AD HOC HEALTHCARE COMMITTEE
FIRE/FIRE SAFETY WORK GROUP
APPROVED CODE CHANGE DRAFTS

CODE GROUP B – IFC COMMITTEE

Code	Section	Comments
IFC	301.3.1	K-66 Smoking Regulations
IFC	404.2, 404.3.1, 404.3.2; 408.3, 408.3.1, 408.3.2 (New); 408.6; 408.6.1, 408.6.2, 408.6.3 (New)	Round 1, Issue 14 & K-tag 50 Fire Safety and Evacuation Plans
IFC	806.1.1, 806.3	Round 1, Issue 1A: Natural Cut Trees in AHCF's
IFC/IBC	IFC 807.1 (IBC [F] 806.1)	Round 1, Issue 1: DECORATIONS ON WALLS
IFC/IBC	907.2.6 (IBC [F]907.2.6); 907.5.2.1 (IBC [F] 907.5.2.1)	Round 1, Issue 9 FIRE ALARMS - AUDIBLE AND VISIBLE
IFC	1103.3; 1103.3.1 (New); 1103.3.2	K-tag K161

Fxx - 13 K-66 Smoking Regulations

310.3.1 (New)

Proponent: John Williams, CBO Chair, ICC Ad Hoc Committee on Health Care

Add new text as follows:

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

310.3.1 Group I-2 hospitals. In Group I-2 hospital occupancies where smoking is prohibited, "No Smoking " signs are not required in interior locations of the facility if the signs are displayed at all major entrances into the facility.

Reason: This proposal will provide correlation with NFPA 101 Section 19.7.4.2 which contains an exception for healthcare occupancies that allows for a facility to not install secondary "No Smoking Signs" throughout a facility if primary signs are prominently displayed at all major entrances. This exception is not currently included in the IFC. Since healthcare facilities already prohibit smoking, where signs are posted at the entrances it is redundant and unnecessary to also require the signs to be posted throughout a facility that does not permit smoking, has a staff trained to monitor and policies in place to quickly stop or prevent the action.

This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 80

workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

Cost Impact: This proposal will not increase the cost of construction.

Round 1, Issue 14 & K-tag 50 Fire Safety and Evacuation Plans

Fxx - 13

404.2, 404.3.1, 404.3.2; 408.3, 408.3.1, 408.3.2 (New); 408.6; 408.6.1, 408.6.2, 408.6.3 (New)

Proponents: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

SECTION 404
FIRE SAFETY AND EVACUATION PLANS

404.1 General. Fire safety, evacuation and lockdown plans and associated drills shall comply with the requirements of Sections 404.2 through 404.5.1.

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

1. Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an *occupant load* less than 2,000.
2. Group B.
   2.1 . Buildings having an ambulatory care facility.
   2.2. Buildings having an *occupant load* of 500 or more *persons* or more than 100 *persons* above or below the lowest *level of exit discharge*.
3. through 15. (No change to current text.)

404.3 Contents. Fire safety and evacuation plan contents shall be in accordance with Sections 404.3.1 and 404.3.2.

404.3.1 Fire evacuation plans. Fire evacuation plans shall include the following:

1. Emergency egress or escape routes and whether evacuation of the building is to be complete, ~~or, where *approved*~~, by selected floors or areas only, or with a defend-in-place response.

2. Procedures for employees who must remain to operate critical equipment before evacuating.
3. Procedures for assisted rescue for persons unable to use the general *means of egress* unassisted.
4. Procedures for accounting for employees and occupants after evacuation has been completed.
5. Identification and assignment of personnel responsible for rescue or emergency medical aid.
6. The preferred and any alternative means of notifying occupants of a fire or emergency.
7. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
8. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
9. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.

404.3.2 Fire safety plans. Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy including the following:
    - 2.1 ~~and p~~ Procedures for notifying occupants, including areas with a private mode alarm system. ~~,~~
    - 2.2 Procedures for ~~relocating~~ occupants under a defend-in-place response.
    - 2.3 Procedures ~~or~~ for evacuating occupants, including occupants who need assistance in evacuation.
3. Site plans indicating the following:
    - 3.1. The occupancy assembly point.
    - 3.2. The locations of fire hydrants.
    - 3.3. The normal routes of fire department vehicle access.
4. Floor plans identifying the locations of the following:
    - 4.1. Exits.
    - 4.2. Primary evacuation routes.
    - 4.3. Secondary evacuation routes.
    - 4.4. Accessible egress routes.
    - 4.5. Areas of refuge.
    - 4.6. Exterior areas for assisted rescue.
    - 4.7. Manual fire alarm boxes.
    - 4.8. Portable fire extinguishers.
    - 4.9. Occupant-use hose stations.
    - 4.10. Fire alarm annunciators and controls.
5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

405.2 Frequency. Required emergency evacuation drills shall be held at the intervals specified in Table 405.2 or more frequently where necessary to familiarize all occupants with the drill procedure.

TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group B [c,d]	Annually	Employees

Group R-2 ~~d~~ e	Four annually	All occupants

(Portions of table not shown do not change.)

a. The frequency shall be allowed to be modified in accordance with Section 408.3.2.
b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.
c. Emergency evacuation drills are required in Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
d. Emergency evacuation drills are required in ambulatory care facilities in accordance with Section 408.3.
~~d~~ e. Applicable to Group R-2 college and university buildings in accordance with Section 408.~~3~~ 4.

SECTION 408
USE AND OCCUPANCY RELATED REQUIREMENTS

408.3 Ambulatory Care Facilities. Ambulatory Care Facilities shall comply with the requirements of Sections 408.3.1 through 408.3.3 and Section 401 through 406.

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

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

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

408.3.3 Staff training. Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by the staff at least every two months. A copy of the plan shall be readily available at all times within the facility.

408.3.4 Emergency Evacuation Drills. Emergency evacuation drills shall comply with Section 405. Emergency evacuation drills shall be conducted at least four times per year.

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

(Renumber subsequent Sections)

408.6 Group I-2. Group I-2 occupancies shall comply with the requirements of Sections 408.6.1 through 408.6.3 and Section 401 through 406. ~~Drills are not required to comply with the time requirements of Section 405.4.~~

408.6.1 Fire evacuation plans. The fire safety and evacuation plans required by Section 404 shall include a description of special staff *actions*. Plan shall include the following in addition to the requirements of Section 404.

1. Procedures for evacuation for patients with needs for containment or restrained and post evacuation containment, if present.
2. A written plan for maintenance of the means of egress.

3. Procedure for a defend-in-place strategy,
4. Procedures for a full floor or building evacuation, if necessary.

408.6.2 Fire safety plans. A copy of the plan shall be maintained at the facility at all times. Plans shall include the following in addition to the requirements of Section 404:

1. Location and number of any patient sleeping rooms and operating rooms.
2. Location of adjacent smoke compartments or refuge areas.
3. Path of travel to adjacent smoke compartments.
4. Location of any special locking, delayed egress or access control arrangements.
5. Location of elevators utilized for patient movement in accordance with the fire safety plan, if provided.

408.6.3 Emergency Evacuation Drills. Emergency evacuation drills shall comply with Section 405.

Exceptions:

1. The movement of patients to safe areas or to the exterior of the building is not required.
2. When emergency evacuation drill are conducted after visiting hours or when patients are residents are expected to be asleep, a coded announcement shall be permitted instead of audible alarms.

~~**408.6.1 Evacuation not required.** During emergency evacuation drills, the movement of patients to safe areas or to the exterior of the building is not required.~~

~~**408.6.2 Coded alarm signal.** When emergency evacuation drills are conducted after visiting hours or when patients or residents are expected to be asleep, a coded announcement is allowed instead of audible alarms.~~

Reason: This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 80 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/cc/ctc/index.html. Since its inception in April, 2005, the CTC has held twenty-two meetings – all open to the public.

This code change proposal clarifies the code by accurately describing the documentation needed to understand the typical "defend in place" method of occupant protection. Defend-in-place is a widely used approach to protecting occupants who are bedridden, unconscious or otherwise unable to self-preserve in a fire event. The method relies on both active and passive fire protection systems as well as the actions of trained staff and responders. The heavy emphasis on staff action requires a comprehensive fire safety and evacuation plan.

Any building containing an ambulatory healthcare occupancy will, by definition, contain occupants who may be incapable of self preservation. The intent of the current IBC requirements for ambulatory care is to create a type of defend-in-place environment. Fire safety and evacuations must be developed, reviewed and approved to support this strategy.

The reference to "defend-in-place" is added in Section 404.3.1 to recognize the defend- in-place method. This is not a new concept. The IBC and legacy codes have been written to support this concept for years, yet the code did not name or describe the concept.

Fire safety plans should describe in the life safety strategy the method of notifying occupants, including the use of a private mode alarm system as allowed by code. Procedures for dealing with occupants in a defend-in-place strategy should also be described for staff training.

The new Section 408.3 adds requirements for how to create fire safety and evacuation plans Ambulatory Care Facilities. This section does not include great detail, as there are many successful ways to approach a defend in place response. Rather, this section describes the minimum amount of information necessary aid in the review of facility and the plan. Fire evacuations plan are required to describe the special actions of staff, especially staff that must stabilize a patient prior to moving. This will be the basis of the staff education and training. This will also help the code official understand the expected performance of the building.

It is imperative that the building and fire official know the size and location of the facility as well as the number of patients

who are incapable of self preservation. This information will help the building official determine the proper classification and mitigations required. It will also allow the fire official to preplan the response for a particular building. Any special characteristics of the means of egress, such as path to the adjacent smoke compartment and special locking arrangements should also be described to aid in verifying code compliance. Practically these documents will be the basis for staff training as well.

Section 408.6 has been rewritten to accurately reflect the needs and the current practice for this occupancy type. Much like the new section for ambulatory care, this section requires the facility to describe the special actions of staff. Due to the special nature of some facilities, specific requirements are made locations where patients are restrained. Since these facilities contain a large number of carts, beds, and other mobile equipment a written plan for maintenance of the means of egress is required. This would address the practical operational needs of the facility while ensuring that the means of egress can be maintained free of obstructions. While these facilities are defend in place, catastrophic failure may require full evacuation. Facilities are asked to describe this procedure so that the first responders can preplan.

Fire safety plans are required to show the location of area where incapable patients are likely to be. They are required to show the location of smoke compartments, routes of travel, patient movement elevators and any locking constraints that might affect the horizontal evacuation of patients. All of these will be essential to robust staff training as well as operational planning for first responders.

Finally, the requirements for emergency evacuation drill have been merged into a single subsection for clarity. The only functional change is to delete the exception which would have allowed drills to not comply with the time requirements of Section 405.4. The committee felt that holding drill at unexpected time and varying conditions was a crucial component of staff training.

These requirements, while new to the fire code, have been a widely accepted practice in the facilities for years. This code change proposal has been reviewed by representatives from both the hospital and nursing home industry who have given their support to these changes.

Cost Impact: This proposal will not increase the cost of construction.

Round 1, Issue 1A: Natural Cut Trees in AHCF's

Fxx - 13
806.1.1, 806.3

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care

Revise as follows:

IFC 806.1.1 Restricted occupancies. Natural cut trees shall be prohibited in <u>ambulatory care facilities and</u> Group A, E, I-1, I-2, I-3, I-4, M, R-1, R-2 and R-4 occupancies.

Exceptions:

1. Trees located in areas protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2 shall not be prohibited in Groups A, E, M, R-1 and R-2.

2. Trees shall be allowed within *dwelling units* in Group R-2 occupancies.

IFC 806.3 Obstruction of means of egress. The required width of any portion of a *means of egress* shall not be obstructed by decorative vegetation. <u>Natural cut trees shall not be located within an exit, corridor, or a lobby or vestibule that is part of the means of egress.</u>

Reason: This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 80

workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

Ambulatory Care Facilities is being added to the list of prohibited occupancies for natural cut trees at Section 806.1.1. Patients are rendered incapable of self preservation in this occupancy in activities that present the same evacuation challenges presented by Group I-2 occupancies which are already in the list. Section 806.3 "Obstruction of the means of egress" is modified by adding "*Natural cut trees shall not be located within an exit, corridor, a lobby or vestibule that is part of the means of egress*". The rapid manner in which a natural cut tree is consumed by fire with the associated release of heat and smoke would present a distinct hazard to egress regardless of whether it impinged on the required width of the means of egress. A burning tree could not be approached or passed by effectively blocking that portion of an egress path while spreading heat and smoke to additional portions of the means of egress. A significant impact would be a natural cut tree located within a lobby that has the allowed 50% of all egress capacity passing through the same lobby.

Ambulatory Care Facilities are located within Business Group occupancies where natural cut trees are permitted, this added prohibition eliminates a hazard that otherwise would not occur for similar activities conducted in a I-2 Group occupancy and provides an improved level of protection for other occupancies. Hospital complexes are typically a mixed use occupancy with Group I-2, Group A-3, Group M and Group B activities occurring within various portions of the complex. This added prohibition further protects the means of egress from the various components of the hospital complex.

Cost Impact: This proposal will not increase the cost of construction.

Round 1, Issue 1: DECORATIONS ON WALLS

Fxx - 13
IFC 807.1 (IBC [F] 806.1)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care and Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

IFC 807.1 (IBC [F] 806.1) General requirements. In occupancies in Groups A, E, I and R-1 and dormitories in Group R-2, curtains draperies, hangings and other *decorative materials* suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with section 806.2 or be noncombustible.

Exceptions:

1. Curtains, draperies, hangings and other decorative materials suspended from walls of *sleeping units* and *dwelling units* in dormitories in Group R-2 protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1 and such materials are limited to not more than 50 percent of the aggregate area of walls.
2. Decorative materials, including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are of limited quantities such that a hazard of fire development or spread is not present.

In Groups I-1 and I-2, combustible *decorative materials* shall meet the flame propagation performance criteria of NFPA 701 ~~unless the *decorative materials*, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present~~. In Group I-3, combustible decorations are prohibited.

Exception: In Groups I-1 and I-2, *decorative materials* covering not more than 20 percent of the specific wall area to which it is attached.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered *interior finish* if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered *decorative materials* or furnishings.

In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet the flame propagation performance criteria in accordance with Section 806.2 and NFPA 701 or shall be noncombustible.

Section 202 (IBC 202)
GENERAL DEFINITIONS

DECORATIVE MATERIALS. All materials applied over the building *interior finish* for decorative, acoustical or other effect (~~such as~~ including, but not limited to, curtains, draperies, fabrics, streamers and surface coverings), and all other materials utilized for decorative effect (~~such as~~ including, but not limited to, photographs, paintings, bulletin boards, artwork, posters, batting, cloth, cotton, hay, stalks, straw, vines, leaves, trees, moss and similar items), including foam plastics and materials containing foam plastics. Decorative materials do not include floor coverings, ordinary window shades, *interior finish* and materials 0.025 inch (0.64 mm) or less in thickness applied directly to and adhering tightly to a substrate.

Reason: This proposal is submitted by the ICC Ad Hoc Committee for Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 80 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

This proposal is being co-sponsored by the ICC Code Technology Committee. The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/cc/ctc/index.html. Since its inception in April, 2005, the CTC has held twenty-two meetings – all open to the public.

Healthcare occupancies have areas for long term patients. These areas are for pediatrics, psychiatric, substance abuse recovery units, etc. Patient-prepared art and seasonal decorations help define a friendlier environment. Current code limits the decorative material to materials meeting NFPA 701. The proposed exception will allow up to 20% of the wall area to be decorative material without NFPA 701 documentation. This allowable area is in response to the user's needs to address to display more artwork.

The original requirements for Group I-1 & I-2 occupancies allow photos and paintings are of such limited quantities that a hazard of fire development or spread is not present. NFPA 701 flame propagation is required for other decorative material. These 2012 edition Section 806.1 requirements are independent of automatic sprinkler protection. Automatic sprinklers are required in Group I-1 & I-2 facilities. Automatic suppression will limit the fire propagation to the area of origin. The decorative finishes will not adversely affect the automatic sprinkler performance for typical materials of paper, cloth, textiles, and plastic films in quantities limited to less than 20% of the wall area. Burning characteristics vary widely based on the material used. The new automatic sprinkler technology required by NFPA 13 "Standard for the Installation of Automatic Sprinklers" will respond quicker to a fire. Quick response automatic sprinklers are required in all new light hazard areas. The quick response sprinkler technology was mandated in NFPA 13 in the 1996 edition of the standard. Group I-1 & I-2 corridor and circulation spaces are considered light hazard area for automatic sprinkler protection. These quick response sprinklers will respond 3 to 5 times faster than standard response sprinklers. This faster response will start suppression when the fire is smaller with less heat and products of combustion generation.

The 2012 IFC Section 807.4.3.2 and 807.4.4.2 for Group E and I-4 occupancies allow art work and teaching materials on the corridor walls not to exceed 20% of the wall area. These occupancy types are required to be protected with automatic sprinklers in most configurations. There is trained staff in the facility at all times it is occupied by students, children or clients. Group I-1 and I-2 occupancies have trained staff present 24 hours a day. Similar safe guards are present in these 3 types of occupancies. I-1 and I-2 also have smoke zoning and special protection of hazard requirements to control exposure to the products of combustion.

Flame spread on the decorative wall covering will be primarily in the vertical direction. Horizontal propagation will occur at a considerably slower rate than the vertical in typical corridor configurations. This slower horizontal propagation can be retarded or suppressed by the quick response sprinklers. 20% of the wall area was selected as a reasonable limit, allowing the facility flexibility in using decorative wall materials.

Cost Impact: This proposal will not increase the cost of construction.

NOTE: This code change is still undergoing minor revision as of 3-23-12

Round 1, Issue 9 FIRE ALARMS - AUDIBLE AND VISIBLE

Fxx - 13

907.2.6 (IBC [F]907.2.6); 907.5.2.1 (IBC [F] 907.5.2.1)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care

Revise as follows:

907.2.6 (IBC [F]907.2.6) Group I. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I occupancies. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be provided in accordance with Sections 907.2.6.1, 907.2.6.2 and 907.2.6.3.3.

Exceptions:

1. Manual fire alarm boxes in sleeping units of Group I-1 and I-2 occupancies shall not be required at exits if located at all care providers' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.4.2.1 are not exceeded.

2. Occupant notification systems are not required to be activated where private mode signaling installed in accordance with NFPA 72 is approved by the fire code official and staff evacuation responsibilities are included in the fire safety and evacuation plan required by Section 404.

907.5.2 (IBC [F] 907.5.2) Alarm notification appliances. Alarm notification appliances shall be provided and shall be listed for their purpose.

907.5.2.1 (IBC [F] 907.5.2.1) Audible alarms. Audible alarm notification appliances shall be provided and emit a distinctive sound that is not to be used for any purpose other than that of a fire alarm.

Exceptions:

1. ~~Visible alarm notification appliances shall be allowed in lieu of audible alarm notification appliances in critical care areas of Group I-2 occupancies~~ Audible alarm notification appliances are not required in areas of Group I occupancies that are in compliance with Section 907.2.6, Exception 2.

2. (No change to current text)

Reason: **(Need revised reason from Bob D.)**

This proposal is submitted by the ICC Ad Hoc Committee on Healthcare (AHC). The AHC was established by the ICC Board of Directors to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. The AHC is composed of building code officials, fire code officials, hospital facility engineers, and state healthcare enforcement representatives. The goals of the committee are to ensure that the ICC family of codes appropriately addresses the fire and life safety concerns of a highly specialized and rapidly evolving healthcare delivery system. This process is part of a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Since its inception in April, 2011, the AHC has held 5 open meetings and over 80 workgroup calls which included members of the AHC as well as any interested party to discuss and debate the proposed changes. All meeting materials and reports are posted on the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx

Cost Impact: This proposal will not increase the cost of construction.

Fxx – 13 (K-tag K161)

1103.3; 1103.3.1 (New); 1103.3.2

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care

Revise as follows:

1103.3 Existing elevators. Existing elevators, escalators, dumbwaiters and moving walks shall comply with the requirements of Sections 1103. 3.1 and 1103.3.2.

1103.3.1 Elevators, escalators, dumbwaiters and moving walks. Existing elevators, escalators, dumbwaiters and moving walks in ambulatory care facilities and Group I-2 hospitals shall comply with ASME A17.3.

1103.3.2 Elevator emergency operation. Existing elevators with a travel distance of 25 feet (7620 mm) or more above or below the main floor or other level of a building and intended to serve the needs of emergency personnel for fire-fighting or rescue purposes shall be provided with emergency operation in accordance with ASME A17.3.

Reason: The healthcare industry has historically been required to comply with regulations set forth by accreditation and certification agencies, such as The Joint Commission. Because the ICC family of codes does not currently have an existing elevator standard, ASME A17.3 *Safety Code for Existing Elevators and Escalators* is proposed for compliance of existing elevators in Group I-2 and ambulatory care facility occupancies. ASME A17.3 has been referenced by guidelines adopted by The Joint Commission for over a decade and this code change will provide correlation of the IFC with the mandated healthcare industry standard.

Adding a reference to ASME A17.3 will require that existing elevators escalators, dumbwaiters and moving walks and their related operating equipment in ambulatory care facilities and Group I-2 hospitals comply with a minimum level of safety. Because the occupants of these types of facilities are often incapable of self-preservation, it will also provide important features essential for occupant safety including escalator and moving walk emergency stop buttons and automatic skirt obstruction stop feature and, for power dumbwaiters, hoistway door locking to keep doors closed except for the floor where the car is being loaded or unloaded. A new Section 1103.3 is included editorially to conform to established code style for multiple requirement sections.

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Cost Impact: The code change proposal should not increase the cost because compliance with similar requirements is already mandated by facility licensure requirements.

Fxx - 13
Section 11XX (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care

Add new text as follows:

This space reserved for an as-yet incomplete Group B proposal to require retroactive protection of Rubbish chutes, incinerators and laundry chutes to parallel NFPA 101 Chapter 19 and NFPA 82 based on K-tag K-71.

NOTE: The content of this proposal parallels IBC Section 509. Table 1106 is the same as the *revised* Table 509 that will appear in the IBC if Group A code change **G130-12** is approved. If Group A code change **G130-12** is disapproved, Table 1106 will revert to the IBC 2012 Table 509 before being submitted for the Group B cycle.

(Round 1, Issue 11 Incidental Uses)

Fxx - 13
Section 1106 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care

Add new text as follows:

IFC SECTION 1106
INCIDENTAL USES

1106.1 General. Incidental uses located within existing single occupancy or mixed occupancy buildings shall comply with the provisions of this section. Incidental uses are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses listed in Table 1106.

> **Exception:** Incidental uses within and serving a *dwelling unit* are not required to comply with this section.

1106.2 Occupancy classification. Incidental uses shall not be individually classified in accordance with Section 302.1 of the *International Building Code*. Incidental uses shall be included in the building occupancies within which they are located.

1106.3 Area limitations. Incidental uses shall not occupy more than 10 percent of the *building area* of the *story* in which they are located.

1106.4 Separation and protection. The incidental uses listed in Table 1106 shall be separated from the remainder of the building or equipped with an *automatic sprinkler system*, or both, in accordance with the provisions of that table.

1106.4.1 Separation. Where Table 1106 specifies a fireresistance-rated separation, the incidental uses shall be separated from the remainder of the *building* in accordance with Section 509.4.1 of the *International Building Code*.

1106.4.2 Protection. Where Table 1106 permits an *automatic sprinkler system* without a *fire barrier*, the incidental uses shall be separated from the remainder of the building by construction capable of resisting the passage of smoke in accordance with Section 509.4.2 of the *International Building Code*.

1106.4.2.1 Protection limitation. Except as specified in Table 1106 for certain incidental uses, where an *automatic sprinkler system* is provided in accordance with Table 1106, only the space occupied by the incidental use need be equipped with such a system.

TABLE 1106
INCIDENTAL USES

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Furnace room where any piece of equipment is over 400,000 Btu per hour input.	1 hour or provide automatic sprinkler system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic sprinkler system
Refrigerant machinery room	1 hour or provide automatic sprinkler system
Hydrogen cutoff rooms, not classified as Group H	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I and R occupancies.
Incinerator rooms	2 hours and provide automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic sprinkler system
In Group E occupancies, laboratories and vocational shops~~,~~ not classified as Group H.	1 hour or provide automatic sprinkler system
In Group I-2 occupancies, laboratories not classified as Group H	1 hour and provide automatic sprinkler system
In ambulatory care facilities, laboratories not classified as Group H	1 hour or provide automatic sprinkler system
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system
In Group I-2, laundry rooms over 100 square feet	1 hour
Group I-3 cells and Group I-2 patient rooms equipped with padded surfaces	1 hour
In Group I-2**,** physical plant maintenance shops.	1 hour
In ambulatory care facilities or Group I-2 occupancies , waste and linen collection rooms with containers that have an aggregate volume of 10 cubic feet or greater	1 hour
In other than ambulatory care facilities and Group I-2 occupancies, waste and linen collection rooms over 100 square feet	1 hour or provide automatic sprinkler system
In ambulatory care facilities or Group I-2 occupancies, storage rooms greater than 100 square feet	1 hour
Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons for flooded lead-acid, nickel cadmium or VRLA, or more than 1,000 pounds for lithium-ion and lithium metal polymer used for facility standby power, emergency power or	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I and R occupancies.

uninterruptable power supplies	

For SI: 1 square foot = 0.0929 m^2, 1 pound per square inch (psi) = 6.9 kPa, 1 British thermal unit (Btu) per hour = 0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L.

NOTE: For clarity, underlining of the entire table content has been eliminated.

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This table is being introduced into the IFC to help clarify the requirements for ratings in buildings not related to a new construction project. This is the same table as IBC table 509, with new proposals specific to the Group I-2 Hospitals. The above chart makes the noted tables consistent with current operational and programmatic standards in the I-2 Hospital occupancy.

This table addresses the occasion when materials in a laboratory increases, most notably in the aggregate of a larger histology / cytology laboratories. Materials such as xylene, hydrochloric acid, ethanol and fixatives (among others) present in these areas. Although they are stored in gallon and liter quantities, and not bulk storage, the quantities add up over the larger lab areas when they are in use at the benches. NFPA 45 is the current reference standard, as NFPA 99 no longer directly addresses ratings of spaces. Severe hazard laboratories that fall into Class A and B of NFPA 45 have largely been eliminated from I-2 occupancies, but in their instance would still be subject to higher classes by virtue of being referenced in this table. The reference to not being H-occupancy in the table correlates to a Class A or B lab as described in NFPA 45. Class C and D labs exist in the I-2 occupancies, and are predominantly subject to 1-hour rated construction, or sprinkler coverage as the trade-off in existing. The distinction between two labs is made here in an attempt not to rely wholly on NFPA 45, but provide some guidance as to the distinction between smaller stat labs and larger clinical labs. Ambulatory care facilities has been added to the current laboratory category to address those support spaces such as stat labs that are set up for a specific purpose to save time in the B-occupancy setting. Larger scale lab operations are typically sent out to proprietary labs from ambulatory facilities. When addressing labs crossing the threshold into one hour rated construction, these labs are typically constructed as stand-alone operations and commonly appear in B occupancies anyway, and are subject to the current occupancy separation requirements.

Volume thresholds are being considered because basic exam spaces contain some level of waste containers and linen hampers without rising to the level of storage. The 64 gallon limit represents essentially two medium sized linen hampers and/or trash receptacles. Larger linen and waste receptacle containers, and not the smaller containers typically found in an exam room or patient sleeping room, are subject to volume rather than square footage of the room because a relatively small space, with the 64 gallon threshold crossed in a space well below, for example, 100 square feet. Reference to the IFC section relating to volumes has been added to the table as a footnote.

Addition of storage rooms as an area requiring 1 hour rated protection is a key functional aspect of an [I-2 Healthcare] building. Areas that become unused become storage areas very quickly. Specifically calling out Storage areas helps define and control the storage of combustibles, and avoid creating random storage in otherwise unmonitored or unprotected areas. Use of the term *combustibles* is used in the table to draw distinction of storage rooms versus equipment staging rooms. Often, non-flammable material such as lifts, IV poles, or other metallic items that does not have an electrical source are staged in rooms that do not represent sources of fire ignition.

Areas addressed in the past, but are no longer included in the table, are addressed elsewhere in the IFC. For example, storage of combustible gases is addressed in 5306.2 and has specific references to the I-2 occupancy. Gift shops, formerly listed as an incidental area requiring protection, has largely been eliminated from these requirements in the I-Codes and other model codes, and are addressed in the context of being open to the corridor.

In consideration of ambulatory care facilities, where not otherwise specifically called out, categories that are required for both B and I occupancies are assumed to cover [I-2 Hospitals] and ambulatory care facilities. Examples of this interpretation are Hydrogen Cut-Off Rooms and Stationary Battery Storage.

Cost Impact: The code change proposal should not increase the cost because compliance with similar requirements is already mandated by facility licensure requirements.

Fxx - 13 (Round 1, Issue 12A)

Table 5003.1.1(1) [IBC Table [F] 307.1(1)]

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care

Revise as follows:

TABLE 5003.1.1(1) [IBC Table [F] 307.1(1)]
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA
OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD [a, j, m, n, p]

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE [b]			USE-CLOSED SYSTEMS [b]			USE-OPEN SYSTEMS [b]	
			Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds)

(Portions of table not shown do not change.)

For SI: 1 cubic foot = 0.028 m_3, 1 pound = 0.454 kg, 1 gallon = 3.785 L.
NL = Not Limited; N/A = Not Applicable; UD = Unclassified Detonable

a. through o. (No change to current text)
p. The following shall not be included in determining the maximum allowable quantities:
1. Liquid or gaseous fuel in fuel tanks on vehicles.
2. Liquid or gaseous fuel in fuel tanks on motorized equipment operated in accordance with this code.
3. Gaseous fuels in piping systems and fixed appliances regulated by the *International Fuel Gas Code.*
4. Liquid fuels in piping systems and fixed appliances regulated by the *International Mechanical Code*.
5. In Group I-2 hospitals, alcohol based hand rubs classified as Class I or II liquids where installed in accordance with Sections 5705.5 and 5705.5.1. The location of the alcohol based hand rub (ABHR) dispensers shall be provided in the construction documents.
q. (No change to current text)

Reason: This proposed change will allow a reasonable amount of Alcohol based Hand Rub for Infection Control and Patient Life Safety located in Group I-2 Hospitals in appropriately sized dispensers to be located in control areas and permits the amounts not to be included in determining the maximum allowable quantities. IFC 5705.5 - addresses the specifics regarding these amounts and locations.

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Cost Impact: This proposal will not increase the cost of construction.

Fxx-12/13 K-tag K76 Medical Gas Ventilation

5306.2.1

Proponent: John Williams, Chair, ICC Ad Hoc Committee on Health Care

Revise as follows:

5306.2.1 One-hour exterior rooms. A 1- hour exterior room shall be a room or enclosure separated from the remainder of the building by fire barriers constructed in accordance with Section 707 of the *International Building Code* or horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both, with a fire- resistance rating of not less than 1- hour. Openings between the room or enclosure and interior spaces shall be self-closing smoke- and draft-control assemblies having a fire protection rating of not less than 1hour. Rooms shall have at least one exterior wall that is provided with at least two non-closable louvered vents. Each vent shall have a minimum free opening area of 24 square inches (155 cm^2) for each 1,000 cubic feet (28 m^3) at normal temperature and pressure (NTP) of gas stored in the room and shall not be less than 72 square inches (465 cm2) in aggregate free opening area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the ceiling. Rooms shall be provided with at least one automatic sprinkler to provide container cooling in case of fire.

Reason: The purpose of this proposal is to update Section 5306.2.1 on Medical Gas Systems to clarify and address the differences with the language in NFPA 99-2012, Section 9.3.7.5.2 with which hospitals are required to comply.

This proposed revision requires the vents to be of the non-closable type which is not currently required in the IFC, and of a larger size. It further defines the louver opening as “aggregate free opening” as required which is not currently specified in the IFC.

NFPA 99 is the more restrictive and sets the design of the louver to be specifically fixed where the IFC language may result is a “closable” louver which is not the intent of this code section. It also provides clarification on the sizing of the louver as it relates to the amount of gas being stored in the room where the IFC currently does not.

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Cost Impact: This proposal will increase the cost of construction.