**4006.10.1 4006.3.7.1 Filling of home care containers.** (Proposed text is unchanged)

4006.10.1.1 4006.3.7.1.1 Incompatible surfaces. (Proposed text is unchanged)

**4006.10.2 4006.3.7.2** Filling of ambulatory care containers. (Proposed text is unchanged)

4006.10.3 4006.3.7.3 Open flames and high temperature devices. (Proposed text is unchanged)

(Portions of proposal not shown remain unchanged)

**Committee Reason:** The proposal responds to guidance given by the committee in the 2004/2005 cycle in disapproving code change F215-04/05 and represents a consensus among gas purveyors and fire code officials. It provides needed and reasonable regulation of the hazards associated with the storage and use of liquid oxygen in home health care scenarios. The modification clarifies that Sections 4006.1 and

4006.2 apply to all occupancies and that Sections 4006.3.1 through 4006.3.7.3 apply to Groups I-1, I-4, R-3 Residential Care/Assisted Living and R-4 occupancies.

**Assembly Action:** 

#### None

## F206-06/07

**Note:** The following analysis was not in the Code Change Proposal book but was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

Committee Action:

### Approved as Modified

Modify the proposal as follows:

#### TABLE 4104.2.1 <u>PYROPHORIC GASES—DISTANCE FROM</u> <u>STORAGE TO EXPOSURES</u><sup>a</sup>

(Retain entire contents of table)

For SI: 1 foot = 304.8 mm, 1 cubic foot = 0.02832m3.

a. The <u>minimum required distances shall be reduced to 5 feet when</u> protective structures having a minimum fire resistance of 2 hours interrupt the line of sight between the container and the exposure. The protective structure shall be at least 5 feet from the exposure. The configuration of the protective structure shall allow natural ventilation to prevent the accumulation of hazardous gas concentrations.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** The proposal represents the results of the Compressed Gas Association's response to direction given by the committee regarding CGA's silane gas standard. The standard has achieved designation as an ANSI standard and provides for comprehensive regulation of the hazards of silane gas, thereby eliminating the need to retain IFC Section 4106. The modification corrects an erratum in the monograph.

#### Assembly Action:

None

## F207-06/07

### Committee Action:

Approved as Submitted

**Committee Reason:** Based on the proponent's published reason statement. The proposal provides appropriate updates to the IFC referenced standards.

Assembly Action:

None

## F208-06/07

Committee Action:

### Approved as Submitted

**Committee Reason:** Based on the proponent's published reason statement. The proposal provides a much-needed and appropriate update to the IFC referenced USDOTn standards.

**Assembly Action:** 

## F209-06/07

**Note:** The following analysis was not in the Code Change Proposal book but was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

Analysis: The standards were not provided.

**Committee Action:** 

### Disapproved

**Committee Reason:** The 2007 editions of these currently referenced standards are not yet available. Drafts of the 2007 editions were not submitted to the committee for review.

**Assembly Action:** 

None

## F210-06/07

### **Committee Action:**

Disapproved

**Committee Reason:** The proposal treats the subject matter in too broad a fashion and would have a negative impact upon small marinas that have not been shown to be a problem. For example, a wilderness outpost that rents out six kyaks or a youth camp that owns and docks 5 sailboats should not have to comply with all the requirements simply because they fit the definition. Also, the provisions would be applicable to any type of watercraft by definition in Section XX02. The threshold for fire protection equipment at 5 vessels is too low. There is no guidance regarding reportable quantities for fuel spills in Section XX03. The subject matter would be more appropriate as an appendix to the code, as it was in the legacy Uniform Fire Code/97, since not all jurisdictions would have use for it.

Assembly Action:

Approved as Submitted

## F211-06/07

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**B105.1 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 3,600 square feet (344.5 m2) shall be 1,000 gallons per minute (3785.4 L/min) for  $2 \frac{1}{2}$  hours. Fire flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5m<sup>2</sup>) shall not be less than that specified in Table B105.1.

**Committee Reason:** Based on the proponent's reason statement. The proposal provides a needed fire flow duration for average dwellings. The 2-hour duration was chosen because it is the minimum duration in current Table B105.1. The modification recognizes that the fire flow for a dwelling 3,600 sq.ft. or less in area should not be the same as that for dwellings over 3,600 sq.ft. and reduces it to a more reasonable 1-hour.

Assembly Action:

None

## F212-06/07

**Committee Action:** 

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal deletes a table note that creates confusion and is no longer needed based on previous code changes to Appendix B. If applied with

current Section B105.2, Exception, the current note could be interpreted to allow a total reduction in fire flow of 100%, which is not the appendix's intent.

Assembly Action:

### As Submitted

## F213-06/07

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** Based on the proponent's reason statement. The proposal corrects what appears to be a typographical error carried over from a legacy code during drafting of the IFC.

Assembly Action:

None

## F214-06/07

### **Committee Action:**

Disapproved

**Committee Reason:** The proposal is unclear as to who would make the determination that aerial access routes cannot be installed and on what basis. Alternative methods are already provided for in Section 104.9.

Assembly Action:

None

## F215-06/07

**Committee Action:** 

**Approved as Modified** 

Modify the proposal as follows:

Hazard Category	Designation
Oxidizer 4	OX <u>4</u>
Oxidizer 3	OX <u>3</u>
Oxidizer 2	OX <u>2</u>
Oxidizer 1	None OX 1
Uns <u>t</u> able reactive 1	None
Water reactive 3	W <u>3, <del>R3</del></u>
Water reactive 2	W <u>2<del>, R2</del></u>

**Committee Reason:** Based on the proponent's reason statement. The proposal clarifies the intent of the table as to the placarding requirements for the noted materials. The modification also provides correlation with the designations used in NFPA 704-01.

Assembly Action:

None

## F216-06/07

**Note:** The following analysis was not in the Code Change Proposal book but was published in the "Errata to the 2006/2007 Proposed Changes to the International Codes and Analysis of Proposed Referenced Standards" provided at the code development hearings:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did not comply with ICC standards criteria, Sections 3.6.2.11 and 3.6.3.2.

Withdrawn by Proponent PART II — IBC-FS Withdrawn by Proponent

## F217-06/07

PART I - IFC

#### **Committee Action:** Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal will lend uniformity to hazardous materials information collection efforts.

Assembly Action:	None
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## F218-06/07

**Committee Action:** Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal adds a needed reference to restore clarity to the text in referencing the appropriate tables and deletes redundant text.

**Assembly Action:** 

## F219-06/07

**Committee Action:** 

## Disapproved

Committee Reason: The proposal is taking the code in a direction opposite of where it had begun to go. The liquid storage room provisions were previously taken out of the code in favor of a Group H-3 occupancy which is what the IBC requirements for separation, etc. are based on. Even NFPA 30 is moving away from the approach contained in the proposal in favor of the current IBC approach.

### **Assembly Action:**

## F220-06/07

### **Committee Action:**

### Disapproved

Committee Reason: The intent of the proposal is to not classify inside generator fuel oil storage areas in Group H, however it is unclear what effects that would have on public safety. The reference to NFPA 31 is incorrect. It is also unclear as to why the proposal is limited only to high-rise buildings. An extensive modification was submitted by the proponent that would have allowed 36,000 gallons of inside storage on the lowest floor level of the building without the protection of a vault as originally proposed and would have deleted most of proposed Section 403.15.1.2, all of Section 403.15.1.3, most of Section 403.15.2 and all of Section 403.15.3. The modification would have corrected the referenced standard to be NFPA 37 but would have retained the requirement for a float switch and alarm as overfill protection, which is considered outdated technology. Overall, the committee felt that, while it appeared to speak to some of the issues of concern, the modification was too complex and extensive to consider at this time.

### **Assembly Action:**

None

## F221-06/07

### **Committee Action:**

### Disapproved

Committee Reason: Standpipe control valves are already required to be monitored and NFPA 14 already requires redundancy. The increased number of control valves could increase the possibility of inadvertent valve closures, especially in multi-story express risers. The proposal is unclear as to how continuous riser feed would be provided if one riser failed. Better correlation with NFPA 14 is needed.

Assembly Action:

## F222-06/07

**Committee Action:** 

Disapproved

None

None

**Committee Reason:** The committee agreed that there is a problem but did not feel that the proposal addressed it. An extensive modification was submitted to replace the proposal but it, too, failed to resolve the issue of whether Section 412.4 (quantities in excess of the MAQ) of Section 412.4.3 (quantities less than the MAQ). The last added sentence in the original proposal should be located in Section [F]412.4.4 since it deals with storage, not operations.

## **Assembly Action:** F223-06/07

### Committee Action:

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal provides clarification regarding the submittal of hazardous material information

Assembly Action:

F224-06/07

**Committee Action:** 

Disapproved

Committee Reason: The proposal does not include a reference to Section [F]415.4, which also applies to Group H-1.

Assembly Action:

### None

None

## F225-06/07

**Committee Action:** 

Approved as Submitted

Committee Reason: Based on the proponent's reason statement. The proposal clarifies that the intent of Section [F]416 is to be applicable to paint spray booths as well as spray rooms and spray space.

Assembly Action:

### None

None

## F226-06/07

### Committee Action:

Committee Reason: The proposal would create inconsistency between the IBC and the IFC because the IFC's portable fire extinguisher requirements are occupancy group-based while those in NFPA 10 are hazard class-based.

## **Assembly Action:**

## F227-06/07

### **Committee Action:**

### Disapproved

Committee Reason: The proposal provides a "laundry list" of organizations which is inconsistent with code style and also provides no specific standards to provide the needed guidance.

None

None

Disapproved

None

## F228-06/07

### Committee Action:

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal will resolve previously encountered problems with interpretation of the IEBC on when water supplies must be in place.

### Assembly Action:

None

## F229-06/07

Committee Action:

Disapproved

Committee Reason: Should be a subsection in IFGC Section 706.2.

Assembly Action: None

## F230-06/07

**Committee Action:** 

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal clarifies the code by adding a word that completes the technical term "exhaust terminations".

### **Assembly Action:**

### None

## F231-06/07

**Committee Action:** 

### Approved as Submitted

**Committee Reason:** Based on the proponent's reason statement. The proposal properly relocates system design requirements so as to apply to both open and closed systems.

**Assembly Action:** 

#### None

## F232-06/07

Committee Action: Approved as Modified

Modify the proposal as follows:

**[F] 415.6.3.4.1 Fire separation**. Separation of the a <u>A</u>ttached structures shall be provided <u>separated from the building</u> by fire barriers having a fire-resistance rating of not less than 1 hour and shall not have openings. Fire barriers between attached structures occupied only for the storage of LP-gas are permitted to have fire door assemblies that comply with Section 706.7. Such fire barriers shall be designed to withstand a static pressure of at least 100 pounds per square foot (psf) (4788 Pa), except where the building to which the structure is attached is occupied by operations or processes having a similar hazard.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** Based on the proponent's reason statement. The proposal, with the modification, makes editorial refinements in the style of the code to make the LP-gas facility construction provisions clearer to the code user.

	Assem	bly	Action:	
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#### None

Bench spray booth is 4' wide, 4' tall' and 6' in length

Using the 100 linear feet the air flow requirement would be 4' x 4' x 100

<b>Errata:</b> The following proposal was not published in the monograph but	
was published in the "Errata to the 2006/2007 Proposed Changes to	
the International Codes and Analysis of Proposed Referenced	
Standards" provided at the code development hearings:	

**Proponent:** Ben Greene, City of Englewood, Colorado, representing Fire Marshal's Association of Colorado

#### **Revise as follows:**

F233-06/07

**1504.7.3** Air Ventilation rate and velocity. Ventilation systems shall be designed, installed and maintained such that the average air velocity over the open face of the booth, or booth cross section in the direction of airflow during spraying operations, shall not be less than 100 feet per minute (0.51 m/s). the vapor concentration within the spray room, spray booth or spray space does not exceed 25% of the LFL. Ventilation rate and velocity shall be determined using the following formula:

R <sub>CFM</sub>	=	<u>((L x W x H)-(Sf)) x Ac</u>
R <sub>CFM</sub>	Ξ	Required ventilation in cubic feet per minute
L	<u>=</u>	Length inside of booth
W	=	Width inside of booth
<u>H</u>	=	Height inside of booth
L W H Sf	=	Structural features inside of booth, such as gables,
		beams, filter bank structures, etc. (Shall not
		include the object(s) being refinished.)
Ac	=	Number of air changes per minute, (4 is the standard)
<u>A</u> <sub>FPM</sub>	_	
	=	R <sub>CFM</sub> /Fb
	=	<u>R<sub>CFM</sub>/FD</u> Average linear feet per minute ventilation measured at
<u>A</u> <sub>FPM</sub>		Average linear feet per minute ventilation measured at
		Average linear feet per minute ventilation measured at the exhaust filter bank

**Reason:** The purpose of this code change is to clarify the air flow requirements for spray booths, spray rooms and spray spaces.

The existing language uses 100 feet per minute. This language does not allow for increased sizes of booths and does not address small booths. The proposed language provides a simple formula for verification that the air changes per minute provide an environment complying with 25% or less LFL. The 25% of the LFL is based upon the IMC Section 510.2 for required ventilation when concentrations exceed the 25% of the LFL.

In the formula  $R_{CFM}$ , the use of 4 is the number of air changes required per minute. This number is used by both SMACNA and ASHRAE standards for indoor air quality.

Below are examples of the 100 feet per minute and the calculations of 25% of the LFL

#### Example #1

Spray booth is 14' wide, 9' tall and 24' in length

Using the 100 linear feet the air flow requirement would be 14' x 9' x 100 FPM = 12,600 cubic feet of air per minute.

If you divide the required air flow by the cubic feet of the booth (14' x  $9' \times 24' = 3,024$  cubic feet) you have 4.2 air changes per minute. This exceeds the requirement of 25% of the LFL.

Using the same size booth with the proposed code change:

((24' x 14' x 9') - (0)) x 4 = 12,096 cubic feet per minute. This meets the requirement for 25% of the LFL

#### Example #2

Example #3

Spray booth is 14' wide, 9' tall and 30' in length

the requirement for 25% of the LFL.

Using the 100 linear feet the air flow requirement would be 14' x 9' x 100 FPM = 12,600 cubic feet of air per minute

If you divide the required air flow by the cubic feet of the booth (14' x 9' x 30' = 3,780 cubic feet) you have only 3.32 air changes per minute. This does not meet the requirement of 25% of the LFL.

Using the same size booth with the proposed code change: (( $30' \times 14' \times 9'$ ) – (0)) x 4 = 15,120 cubic feet per minute. This meets

197

FPM = 1,600 cubic feet of air per minute.

If you divide the required air flow by the cubic feet of the booth (4' x 4' x 6' = 96 cubic feet) you have 16.6 air changes per minute. Exceeding the 25% of the LFL. This may not be a reasonable amount of air to move through the bench spray booth.

Using the same size bench booth with the proposed code change: ((4' x 4' x 6') x (0)) x 4 = 384 cubic feet per minute. This meets the required 25% of the LFL and is a reasonable air flow through the bench spray booth.

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

### Committee Action: Disapproved

**Committee Reason:** There are several different types of materials that could be used in spray application whose values for 25% of the LFL may differ which could lead to the use of the wrong number in the equation, creating a hazard condition.

**Assembly Action:**