2006 INTERNATIONAL BUILDING CODE DOCUMENTATION FIRE SAFETY

Code Change No: FS7-06/07

Original Proposal

Sections: 702.1 (IFC 902.1)

Proponent: Greg Rogers, Kitsap Fire District 7, representing ICC Joint Fire Service Review Committee

Revise definition as follows:

FIRE AREA. The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or fire-resistance-rated horizontal assemblies of a building. <u>Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor above.</u>

Reason: Sprinkler and fire alarm requirements in Chapter 9 of the IBC and IFC are based on the square footage or occupant load of a fire area. It is not clear from the definition of a fire area that building areas without surrounding walls are included in the fire area. This concept is clear in the definition of building area found in IBC 502.1, "Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above". This was confirmed by IFC Interpretation No. 25-05, dated 09-12-05.

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

Public Hearing Results

Committee Action: Disapproved

Committee Reason: Although this issue is not clear in the existing code, placing this requirement within the definition is not the best solution and may be overlooked. The testimony discussed items such as picnic shelters, flea-markets and other items which don't have walls around them that would be affected by this requirement and now need sprinklers or alarms due to exceeding the fire area. Another example given was a canopy which was 44 feet tall and open on all sides. Items which are open and unenclosed do not create the same fire hazard and should not be regulated by the same requirements that apply to enclosed buildings.

Assembly Action: Approved as Submitted

Public Comments

Individual Consideration Agenda

This item is on the agenda for individual consideration because an assembly action was successful and public comments were submitted.

Public Comment 1:

Edmund Domian, West Valley City, Utah, requests Approval as Submitted.

Commenter's Reason: The real issue of this code change is not what meets the definition of "building" but what warrants a need for compartmentation. Many big box warehouse-type stores have a large attached open yard of combustible products for sale, which often meet the definition of high piled combustible storage. This "open yard" has a metal or fabric canopy overhead; the public are trapped in this area within a fenced perimeter. The fire load in these "open yards" can be substantial. Occupants must often re-enter the main building from this enclosed "open yard" to egress the building in an emergency. Such areas should be included in the calculations of any defined "FIRE AREA."

Final Hearing Results

FS7-06/07 AS

Code Change No: **FS11-06/07**

Original Proposal

Sections: 402.10, 402.15.4, 406.5.2, 406.6.6.3 and 410.3.5.3, 703.4.2, 719.1, 719.4, 802.1, 803.1, 803.5, 803.6.1, 803.6.2, 1407.10.1, 2603.3, 2603.5.4, 2606.4, Chapter 35 (New) D102.2.8, D106; IFC 804.2.4, 803.5.1, [F] 806.5, [F] 2606.2.4, Chapter 45; IRC R314.3, R314.6, R315.3, R315.4, R316.1, R316.2, M1601.2.1, Chapter 43; IWUIC 202, Chapter 7

Proponent: Bob Eugene, Underwriters Laboratories Inc.

THIS PROPOSAL IS ON THE AGENDA OF THE IBC FIRE SAFETY, GENERAL AND STRUCTURAL, IFC, IRC BUILDING/ENERGY, MECHANICAL AND WUIC CODE DEVELOPMENT COMMITTEES. SEE THE TENTATIVE HEARING ORDERS FOR THESE COMMITTEES.

PART I - IBC FIRE SAFETY

1. Revise as follows:

703.4.2 Composite materials. Materials having a structural base of noncombustible material as determined in accordance with Section 703.4.1 with a surfacing not more than 0.125 inch (3.18 mm) thick that has a flame spread index not greater than 50 when tested in accordance with ASTM E 84 or UL 723 shall be acceptable as noncombustible materials.

719.1 General. Insulating materials, including facings such as vapor retarders and vapor-permeable membranes, similar coverings, and all layers of single and multilayer reflective foil insulations, shall comply with the requirements of this section. Where a flame spread index or a smoke-developed index is specified in this section, such index shall be determined in accordance with ASTM E 84 or UL 723. Any material that is subject to an increase in flame spread index or smoke-developed index beyond the limits herein established through the effects of age, moisture, or other atmospheric conditions shall not be permitted.

Exceptions:

- 1. Fiberboard insulation shall comply with Chapter 23.
- 2. Foam plastic insulation shall comply with Chapter 26.
- 3. Duct and pipe insulation and duct and pipe coverings and linings in plenums shall comply with the *International Mechanical Code*.

719.4 Loose-fill insulation. Loose-fill insulation materials that cannot be mounted in the ASTM E 84 <u>or UL 723</u> apparatus without a screen or artificial supports shall comply with the flame spread and smoke-developed limits of Sections 719.2 and 719.3 when tested in accordance with CAN/ULC S102.2.

Exception: Cellulose loose-fill insulation shall not be required to comply with the flame spread index requirement of CAN/ULC S102.2, provided such insulation complies with the requirements of Section 719.6.

802.1 FLAME SPREAD INDEX. A comparative measure, expressed as a dimensionless number, derived from visual measurements of the spread of flame versus time for a material tested in accordance with ASTM E 84 <u>or UL 723</u>.

803.1 General. Interior wall and ceiling finishes shall be classified in accordance with ASTM E 84 or <u>UL 723</u>. Such interior finish materials shall be grouped in the following classes in accordance with their flame spread and smokedeveloped indexes.

Class A: Flame spread 0-25; smoke-developed 0-450.

Class B: Flame spread 26-75; smoke-developed 0-450.

Class C: Flame spread 76-200; smoke-developed 0-450.

Exception: Materials, other than textiles, tested in accordance with Section 803.2.

- **803.5 Interior finish requirements based on group.** Interior wall and ceiling finish shall have a flame spread index not greater than that specified in Table 803.5 for the group and location designated. Interior wall and ceiling finish materials, other than textiles, tested in accordance with NFPA 286 and meeting the acceptance criteria of Section 803.2.1, shall be permitted to be used where a Class A classification in accordance with ASTM E 84 or UL 723 is required.
- **803.6.1 Surface burning characteristic test.** Textile wall and ceiling coverings shall have a Class A flame spread index in accordance with ASTM E 84 or UL 723 and be protected by automatic sprinklers installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- **1407.9 Surface-burning characteristics.** Unless otherwise specified, MCM shall have a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested as an assembly in the maximum thickness intended for use in accordance with ASTM E 84 or UL 723.
- **1407.10.1 Surface-burning characteristics.** MCM shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 450 when tested as an assembly in the maximum thickness intended for use in accordance with ASTM E 84 or UL 723.
- **2603.3 Surface-burning characteristics.** Unless otherwise indicated in this section, foam plastic insulation and foam plastic cores of manufactured assemblies shall have a flame spread index of not more than 75 and a smokedeveloped index of not more than 450 where tested in the maximum thickness intended for use in accordance with ASTM E 84 or UL 723. Loose fill-type foam plastic insulation shall be tested as board stock for the flame spread index and smoke-developed index.

Exceptions:

- 1. Smoke-developed index for interior trim as provided for in Section 2604.2.
- 2. In cold storage buildings, ice plants, food plants, food processing rooms and similar areas, foam plastic insulation where tested in a thickness of 4 inches (102 mm) shall be permitted in a thickness up to 10 inches (254 mm) where the building is equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1. The approved automatic sprinkler system shall be provided in both the room and that part of the building in which the room is located.
- 3. Foam plastic insulation that is a part of a Class A, B or C roof-covering assembly provided the assembly with the foam plastic insulation satisfactorily passes FM 4450 or UL 1256. The smoke-developed index shall not be limited for roof applications.
- 4. Foam plastic insulation greater than 4 inches (102 mm) in thickness shall have a maximum flame spread index of 75 and a smoke-developed index of 450 where tested at a minimum thickness of 4 inches (102 mm), provided the end use is approved in accordance with Section 2603.9 using the thickness and density intended for use.
- 5. Flame spread and smoke-developed indexes for foam plastic interior signs in covered mall buildings provided the signs comply with Section 402.15.

2603.4.1.13 Type V construction. Foam plastic spray applied to a sill plate and header of Type V construction is subject to all of the following:

- 1. The maximum thickness of the foam plastic shall be 31/4 inches (82.6 mm).
- 2. The density of the foam plastic shall be in the range of 1.5 to 2.0 pcf (24 to 32 kg/m³).
- 3. The foam plastic shall have a flame spread index of 25 or less and an accompanying smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723.

2603.5.4 Flame spread and smoke-developed indexes. Foam plastic insulation, exterior coatings and facings shall be tested separately in the thickness intended for use, but not to exceed 4 inches (102 mm), and shall each have a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E 84 or UL 723.

Exception: Prefabricated or factory-manufactured panels having minimum 0.020-inch (0.51 mm) aluminum facings and a total thickness of 0.25 inch (6.4 mm) or less are permitted to be tested as an assembly where the foam plastic core is not exposed in the course of construction.

2606.4 Specifications. Light-transmitting plastics, including thermoplastic, thermosetting or reinforced thermosetting plastic material, shall have a self-ignition temperature of 650°F (343°C) or greater where tested in accordance with ASTM D 1929; a smoke-developed index not greater than 450 where tested in the manner intended for use in accordance with ASTM E 84 or UL 723, or not greater than 75 where tested in the thickness intended for use in accordance with ASTM D 2843 and shall conform to one of the following combustibility classifications:

Class CC1: Plastic materials that have a burning extent of 1 inch (25 mm) or less where tested at a nominal thickness of 0.060 inch (1.5 mm), or in the thickness intended for use, in accordance with ASTM D 635,

Class CC2: Plastic materials that have a burning rate of 2.5 inches per minute (1.06 mm/s) or less where tested at a nominal thickness of 0.060 inch (1.5 mm), or in the thickness intended for use, in accordance with ASTM D 635.

D102.2.8 Permanent canopies. Permanent canopies are permitted to extend over adjacent open spaces provided:

1. The canopy and its supports shall be of noncombustible material, fire-retardant-treated wood, Type IV construction or of 1-hour fire-resistance-rated construction.

Exception: Any textile covering for the canopy shall meet the fire propagation performance criteria of NFPA 701 after both accelerated water leaching and accelerating weathering.

- 2. Any canopy covering, other than textiles, shall have a flame spread index not greater than 25 when tested in accordance with ASTM E 84 or UL 723 in the form intended for use.
- 3. The canopy shall have at least one long side open.
- 4. The maximum horizontal width of the canopy shall not exceed 15 feet (4572 mm).
- 5. The fire resistance of exterior walls shall not be reduced.

2. Add new standard to Chapter 35 and Appendix D as follows:

UL

723-03 <u>Standard for Test for Surface Burning Characteristics of Building Materials, with Revisions through May</u> 2005

SECTION D106 REFERENCED STANDARDS

ASTM

E 84-04 Test Method for Surface Burning Characteristics of Building Materials

PART II - IBC GENERAL

1. Revise as follows:

402.10 Kiosks. Kiosks and similar structures (temporary or permanent) shall meet the following requirements:

- 1. Combustible kiosks or other structures shall not be located within the mall unless constructed of any of the following materials:
 - 1.1. Fire-retardant-treated wood complying with Section 2303.2.
 - 1.2. Foam plastics having a maximum heat release rate not greater than 100kW (105 Btu/h) when tested in accordance with the exhibit booth protocol in UL 1975.
 - 1.3. Aluminum composite material (ACM) having a flame spread index of not more than 25 and a smoke-developed index of not more than 450 when tested as an assembly in the maximum thickness intended for use in accordance with ASTM E 84 or UL 723.
- 2. Kiosks or similar structures located within the mall shall be provided with approved fire suppression and detection devices.
- 3. The minimum horizontal separation between kiosks or groupings thereof and other structures within the mall shall be 20 feet (6096 mm).
- 4. Each kiosk or similar structure or groupings thereof shall have a maximum area of 300 square feet (28 m²).
- **402.15.4 Plastics other than foam plastics.** Plastics other than foam plastics used in signs shall be light-transmitting plastics complying with Section 2606.4 or shall have a self-ignition temperature of 650°F (343°C) or greater when tested in accordance with ASTM D 1929, and a flame spread index not greater than 75 and smokedeveloped index not greater than 450 when tested in the manner intended for use in accordance with ASTM E 84 or UL 723 or meet the acceptance criteria of Section 803.2.1 when tested in accordance with NFPA 286.
- **406.5.2 Canopies.** Canopies under which fuels are dispensed shall have a clear, unobstructed height of not less than 13 feet 6 inches (4115 mm) to the lowest projecting element in the vehicle drive-through area. Canopies and their supports over pumps shall be of noncombustible materials, fire-retardant-treated wood complying with Chapter 23, wood of Type IV sizes or of construction providing 1-hour fire resistance. Combustible materials used in or on a canopy shall comply with one of the following:

- 1. Shielded from the pumps by a noncombustible element of the canopy, or wood of Type IV sizes;
- 2. Plastics covered by aluminum facing having a minimum thickness of 0.010 inch (0.30 mm) or corrosion-resistant steel having a minimum base metal thickness of 0.016 inch (0.41 mm). The plastic shall have a flame spread index of 25 or less and a smoke-developed index of 450 or less when tested in the form intended for use in accordance with ASTM E 84 or UL 723 and a self-ignition temperature of 650 F (343°C) or greater when tested in accordance with ASTM D 1929; or
- 3. Panels constructed of light-transmitting plastic materials shall be permitted to be installed in canopies erected over motor vehicle fuel-dispensing station fuel dispensers, provided the panels are located at least 10 feet (3048 mm) from any building on the same lot and face yards or streets not less than 40 feet (12 192 mm) in width on the other sides. The aggregate areas of plastics shall not exceed 1,000 square feet (93 m²). The maximum area of any individual panel shall not exceed 100 square feet (9.3 m²).

410.3.5.3 Smoke test. Curtain fabrics shall have a smoke-developed rating of 25 or less when tested in accordance with ASTM E 84 or UL 723.

3105.4 Canopy materials. Canopies shall be constructed of a rigid framework with an approved covering that meets the fire propagation performance criteria of NFPA 701 or has a flame spread index not greater than 25 when tested in accordance with ASTM E 84 or UL 723.

2. Add new standard to Chapter 35 as follows:

UL

<u>723-03</u> <u>Standard for Test for Surface Burning Characteristics of Building Materials, with Revisions through May</u> 2005

PART III - IBC STRUCTURAL

Revise as follows:

2303.2 Fire-retardant-treated wood. Fire-retardant-treated wood is any wood product which, when impregnated with chemicals by a pressure process or other means during manufacture, shall have, when tested in accordance with ASTM E 84 or UL 723, a listed flame spread index of 25 or less and show no evidence of significant progressive combustion when the test is continued for an additional 20-minute period. In addition, the flame front shall not progress more than 10.5 feet (3200 mm) beyond the centerline of the burners at any time during the test.

PART IV - IFC

1. Revise as follows:

803.5.1 Textile wall coverings. Textile wall coverings shall comply with one of the following:

- 1. The coverings shall have a Class A flame spread index in accordance with ASTM E 84 or UL 723 and be protected by automatic sprinklers installed in accordance with Section 903.3.1.1 or 903.3.1.2,
- 2. The covering shall meet the criteria of Section 803.5.1.1 or 803.5.1.2 when tested in the manner intended for use in accordance with NFPA 265 using the product-mounting system, including adhesive, of actual use, or
- 3. The covering shall meet the criteria of Section 803.1.2.1 when tested in accordance with NFPA 286 using the product-mounting system, including adhesive, of actual use.

804.2.4 Flame spread. The flame spread rating shall not exceed 75 where tested in accordance with ASTM E 84<u>or</u> <u>UL 723</u>. The smoke-developed index shall not be limited.

[F] 806.5 Interior trim. Material, other than foam plastic used as interior trim shall have a minimum Class C flame spread and smoke-developed index when tested in accordance with ASTM E 84 or UL 723, as described in Section 803.1. Combustible trim, excluding handrails and guardrails, shall not exceed 10 percent of the aggregate wall or ceiling area in which it is located.

[F] 2604.2.4 Flame spread. The flame spread index shall not exceed 75 where tested in accordance with ASTM E 84 or UL 723. The smoke-developed index shall not be limited.

2. Add new standard to Chapter 45 as follows:

UL 723-03 Standard for Test for Surface Burning Characteristics of Building Materials, with Revisions through May 2005

PART V - IRC BUILDING/ENERGY

1. Revise as follows:

R314.3 Surface burning characteristics. Unless otherwise allowed in Section R314.5 or R314.6, all foam plastic or foam plastic cores used as a component in manufactured assemblies used in building construction shall have a flame spread index of not more than 75 and shall have a smoke-developed index of not more than 450 when tested in the maximum thickness intended for use in accordance with ASTM E84 or UL 723. Loose-fill type foam plastic insulation shall be tested as board stock for the flame spread index and smoke-developed index.

Exception: Foam plastic insulation more than 4 inches thick shall have a maximum flame spread index of 75 and a smoke-developed index of 450 where tested at a minimum thickness of 4 inches, provided the end use is approved in accordance with Section R314.6 using the thickness and density intended for use.

R314.6 Specific approval. Foam plastic not meeting the requirements of Sections R314.3 through R314.5 shall be specifically approved on the basis of one of the following approved tests: NFPA 286 with the acceptance criteria of Section R315.4, FM4880, <u>UL 723</u>, <u>UL1040</u> or <u>UL1715</u>, or fire tests related to actual end-use configurations. The specific approval shall be based on the actual end use configuration and shall be performed on the finished foam plastic assembly in the maximum thickness intended for use. Assemblies tested shall include seams, joints and other typical details used in the installation of the assembly and shall be tested in the manner intended for use.

R315.3 Testing. Tests shall be made in accordance with ASTM E 84 or UL 723.

R315.4 Alternate test method. As an alternate to having a flame-spread classification of not greater than 200 and a smoke developed index of not greater than 450 when tested in accordance with ASTM E 84 or <u>UL 723</u>, wall and ceiling finishes, other than textiles, shall be permitted to be tested in accordance with NFPA 286. Materials tested in accordance with NFPA 286 shall meet the following criteria:

During the 40 kW exposure, the interior finish shall comply with Item 1. During the 160 kW exposure, the interior finish shall comply with Item 2. During the entire test, the interior finish shall comply with Item 3.

- 1. During the 40 kW exposure, flames shall not spread to the ceiling.
- 2. During the 160 kW exposure, the interior finish shall comply with the following:
 - 2.1. Flame shall not spread to the outer extremity of the sample on any wall or ceiling.
 - 2.2. Flashover, as defined in NFPA 286, shall not occur.
- 3. The total smoke released throughout the NFPA 286 test shall not exceed 1,000 m².

R316.1 Insulation. Insulation materials, including facings, such as vapor retarders or vapor permeable membranes installed within floor-ceiling assemblies, roof-ceiling assemblies, wall assemblies, crawl spaces and attics shall have a flame-spread index not to exceed 25 with an accompanying smoke-developed index not to exceed 450 when tested in accordance with ASTM E 84 or UL 723.

Exceptions:

- 1. When such materials are installed in concealed spaces, the flame-spread and smoke-developed limitations do not apply to the facings, provided that the facing is installed in substantial contact with the unexposed surface of the ceiling, floor or wall finish.
- 2. Cellulose loose-fill insulation, which is not spray applied, complying with the requirements of Section R316.3, shall only be required to meet the smoke-developed index of not more than 450.

R316.2 Loose-fill insulation. Loose-fill insulation materials that cannot be mounted in the ASTM E 84 or UL 723 apparatus without a screen or artificial supports shall comply with the flame spread and smoke-developed limits of Sections R316.1 and R316.4 when tested in accordance with CAN/ULC S102.2.

Exception: Cellulose loose-fill insulation shall not be required to comply with the flame spread index requirement of CAN/ULC S102.2, provided such insulation complies with the requirements of Section R316.3.

2. Add standard to Chapter 43 as follows:

UL

<u>723-03</u> <u>Standard for Test for Surface Burning Characteristics of Building Materials, with Revisions through May 2005</u>

PART VI - IRC MECHANICAL

Revise as follows:

M1601.2.1 Duct insulation materials. Duct insulation materials shall conform to the following requirements:

- 1. Duct coverings and linings, including adhesives where used, shall have a flame spread index not higher than 25, and a smoke-developed index not over 50 when tested in accordance with ASTM E 84 or UL 723, using the specimen preparation and mounting procedures of ASTM E 2231.
- Duct coverings and linings shall not flame, glow, smolder or smoke when tested in accordance with ASTM C 411 at the temperature to which they are exposed in service. The test temperature shall not fall below 250°F (121°C).
- 3. External duct insulation and factory-insulated flexible ducts shall be legibly printed or identified at intervals not longer than 36 inches (914 mm) with the name of the manufacturer; the thermal resistance *R*-value at the specified installed thickness; and the flame spread and smoke-developed indexes of the composite materials. All duct insulation product *R*-values shall be based on insulation only, excluding air films, vapor retarders or other duct components, and shall be based on tested C-values at 75°F (24°C) mean temperature at the installed thickness, in accordance with recognized industry procedures. The installed thickness of duct insulation used to determine its *R*-value shall be determined as follows:
 - 3.1. For duct board, duct liner and factory-made rigid ducts not normally subjected to compression, the nominal insulation thickness shall be used.
 - 3.2. For ductwrap, the installed thickness shall be assumed to be 75 percent (25-percent compression) of nominal thickness.
 - 3.3. For factory-made flexible air ducts, The installed thickness shall be determined by dividing the difference between the actual outside diameter and nominal inside diameter by two.

PART VII - WUIC

1. Revise as follows:

SECTION 202 DEFINITIONS

NONCOMBUSTIBLE. As applied to building construction material means a material that, in the form in which it is used, is either one of the following:

- 1. Material of which no part will ignite and burn when subjected to fire. Any material conforming to ASTM E 136 shall be considered noncombustible within the meaning of this section.
- 2. Material having a structural base of noncombustible material as defined in Item 1 above, with a surfacing material not over 1/8 inch (3.2 mm) thick, which has a flame spread rating of 50 or less. Flame spread rating as used herein refers to rating obtained according to tests conducted as specified in ASTM E 84 or UL 723.

"Noncombustible" does not apply to surface finish materials. Material required to be noncombustible for reduced clearances to flues, heating appliances or other sources of high temperature shall refer to material conforming to Item 1. No material shall be classed as noncombustible that is subject to increase in combustibility or flame spread rating, beyond the limits herein established, through the effects of age, moisture or other atmospheric condition.

2. Add referenced standard to Chapter 7 as follows:

UL

<u>723-03</u> <u>Standard for Test for Surface Burning Characteristics of Building Materials, with Revisions through May</u> 2005

Reason: (IBC, IFC, IMC, IRC and IWUIC) Add a direct reference to UL 723 where ASTM E84 is referenced throughout the family of I-codes. The purpose of this code change is to include reference to UL 723 as an alternate to ASTM E 84 throughout the family of I-codes. These two Standards describe the same test method. The specifications for the test apparatus and test procedure are identical between the two standards. As such, identical test results would be obtained from tests conducted using each of these methods. UL 723 is an ANSI approved standard. The inclusion of this alternate test method would provide the authority having jurisdiction with the flexibility to accept listed and labeled

The inclusion of this alternate test method would provide the authority having jurisdiction with the flexibility to accept listed and labeled products evaluated in accordance with ASTM E 84 or UL 723.

The purpose of the test is to determine the comparative burning characteristics of the material under test by evaluating the spread of flame over its surface and the density of the smoke developed when exposed to a test fire, and thus to establish a basis on which surface burning characteristics of different materials are compared.

CODE CHANGES RESOURCE COLLECTION - INTERNATIONAL FIRE CODE

Bibliography: UL 723

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

Analysis: Results of the review of the proposed standard will be posted on the ICC website by August 20, 2006.

Public Hearing Results

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 proposed new standard indicated that, in the opinion of staff, the standard did comply with ICC standards criteria

PART I - IBC FIRE SAFETY

Committee Action:

Approved as Submitted

Committee Reason: Similar to the action taken with both FS10 and FS8 above, the addition of the standard will provide added flexibility for both the designer and the building official. This action also coordinates with the action taken by the IFC and IBC Structural committees which have already met and approved this item.

Assembly Action: None

PART II - IBC GENERAL

Committee Action:

Approved as Submitted

Committee Reason: The inclusion of UL 723 as an alternate and equivalent standard to E 119 was felt to be an appropriate addition to the code. This is also consistent with the actions taken on the other portions of this code change.

Assembly Action: None

PART III — IBC STRUCTURAL

Committee Action:

Approved as Submitted

Committee Reason: The proposal clarifies fire-retardant treated wood requirements by adding an appropriate reference to a test standard.

Assembly Action: None

PART IV — IFC

Committee Action:

Approved as Submitted

Committee Reason: Including a reference to UL 723 will provide the code official with greater flexibility in approving materials tested to either ASTM E84 or UL723, since both test standards are equivalent.

Assembly Action: None

PART V - IRC

Committee Action:

Approved as Modified

Modify the proposal as follows:

R314.6 Specific approval. Foam plastic not meeting the requirements of Sections R314.3 through R314.5 shall be specifically approved on the basis of one of the following approved tests: NFPA 286 with the acceptance criteria of Section R315.4, FM4880, <u>UL 723</u>, UL 1040 or UL 1715, or fire tests related to actual end-use configurations. The specific approval shall be based on the actual end use configuration and shall be performed on the finished foam plastic assembly in the maximum thickness intended for use. Assemblies tested shall include seams, joints and other typical details used in the installation of the assembly and shall be tested in the manner intended for use.

(Portions of proposal not shown remain unchanged)

Committee Reason: The new reference to UL 723 adds depth to the code and provides an alternative to ASTM E84. These two standards describe the same test method. The addition of this alternate test method provides the authority having jurisdiction with the flexibility to accept listed and labeled products evaluated under UL 723.

Section R314.6 was modified to remove the reference to UL723. The reference was not needed in this particular section of the IRC.

Assembly Action: None

FS11-06/07, Part I	AS
FS11-06/07, Part II	AS
FS11-06/07, Part III	AS
FS11-06/07, Part IV	AS
FS11-06/07, Part V	AM
FS11-06/07, Part VI	AS
FS11-06/07, Part VII	AS

Code Change No: **FS37-06/07**

Original Proposal

Sections: 402.4.6, 402.7.1, 403.2, [F]404.3, 410.5.1, 410.5.2, [F]415.6.1.2, [F]415.6.2.2, [F]415.6.3.4.1, [F]415.6.3.5.2, [F]415.7.1, [F]415.7.3, [F]415.8.2.2, 415.8.5.2.1, 415.8.5.2.2, [F]416.2, [F]418.4, [F]418.5, [F]418.6, 706.3.3, 706.3.9, Table 706.3.9, 707.11, 707.13.3, 707.13.4, 712.3, 901.7, 903.2, [F]909.11 (IMC 513.11 & IFC 909.11), 909.20.2, 909.20.6.1, [F]910.3.4, [F]910.4.4, 1021.3 (IFC [B] 1021.3), 1022.2 (IFC [B] 1022.2) 3006.4, 3104.5, 3410.6.16.1 (IEBC [B] 1301.6.16.1)

Errata: Replace the proposal shown in the monograph with the following:

Proponent: Philip Brazil, P.E, Reid Middleton, Inc., representing himself

PART I - IBC FIRE SAFETY

706.3.3 Exit passageway. The fire-resistance rating of the separation between fire barrier separating building areas and from an exit passageway shall comply with Section 1021.1.

706.3.9. Single-occupancy fire areas. The fire barriers or horizontal assembly assemblies, or both, separating a single occupancy into different fire areas shall have a fire-resistance rating of not less than that indicated in Table 706.3.9.

707.11 Enclosure at the bottom. Shafts that do not extend to the bottom of the building or structure shall <u>comply</u> <u>with one of the following</u>:

- 1. They shall be enclosed at the lowest level with construction of the same fire-resistance rating as the lowest floor through which the shaft passes, but not less than the rating required for the shaft enclosure;
- 2. They shall terminate in a room having a use related to the purpose of the shaft. The room shall be separated from the remainder of the building by a fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. having a The fire-resistance rating and opening protectives shall be at least equal to the protection required for the shaft enclosure; or.
- 3. They shall be protected by approved fire dampers installed in accordance with their listing at the lowest floor level within the shaft enclosure.

Exceptions:

- The fire-resistance-rated room separation is not required, provided there are no openings in or
 penetrations of the shaft enclosure to the interior of the building except at the bottom. The bottom of the
 shaft shall be closed off around the penetrating items with materials permitted by Section 717.3.1 for
 draftstopping, or the room shall be provided with an approved automatic fire suppression system.
- 2. A shaft enclosure containing a refuse chute or laundry chute shall not be used for any other purpose and shall terminate in a room protected in accordance with Section 707.13.4.
- 3. The fire-resistance-rated room separation and the protection at the bottom of the shaft are not required provided there are no combustibles in the shaft and there are no openings or other penetrations through the shaft enclosure to the interior of the building.

- **707.13.3 Refuse and laundry chute access rooms**. Access openings for refuse and laundry chutes shall be located in rooms or compartments enclosed by a <u>not less than 1-hour</u> fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both that has a fire-resistance rating of not less than 1 hour. Openings into the access rooms shall be protected by opening protectives having a fire protection rating of not less than 3/4 hour. Doors shall be self- or automatic closing upon the detection of smoke in accordance with Section 715.4.7.3.
- **707.13.4 Termination room**. Refuse and laundry chutes shall discharge into an enclosed room separated from the remainder of the building by a <u>not less than 1-hour</u> fire barriers <u>constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both that has a fire-resistance rating of not less than 1 hour. Openings into the termination room shall be protected by opening protectives having a fire protection rating of not less than 3/4 hour. Doors shall be self- or automatic closing upon the detection of smoke in accordance with Section 715.4.7.3. Refuse chutes shall not terminate in an incinerator room. Refuse and laundry rooms that are not provided with chutes need only comply with Table 508.2.</u>
- **712.3 Fire-resistance-rated walls**. Penetrations into or through fire walls, fire barriers walls, smoke barrier walls, and fire partitions shall comply with Sections 712.3.1 through 712.3.4.
- **901.7 Fire areas.** Where buildings, or portions thereof, are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with this chapter, such fire areas shall be separated by fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both having a fire-resistance rating of not less than that determined in accordance with Section 706.3.9.
- [B] 909.20.2 Construction. The smokeproof enclosure shall be separated from the remainder of the building by not less than a 2-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. without Openings are not permitted other than the required means of egress doors. The vestibule shall be separated from the stairway by not less than a 2-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. The open exterior balcony shall be constructed in accordance with the fire-resistance-rating requirements for floor construction.
- **[B] 909.20.6.1 Ventilation systems.** Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment and ductwork shall comply with one of the following:
 - Equipment and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by <u>not less than</u> 2-hour fire barriers <u>constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with</u> Section 711, or both.
 - 2. Equipment and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by <u>not less than</u> 2-hour fire barriers <u>constructed in</u> <u>accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.</u>
 - 3. Equipment and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by <u>not less than</u> 2-hour fire barriers <u>constructed in accordance with</u> Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.

PART II - IBC GENERAL

Revise as follows:

- **402.4.6 Service areas fronting on exit passageways**. Mechanical rooms, electrical rooms, building service areas and service elevators are permitted to open directly into exit passageways, provided the exit passageway is separated from such rooms with not less than 1-hour fire-resistance-rated fire barriers and 1-hour opening protectives constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. The minimum fire-protection rating of openings in the fire barriers shall be 1 hour.
- **402.7.1 Attached garage.** An attached garage for the storage of passenger vehicles having a capacity of not more than nine persons and open parking garages shall be considered as a separate building where it is separated from the covered mall building by a <u>not less than 2-hour</u> fire barriers having a fire-resistance rating of at least 2 hours constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.

Exception: Where an open parking garage or enclosed parking garage is separated from the covered mall building or anchor building a distance greater than 10 feet (3048 mm), the provisions of Table 602 shall apply. Pedestrian walkways and tunnels which attach the open parking garage or enclosed parking garage to the covered mall building or anchor building shall be constructed in accordance with Section 3104.

410.5.1 Separation from stage. Where the stage height is greater than 50 feet (15 240 mm), The stage shall be separated from dressing rooms, scene docks, property rooms, workshops, storerooms and compartments appurtenant to the stage and other parts of the building by a fire barriers with not less than a 2-hour fire-resistance rating with approved opening protectives constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. The minimum fire-resistance rating shall be 2 hours for stage heights greater than 50 feet (15 240 mm) and 1 hour for stage heights of 50 feet (15 240 mm) or less, the required stage separation shall be a fire barrier with not less than a 1-hour fire-resistance rating with approved opening protectives.

410.5.2 Separation from each other. Dressing rooms, scene docks, property rooms, workshops, storerooms and compartments appurtenant to the stage shall be separated from each other by <u>not less than 1-hour</u> fire barriers with not less than a 1-hour fire-resistance rating with approved opening protectives <u>constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.</u>

3006.4 Machine rooms and machinery spaces. Elevator machine rooms and machinery spaces shall be enclosed with fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. with a The fire-resistance rating shall not be less than the required rating of the hoistway enclosure served by the machinery. Openings in the fire barriers shall be protected with assemblies having a fire protection rating not less than that required for the hoistway enclosure doors.

3104.5 Fire barriers between pedestrian walkways and buildings. Walkways shall be separated from the interior of the building by fire barriers walls with a fire-resistance rating of not less than 2 hours. This protection shall extend vertically from a point 10 feet (3048 mm) above the walkway roof surface or the connected building roof line, whichever is lower, down to a point 10 feet (3048 mm) below the walkway and horizontally 10 feet (3048 mm) from each side of the pedestrian walkway. Openings within the I0-foot (3048 mm) horizontal extension of the protected walls beyond the walkway shall be equipped with devices providing a 3/4-hour fire protection rating in accordance with Section 715.

Exception: The walls separating the pedestrian walkway from a connected building are not required to have a fire-resistance rating by this section where any of the following conditions exist:

- 1. The distance between the connected buildings is more than 10 feet (3048 mm), the pedestrian walkway and connected buildings, except for open parking garages, are equipped throughout with an automatic sprinkler system in accordance with NFPA 13 and the wall is constructed of a tempered, wired or laminated glass wall and doors subject to the following:
 - 1.1. The glass shall be protected by an automatic sprinkler system in accordance with NFPA 13 and the sprinkler system shall completely wet the entire surface of interior sides of the glass wall when actuated.
 - 1.2. The glass shall be in a gasketed frame and installed in such a manner that the framing system will deflect without breaking (loading) the glass before the sprinkler operates.
 - 1.3. Obstructions shall not be installed between the sprinkler heads and the glass.
- 2. The distance between the connected buildings is more than 10 feet (3048 mm), and both sidewalls of the pedestrian walkway are at least 50 percent open with the open area uniformly distributed to prevent the accumulation of smoke and toxic gases.
- 3. Buildings are on the same lot, in accordance with Section 503.1.3.
- 4. Where exterior walls of connected buildings are required by Section 704 to have a fire-resistance rating greater than 2 hours, the walkway shall be equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13.

3410.6.16.1 (IEBC [B] 1301.6.16.1) Categories. The categories for mixed occupancies are:

- 1. Category a Minimum 1-hour fire barriers between Occupancies separated by minimum 1-hour fire barriers or minimum 1-hour horizontal assemblies, or both.
- 2. Category b Fire barriers Separations between occupancies in accordance with Section 508.3.3.
- 3. Category c Fire barriers Separations between occupancies having a fire-resistance rating of not less than twice that required by Section 508.3.3.

PART III - IBC MEANS OF EGRESS

1021.3 (IFC 1021.3) Construction. Exit passageway enclosures shall have walls, floors and ceilings of not less than 1-hour fire-resistance rating, and not less than that required for any connecting exit enclosure. Exit passageways shall be constructed as fire barriers in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.

1022.2 (IFC 1022.2) Separation. The separation between buildings or refuge areas connected by a horizontal exit shall be provided by a fire wall complying with Section 705 or a fire barrier complying with Section 706 and having a fire-resistance rating of not less than 2 hours. Opening protectives in horizontal exits walls shall also comply with Section 715. The horizontal exit separation shall extend vertically through all levels of the building unless floor assemblies have a fire resistance rating of not less than 2 hours with no unprotected openings.

Exception: A fire-resistance rating is not required at horizontal exits between a building area and an above-grade pedestrian walkway constructed in accordance with Section 3104, provided that the distance between connected buildings is more than 20 feet (6096 mm).

Horizontal exits walls constructed as fire barriers shall be continuous from exterior wall to exterior wall so as to divide completely the floor served by the horizontal exit.

PART IV - IFC

Revise as follows:

[F] 403.2 Automatic sprinkler system. Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 903.3.5.2.

Exception: An automatic sprinkler system shall not be required in spaces or areas of:

- 1. Open parking garages in accordance with Section 406.3.
- 2. Telecommunications equipment buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers consisting of not less than 1-hour fire resistance-rated walls and constructed in accordance with Section 706 or not less than 2-hour fire-resistance-rated floor/ceiling horizontal assemblies constructed in accordance with Section 711, or both.

[F] 404.3 Automatic sprinkler protection. An approved automatic sprinkler system shall be installed throughout the entire building.

Exceptions:

- That area of a building adjacent to or above the atrium need not be sprinklered provided that portion of the building is separated from the atrium portion by not less than a 2-hour <u>fire-resistance-rated</u> fire barriers <u>constructed in accordance with Section 706</u> or horizontal <u>assembly assemblies constructed in accordance with Section 711</u>, or both.
- 2. Where the ceiling of the atrium is more than 55 feet (16 764 mm) above the floor, sprinkler protection at the ceiling of the atrium is not required.

[F] 415.6.1.2 Grinding rooms. Every room or space occupied for grinding or other operations that produce combustible dusts shall be enclosed with fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. that have not less than a 2-hour The minimum fire-resistance rating shall be 2 hours where the area is not more than 3,000 square feet (279 m²), and not less than a 4-hour fire-resistance rating 4 hours where the area is greater than 3,000 square feet (279 m²).

[F] 415.6.2.2 Tank protection. Storage tanks shall be noncombustible and protected from physical damage. A <u>Fire barriers</u> wall or horizontal assemblies or both around the storage tank(s) shall be permitted as the method of protection from physical damage.

[F] 415.6.3.4.1 Fire separation. Separation of the attached structures shall be provided by fire barriers <u>constructed</u> in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. having a The minimum fire-resistance rating of not less than shall be 1 hour and the fire barriers 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 715. Such fire barriers and horizontal assemblies 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.

[F] 415.6.3.5.2 Common construction. Walls and floor/ceiling assemblies common to the room and to the building within which the room is located shall be fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. with not less than a 1 hour The minimum fire-resistance rating shall be 1 hour and the fire barriers shall be without openings. Common walls for rooms occupied only for storage of LP-gas are permitted to have opening protectives complying with Section 715. The walls and ceilings shall be designed to withstand a static pressure of at least 100 psf (4788 Pa).

Exception: Where the building, within which the room is located, is occupied by operations or processes having a similar hazard.

[F] 415.7.1 Gas rooms. When gas rooms are provided, such rooms shall be separated from other areas by not less than a 1-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.

[F] 415.7.3 Separation - highly toxic solids and liquids. Highly toxic solids and liquids not stored in approved hazardous materials storage cabinets shall be isolated from other hazardous materials storage by a <u>not less than 1-hour</u> fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both having a fire-resistance rating of not less than 1-hour

[F] 415.8.2.2 Separation. Fabrication areas, whose sizes are limited by the quantity of hazardous materials allowed by Table 415.8.2.1.1, shall be separated from each other, from corridors, and from other parts of the building by not less than 1-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.

Exceptions:

- 1. Doors within such fire barrier walls, including doors to corridors, shall be only self-closing fire door assemblies having a fire-protection rating of not less than 3/4 hour.
- 2. Windows between fabrication areas and corridors are permitted to be fixed glazing listed and labeled for a fire protection rating of at least 3/4 hour in accordance with Section 715.

[F] 415.8.5.2.1 HPM rooms and gas rooms. HPM rooms and gas rooms shall be separated from other areas by net less than a 2-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. The minimum fire-resistance rating shall be 2 hours where the area is 300 square feet (27.9 m²) or more and not less than a 1-hour fire barrier 1 hour where the area is less than 300 square feet (27.9 m²).

[F] 415.8.5.2.2 Liquid storage rooms. Liquid storage rooms shall be constructed in accordance with the following requirements:

- 1. Rooms in excess of 500 square feet (46.5 m²) shall have at least one exterior door approved for fire department access.
- 2. Rooms shall be separated from other areas by fire barriers having a constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. The fire-resistance rating of shall be not less than 1 hour for rooms up to 150 square feet (13.9 m²) in area and not less than 2 hours where the room is more than 150 square feet (13.9 m²) in area.
- 3. Shelving, racks and wainscoting in such areas shall be of noncombustible construction or wood of not less than 1inch (25 mm) nominal thickness.
- 4. Rooms used for the storage of Class I flammable liquids shall not be located in a basement.

[F] 416.2 Spray rooms. Spray rooms shall be enclosed with <u>not less than 1-hour</u> fire barriers <u>constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both with not less than a 1-hour fire-resistance rating. Floors shall be waterproofed and drained in an approved manner.</u>

- **[F] 418.4 Tank storage.** Storage areas for flammable and combustible liquid tanks inside of structures shall be located at or above grade and shall be separated from the processing area by not less than 2-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.
- **[F] 418.5 Nitrocellulose storage.** Nitrocellulose storage shall be located on a detached pad or in a separate structure or a room enclosed with no less than 2-hour fire barriers <u>constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.</u>
- **[F] 418.6 Finished products.** Storage rooms for finished products that are flammable or combustible liquids shall be separated from the processing area by <u>not less than 2-hour</u> fire barriers having a fire-resistance rating of at least 2 hours, and openings in the walls shall be protected with approved opening protectives constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.
- **[F] 420.4 Design and construction.** Hydrogen cutoff rooms shall be classified with respect to occupancy in accordance with Section 302.1 and separated from other areas of the building by not less than 1-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both; or as required by Section 508.2 or 508.3 as applicable.
- **[F] 420.4.1 Opening protectives.** Doors within such the fire barriers walls, including doors to corridors, shall be self-closing in accordance with Section 715. Interior door openings shall be electronically interlocked to prevent operation of the hydrogen system when doors are opened or ajar or the room shall be provided with a mechanical exhaust ventilation system designed in accordance with Section 420.4.1.1.
- **[F] 903.2 Where required**. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section.
 - **Exception**: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic fire alarm system and are separated from the remainder of the building by <u>not less than 1-hour</u> fire barriers consisting of not less than 1 hour fire-resistance-rated walls and constructed in accordance with Section 706 or not less than 2-hour fire-resistance-rated floor/ceiling horizontal assemblies constructed in accordance with Section 711, or both.
- **[F] 909.11 (IMC [F] 513.11, IFC 909.11) Power systems.** The smoke control system shall be supplied with two sources of power. Primary power shall be the normal building power systems. Secondary power shall be from an approved standby source complying with the ICC *Electrical Code*. The standby power source and its transfer switches shall be in a separate room separate from the normal power transformers and switch gear and ventilated directly to and from the exterior. and The room shall be enclosed in a room constructed of with not less than 1-hour fire barriers ventilated directly to and from the exterior constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. Power distribution from the two sources shall be by independent routes. Transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power. The systems shall comply with this code or the ICC Electrical Code.
- **[F] 910.3.4 Vent locations.** Smoke and heat vents shall be located 20 feet (6096 mm) or more from adjacent lot lines and fire walls and 10 feet (3048 mm) or more from fire barriers walls. Vents shall be uniformly located within the roof area above high-piled storage areas, with consideration given to roof pitch, draft curtain location, sprinkler location and structural members.
- **[F] 910.4.4 Wiring and control.** Wiring for operation and control of smoke exhaust fans shall be connected ahead of the main disconnect and protected against exposure to temperatures in excess of 1,000°F (538°C) for a period of not less than 15 minutes. Controls shall be located so as to be immediately accessible to the fire service from the exterior of the building and protected against interior fire exposure by not less than 1-hour fire barriers having a fire-resistance rating not less than 1 hour constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both.

Reason: Code change proposal FS2-04/05 (AMPC1) changed the concept of a fire barrier from being a fire containment assembly to begin a component of a fire containment assembly. This was accomplished by changing the definition of fire barrier from begin a vertical or horizontal assembly to being a wall assembly and by deleting the provisions for horizontal fire barriers. The proposal made the necessary revisions to several sections of the IBC for consistency with the change in concept (i.e., Sections 403.10.1, 404.5, 414.2.1, 508.2.2.1, 508.3.3.4.1, 706.3.5, 706.3.7, 706.3.9, 707.5, 911.1 and 1020.1). The proposal, however, did not make the necessary revisions to other sections of the IBC, which are needed in order for the concept to be fully incorporated into the provisions of the IBC. The purpose of this proposal is to make the necessary revisions to the provisions in those code sections.

The changes are similar throughout the proposal, except for Sections 1022.2 and 3104.5. In these cases, the provisions apply only to walls. Consequently, "horizontal exit walls" is changed to "horizontal exits" in Section 1022.2 and "fire barrier walls" is changed to "fire barriers" in Section 3104.5 for consistency with the definition of fire barrier.

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

Public Hearing Results

PART I — IBC FIRE SAFETY Committee Action:

Approved as Submitted

Committee Reason: The proponent has correctly addressed an inconsistency in the code which has been caused by the changes made by FS2-04/05 in a previous code change cycle. Those changes made the distinction that fire barriers were walls and did not include horizontal assemblies. By going through these sections and making these changes, it provides consistency between the intent of FS2-04/05 and between the sections which were not addressed by that proposal. This action also is consistent with the action taken by the IFC committee earlier.

Assembly Action: None

PART II — IBC GENERAL Committee Action:

Approved as Submitted

Committee Reason: The revisions to add horizontal assemblies in addition to fire barriers is consistent with changes made to other portions of the code in the 2006 edition. This action is also consistent with the action on Part I of the proposal.

Assembly Action: None

PART III — IBC MEANS OF EGRESS

Committee Action:

Approved as Submitted

Committee Reason: The revised language in Sections 1021.3 and 1022.2. would provide consistency in the code for the usage of the terms fire barriers and horizontal assemblies.

Assembly Action: None

PART IV — IFC

Committee Action:

Approved as Submitted

Committee Reason: The proposal completes a needed correlation effort undertaken in the 2004/2005 cycle to provide consistent terminology and references when referring to fire barrier and horizontal assembly enclosures.

Assembly Action: None

Final Hearing Results

FS37-06/07, Part I AS FS37-06/07, Part II AS FS37-06/07, Part III AS FS37-06/07, Part IV AS