Code Technologies Committee Report Nursing Care Facilities – Group A changes:

There are 11 areas of study currently listed under CTC.

1. Balanced Fire Protection
   1.1. Vertical Opening
   1.2. Roof Vents
2. Carbon Monoxide Detectors
3. Nursing Care Facilities
4. Child Window Safety
5. Climbable Guards
6. Elevator Lobby
7. Emergency Evacuation with Elevators
8. ADA/IBC Coordination
9. Fire rated glazing
10. Relocatable Modular Building
11. Unenclosed Exit Stairs

Following are code change proposals submitted through CTC from Nursing Care study group or related changes.

Nursing Care Facilities

Code Change #	Section	CTC (x) or Related (o)	Position					Comments
			Oppose & Testify	Oppose	No Position	Support	Support & Testify	
E066	1008.1.9.6	x						
E067	1008.1.9.6	x						
E069	1008.1.9.6	x						
E070	1008.1.9.7	x						
E072	1008.1.9.7	x						
E074	1008.1.9.7	x						
E077	1008.1.9.8	x						
E078	1008.1.9.8	x						
E081	1008.1.9.9	o						
E082	1008.1.9.9	o						
E118	1017.3	o						Aisles
E119	1017.3	x						Aisles
E122	1018.2	x						
E179	1104.3	o						Hospital doors

E186	1107.5.1.1	x						
FG003	303.3.1	o						
FS068	713.14.1	x						
G001	202	x						
G003	308.3	x						
G031	308	x						Group I-1, Condition 1 & 2
G032	308	o						
G033	308	o						Lockups in other than I-3
G034	308.3	x						
G035	308.3	o						Assisted living as Group I-2
G036	308.3.1	o						Group homes less than 5
G037	308.5	o						Lock-up facility
G054	404.6	x						Atrium enclosure in I-2
G055	404.6	x						
G056	407.2.6	x						
G065	407.2.5	x						
G066	407.2.5	x						
G068	407.4	x						
G073	407.4.3	x						
G079	407.11	o						
G091	420.6	o						
G244	3412	o						Group I-2 alternative means
G257	308	o						Group I-2, Condition 1 and 2
M010	303.1	o						
M035	309.2	o						
M036	401.2	x						
M047	403.3	x						
M076	505.1	x						
M101	507	o						
P069	422.11	o						
P171	713.12	o						

E66-12
1008.1.9.6 (IFC [B] 1008.1.9.6)

Proponent: Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

1008.1.9.6 (IFC [B] 1008.1.9.6) Special locking arrangements in doors in ~~Group~~ Groups I-1 assisted living facilities and I-2. Approved, special egress locks shall be permitted in a Group I-1 assisted living facilities or I-2 ~~occupancy~~ occupancies where the clinical needs of persons receiving care require such locking. Special egress locks shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with Items 1 through 7 below.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center, a nursing station or other approved location.
4. A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an exit.
5. The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.
6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.
7. Emergency lighting shall be provided at the door.

Exception: Items 1 through 4 shall not apply to doors to areas where persons which because of clinical needs require restraint or containment as part of the function of a psychiatric treatment area.

Reason: The current text allows special provisions in the path of egress for Group I-2 when patient care, most often due to issues of elopement, allows for staff to control access to the exits. This allowance should be permitted in assisted living facilities in order to allow proper care for residents in the initial stages of Alzheimer's, therefore, this allowance needs to be extended to Group I-1 assisted living facilities.

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.

Cost Impact: Increase

E66-12

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

E67-12
1008.1.9.6 (IFC [B] 1008.1.9.6)

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:

1008.1.9.6 (IFC [B] 1008.1.9.6) ~~Special~~ Controlled egress ~~locking arrangements in~~ doors in Group I-2. ~~Approved,~~ Electric ~~special egress~~ locks, including electro-mechanical locks and electromagnetic locks, shall be permitted to be locked in the means of egress in a Group I-2 occupancy where the clinical needs of persons receiving care require their containment. ~~such locking. Special egress locks~~ Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with Items 1 through ~~7~~ 8 below.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a switch that directly breaks power to the lock, located ~~signal from~~ at the fire command center, a nursing station or other approved location.
4. A building occupant shall not be required to pass through more than one door equipped with a ~~special~~ controlled egress lock before entering an exit.
5. The procedures for the ~~operation(s) of the~~ unlocking ~~system~~ of the doors shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.
6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.
7. Emergency lighting shall be provided at the door.
8. All components of the door locking system shall be listed in accordance with UL 294.

Exception: Items 1 through 4 shall not apply to doors to areas where persons which because of clinical needs require restraint or containment as part of the function of a psychiatric treatment area.

Reason: This section deals with the use of electric locks to enhance the capabilities of egress control. Egress control serves three primary purposes. These are to control the elopement of ambulatory patients not capable of self preservation; the containment of patients that, due to their mental condition, could do harm to others; the prevention of the abduction of babies and children. Exceptions allow for the use of listed child abduction security systems and even mechanical locks (non-electric.)

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.

Cost Impact: None

E67-12

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

E69-12
1008.1.9.6 (IFC [B] 1008.1.9.6)

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:

1008.1.9.6 (IFC [B] 1008.1.9.6) Special locking arrangements in Group I-2. Approved, special egress locks shall be permitted in a Group I-2 occupancy where the clinical needs of persons receiving care require such locking. Special egress locks shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with Items 1 through 7 below.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center, a nursing station or other approved location.
4. A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an exit.
5. The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.
6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.
7. Emergency lighting shall be provided at the door.

~~Exception~~ Exceptions:

1. Items 1 through 4 shall not apply to doors to areas where persons which because of clinical needs require restraint or containment as part of the function of a ~~psychiatric~~ treatment area.
2. Items 1 through 4 shall not apply to doors to areas where a listed egress control system is utilized to reduce the risk of child abduction.

Reason: This section deals with the use of electric locks to enhance the capabilities of egress control. Egress control serves three primary purposes. These are to control the elopement of ambulatory patients not capable of self preservation; the containment of patients that, due to their mental condition, could do harm to others; the prevention of the abduction of babies and children. Exceptions allow for the use of listed child abduction security systems and even mechanical locks (non-electric.)

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Cost Impact: None

E69-12

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

E70-12
1008.1.9.7 (IFC [B] 1008.1.9.7)

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:

1008.1.9.7 (IFC [B] 1008.1.9.7) Delayed egress ~~locks~~. ~~*Approved, listed*~~, Delayed egress ~~locks~~ locking systems, shall be permitted to be installed on doors serving any occupancy except Group A, E, and H occupancies in buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system installed in accordance with Section 907~~,~~. The locking system shall allow immediate free egress and shall be installed and operated ~~provided that the doors unlock~~ in accordance with Items 1 through ~~6~~ 7 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an *exit.*

1. The delay electronics shall deactivate ~~doors unlock~~ upon actuation of the *automatic sprinkler system* or automatic fire detection system, allowing immediate, free egress.
2. The ~~doors unlock~~ delay electronics shall deactivate upon loss of power controlling the lock or lock mechanism, allowing immediate free egress.
3. The ~~door locks~~ delay electronics shall have the capability of being ~~unlocked by a signal from~~ deactivated at the fire command center and other approved locations.
4. An attempt to egress ~~The initiation of~~ shall initiate an irreversible process which ~~will release the~~ shall allow such egress in not more than 15 seconds when a ~~force of not more than 15 pounds (67 N)~~ physical effort to exit is applied to the egress side door hardware for *not more than ~~1~~ 3 ~~second~~ seconds* ~~to the release device~~. The effort to open the door shall not require a force greater than 30 pounds (133N). Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics ~~door lock has~~ have been ~~released~~ deactivated, ~~by the application of force to the releasing device~~, ~~relocking~~ rearming the delay electronics shall be by manual means only.

   Exception: Where approved, a delay of not more than 30 seconds is permitted on a delayed egress door.

5. A sign shall be provided on the door located above and within 12 inches (305mm) of the ~~release device~~ door exit hardware reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 (30) SECONDS. The sign shall comply with the visual character requirements in ICC A117.1.
6. Emergency lighting shall be provided ~~at~~ on the egress side of the door.
7. All components of the door locking system shall be listed in accordance with UL 294.

Reason: The intent of this proposal is to clarify the delayed egress locking system requirements. The intent is for all proposals for Section 1008.1.9.7 to work together. Three changes are submitted in order to keep the discussions separate.

The term "delayed egress lock" is proposed to be changed to "delayed egress locking system." Delayed egress always requires a system of electronic devices that work together to perform the delayed egress task. Sometimes they are contained within an electromagnetic lock or a bar and sometimes they are separate components, but they are never just a lock.

The term 'unlock" is proposed to change to "allow immediate free egress." Immediate free egress can be accomplished without unlocking the door. Merchants, offices and health care facilities are hesitant to use delayed egress because an "after hours" egress event will leave their building unlocked. Addressing the "delay" as a separate issue from "locked", this modification will allow the door to relock FROM THE OUTSIDE after a delayed egress event, but change the operation of the door to free egress until the system is manually reset. The intent of the code is not to keep people out. Instead, it is to let them out.

In Item 4 it is proposed to change the delay from one second to three seconds. One second is not enough time for a fully cognizant person to recognize that their action is what is causing the alarm and decide to abort the exit attempt. Dementia patients tend to wander toward doors when not otherwise engaged. Since staffing cannot be 1:1, it means that the nurses are attending other issues. Reducing these "nuisance" alarm issues can greatly reduce the need to drop everything and go check and reset the door.

In Item 4 it is proposed to make the force requirement consistent with Section 1008.1.3. There are three ways to initiate a delay sequence that are in common use, today. The code has never been changed to accommodate two of these. The original one,

an electromagnetic lock with delay electronics and a switch built into the case, is not addressed. It allows the use of existing door hardware and should be used with exit only applications. Otherwise, it can be triggered from both sides. The second means of delay initiation includes switches in cylindrical and mortise locks that begin the sequence when the inside lever is turned. This method has become possible with the ADA changes made to these locks to accommodate levers. The third method is the one the code seems to reference. It uses a switch bar (aka active dummy with switch), a panic bar with a switch, or fire-exit hardware with a switch. Depending on the manufacturer and the model number, the switch may either signal an external delay timer that controls an electromagnetic lock or signal a self-contained delayed egress system that controls a latch.

In Item 5 it is proposed to require a contrasting color for signage. Manufacturers typically supply the sign with their product, but often the sign blends in with the color of the door. The reference to ICC A117.1 visual requirements would not require engraved letters or Braille, but would require readable text, with good finish and contrast.

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Cost Impact: None

E70-12

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

E72-12
1008.1.9.7 (IFC [B] 1008.1.9.7)

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:

1008.1.9.7 (IFC [B] 1008.1.9.7) Delayed egress ~~locks~~. *Approved, listed*, delayed egress ~~locks~~ locking systems, shall be permitted to be installed on doors serving any occupancy except Group A, E, and H occupancies in buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through ~~6~~ 7 below. ~~A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an *exit*.~~

1. The doors unlock upon actuation of the *automatic sprinkler system* or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center.
4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for *1 second* to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

   Exception: Where approved, a delay of not more than 30 seconds is permitted on a delayed egress door.

5. The egress path from any point shall pass through no more than one delayed egress door.

   Exception: In Group I-2 or I-3 occupancies, the egress path from any point in the building shall be permitted to pass through no more than two delayed egress doors provided the combined delay does not exceed 30 seconds.

6. A sign shall be provided on the door located above and within 12 inches (305mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 (30) SECONDS.
7. Emergency lighting shall be provided at the door.

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

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The intent is for both proposals for Section 1008.1.9.7 to work together. Two changes are submitted in order to keep the discussions separate.

Since delayed egress was developed in two separate theaters for two separate reasons, pilfering was a reason that is perfect for *one* 15 second delay. Back then, sprinkler requirements were not like they are today. On the other hand, delayed egress for health care in a fully sprinklered facility should be recognized as being different. A delay of thirty seconds is appropriate for this situation and so should two 15 second delays when used for good purpose, as they delay the person for no more time and often for less time. Following are two good purposes:

1. Property, especially in cities, is at a premium in both price and availability. For this reason, we see more and more two and three story ambulatory health care facilities as a result of needing to build up instead of out. This comes with a need to keep Alzheimer's disease and Head Injury patients on the floor **and** in the building. Currently, the facility is tasked with having to make a dangerous and unnecessary choice.
2. Most large (60+) single story dementia facilities have a perimeter fence surrounding the back and sides of the building. All exits except the front door are into a protected yard. The front door controls entry into the office/lobby area and reception. It is a small area requiring only the front door as an exit. A second door leading from the front office area into the core of the facility keeps the residents from eloping and strangers from entering. Originally, this door was not an exit and the facility side of the door was disguised as a wall so residents (patients) would not try to get out. Since it was not an exit, a delayed egress system was placed on that door and another one on the front door. Keypads were on both sides and both systems would unlock upon activation of the fire alarm. It was a mantrap designed so that if the lobby to core door went into alarm, the front door would instantly become delayed egress. Pursuant to the "discovery" and subsequent enforcement of the idea that if people exit the way they entered, the lobby to core door was an exit, should not be disguised and the front door could no longer be delayed. Without exceptions for those with health issues, the patients were now less safe than before. Allowing two 15 second delays would return them to a safe environment. This reasoning could also be applied toward doors leading into a common lobby with a stair tower door. The stair tower door would be free egress unless someone had triggered the ward delay in an attempt to elope from the ward. This would set off the alarm and arm the stair tower door's delayed egress system.

Cost Impact: None

E72-12

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

E74-12
1008.1.9.7 (IFC [B] 1008.1.9.7)

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:

1008.1.9.7 (IFC [B] 1008.1.9.7) Delayed egress locks. *Approved, listed*, delayed egress ~~locks~~ locking systems, shall be permitted to be installed on doors serving any occupancy except Group A, E, and H occupancies in buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an *exit.*

1. The doors unlock upon actuation of the *automatic sprinkler system* or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center.
4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for *1 second* to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released, by the application of force to the releasing device, relocking rearming shall be by manual means only.

   Exception: Where approved, a delay of not more than 30 seconds is permitted on a delayed egress door.

5. A sign shall be provided on the door located above and within 12 inches (305mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 (30) SECONDS.

   Exception: Where approved, the installation of a sign is not required when it interferes with the safety of the residents in Group I occupancies.

6. Emergency lighting shall be provided at the door.

Reason: The intent is for all proposals for Section 1008.1.9.7 to work together. Three changes are submitted in order to keep the discussions separate.

The new exception to Item 5 - Providing escape instructions to first stage Alzheimer's disease patients who often still can read is unwise. Staff is there to assist in a fire.

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Cost Impact: None

E74-12

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

E77-12
1008.1.9.8, 1008.1.9.9 (IFC [B] 1008.1.9.8, 1008.1.9.9)

Proponent: Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

1008.1.9.8 (IFC [B] 1008.1.9.8) Access controlled egress doors. The entrance doors in a means of egress in buildings with an occupancy in Groups A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in groups A, B, E, I-1, I-2, I-4, M, R-1 or R-2 are permitted to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294, which shall be installed in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to that the part of the access control system which locks the doors shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016mm to 1219mm) vertically above the floor and within 5 feet (1524mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of the access control system electronics—and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. Entrance doors in buildings with an occupancy in Group A, B, E, or M shall not be secured from the egress side during periods that the building is open to the general public.

1008.1.9.9 (IFC [B] 1008.1.9.9) Electromagnetically locked egress doors. Doors in the *means of egress* in buildings with an occupancy in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 shall be permitted to be electromagnetically locked if equipped with listed hardware that incorporates a built-in switch and meets the requirements below:

1. The listed hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.
2. The listed hardware is capable of being operated with one hand.
3. Operation of the listed hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.
4. Loss of power to the listed hardware automatically unlocks the door.
5. Where panic or *fire exit hardware* is required by Section 1008.1.10, operation of the listed panic or *fire exit hardware* also releases the electromagnetic lock.

Reason: Group I-1 and I-2 include patients where they may be a concern for elopement. In day care, there is the concern of children perhaps leaving the facility. These types of systems allow for some control, while at the same time allowing free egress during an emergency.

If the correlative change for Group R-4, Condition 1 and Condition 2 is successful, a public comment regarding the application of these types of locking arrangements may be submitted.

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.

Cost Impact: Increase

E77-12

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

E78-12
1008.1.9.8 (IFC [B] 1008.1.9.8)

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:

1008.1.9.8 (IFC [B] 1008.1.9.8) ~~Access controlled~~ Motion sensor release of electromagnetically locked egress doors. Electromagnetically locked ~~The entrance~~ doors located in a means of egress in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in groups A, B, E, I-2, M, R-1 or R-2 are permitted ~~to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294, which shall be~~ where installed and operated in accordance with all of the following criteria:

1. A motion sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to ~~that~~ the lock ~~part of the access control system which locks the doors~~ shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016mm to 1219mm) vertically above the floor and within 5 feet (1524mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of ~~the access control system~~ other electronics—and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. Entrance doors in buildings with an occupancy in Group A, B, E, or M shall ~~not be secured from the~~ always allow immediate free egress ~~side~~ during periods that the building is open to the general public.
7. All components of the door locking system shall be listed in accordance with UL 294.

Reason: This code was originally proposed to NFPA, UBC/UFC, and BOCA as an **alternative** way to release electromagnetic locks. It came from Washington, D.C. security contractors in the early 1980s when faced with installing electromagnetic locks on hundreds of all glass doors on defense contractors' facilities. There was no way to install bars with switches and no way to conceal the wiring. The title, Access Controlled Egress Doors, **meant** that access to free egress was controlled. It had nothing to do with the (then) new *electronic access control systems.*

The code addressed fire safety by taking aspects of devices not allowed and making them safer when used together. Buttons, once special knowledge, were given specific placement parameters and requirements to break the power to the lock, directly; the somewhat unreliable motion sensor was backed up by the button; the 30 second re-triggerable and independent timer attached to the button protected against CPU failure and allowed 30 seconds before relocking so the disabled could get through the door; and the connection to the fire system meant that the door would unlock upon alarm. It was an alternate code, designed to be used sparingly and in certain situations.

This code is used heavily in hospitals, but its application is often misunderstood. It is time to clean up this code by eliminating confusing references to *access control systems*, directly or implied. Access has never been an issue for the codes, except in high-rise stair towers.

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.

Cost Impact: None

E78-12

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

E81-12
1008.1.9.9 (IFC [B] 1008.1.9.9)

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

Revise as follows:

1008.1.9.9 (IFC [B] 1008.1.9.9) Electromagnetically locked egress doors. Doors in the *means of egress* in buildings with an occupancy in Group A, B, E, I-2, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, I-2, M, R-1 or R-2 shall be permitted to be electromagnetically locked if equipped with listed hardware that incorporates a built-in switch and meet the requirements below :

1. The listed hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.
2. The listed hardware is capable of being operated with one hand.
3. Operation of the listed hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.
4. Loss of power to the listed hardware automatically unlocks the door.
5. Where panic or *fire exit hardware* is required by Section 1008.1.10, operation of the listed panic or *fire exit hardware* also releases the electromagnetic lock.

Reason: The addition of I-2 is necessary since so many of these health care facilities use electromagnetic locks for security and personnel safety, something that 1008.1.9.8 cannot provide.

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: None

E81-12

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

E82-12
1008.1.9.9 (IFC [B] 1008.1.9.9)

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

Revise as follows:

1008.1.9.9 (IFC [B] 1008.1.9.9) Door hardware release of electromagnetic locks on ~~Electromagnetically locked~~ egress doors. Doors in the *means of egress* in buildings with an occupancy in Group A, B, E, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, M, R-1 or R-2 shall be permitted to be electromagnetically locked if equipped with ~~listed~~ hardware that incorporates a built-in switch and ~~meet the requirements below~~ are installed and operated in accordance with Items 1 through 6 below:

1. The ~~listed~~ hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.
2. The ~~listed~~ hardware is capable of being operated with one hand.
3. Operation of the ~~listed~~ hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.
4. Loss of power to the ~~listed~~ hardware automatically unlocks the door.
5. Where panic or *fire exit hardware* is required by Section 1008.1.10, operation of the ~~listed~~ panic or *fire exit hardware* also releases the electromagnetic lock.
6. All components of the door locking system shall be listed in accordance with UL 294.

Reason: The title change is to prevent confusion between the two types of releasing systems for electromagnetic locks as both codes, 1008.1.9.8 and 1008.1.9.9, detail these requirements which are very different from each other. The remainder of the change is editorial for consistency with other sections.

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: None

E82-12

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

E118-12
1017.3, 1017.5 (IFC [B] 1017.3, 1017.5)

Proponent: S. Bajnai, Chesterfield County, VA, ICC Building Code Action Committee

Revise as follows:

SECTION 1017
AISLES

1017.1 (IFC [B] 1017.1) General. Aisles and aisle accessways serving as a portion of the exit access in the means of egress system shall comply with the requirements of this section. Aisles or aisle accessways shall be provided from all occupied portions of the exit access which contain seats, tables, furnishings, displays and similar fixtures or equipment. The required width of aisles shall be unobstructed.

Exception: Encroachments complying with Section 1005.7.

1017.2 (IFC [B] 1017.2) Aisles in assembly spaces. Aisles and aisle accessways serving a room or space used for assembly purposes shall comply with Section 1028.

1017.3 (IFC [B] 1017.3) Aisles in Groups B and M. In Group B and M occupancies, the minimum clear aisle width shall be determined by Section 1005.1 for the occupant load served, but shall not be less than ~~36 inches (914 mm)~~ that required for corridors by Section 1018.2.

Exception: Nonpublic aisles serving less than 50 people and not required to be accessible by Chapter 11 need not exceed 28 inches (711 mm) in width.

1017.4 (IFC [B] 1017.4) Aisle accessways in Group M. *(no change)*

1017.5 (IFC [B] 1017.5) Aisles in other than assembly spaces and Groups B and M. In other than rooms or spaces used for assembly purposes and Group B and M occupancies, the minimum clear aisle width shall be determined by Section 1005.1 for the occupant load served, but shall not be less than ~~36 inches (914 mm)~~ that required for corridors by Section 1018.2.

Exception: Nonpublic aisles serving less than 50 people and not required to be accessible by Chapter 11 need not exceed 28 inches (711 mm) in width.

Reason: This proposal is submitted by the ICC Building Code Action Committee (BCAC) The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 3 open meetings and over 15 workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Aisles are the main paths for means of egress through many types of spaces, such as between cubicles in open office plans, between merchandise pads in display areas in stores, between shelving in storage areas and between equipment in factories. While not confined by walls as corridors are, they should still be sized consistently with corridors so occupants could exit the building safely. The 2012 IBC has a Table in 1018.2 that provides minimum corridor widths in a clear manner. The exception currently in 1017.3 is repeated in 1017.5 for consistency between use groups.

BCAC has code changes in dealing with aisles in 1005, 1009, 1017 and 1028 as well as a transition between aisle stairs and stairways. The intent is for all four proposals to correlate; however this change can stand by itself.

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

E118-12

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

E119-12
1017.3, 1017.5 (IFC [B] 1017.3, 1017.5)

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:

1017.3 (IFC [B] 1017.3) Aisles in Groups B and M. In Group B and M occupancies, the minimum clear *aisle* width shall be determined by Section 1005.1 for the *occupant load* served, but shall not be less than ~~36 inches (914 mm).~~ that required for corridors by Section 1018.2.

> **Exception:** Nonpublic *aisles* serving less than 50 people and not required to be *accessible* by Chapter 11 need not exceed 28 inches (711 mm) in width.

1017.5 (IFC [B] 1017.5) Aisles in other than assembly spaces and Groups B and M. In other than rooms or spaces used for assembly purposes and Group B and M occupancies, the minimum clear *aisle* width shall be determined by Section 1005.1 for the *occupant load* served, but shall not be less than ~~36 inches (914 mm).~~ that required for corridors by Section 1018.2.

Reason: The change for aisles in IBC Sections 1107.3 and 1017.5 is for coordination with the new corridor width Table 1018.2 and the language for ramp width in Section 1010.6.1. Also, aisles, corridors and ramps are all using the same capacity numbers in Section 1005.3.2. Aisle used for movement of patient beds should also meet 96".

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.

Cost Impact: None

E119-12

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

E122-12
1018.2 (IFC [B] 1018.2)

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:

1018.2 (IFC [B] 1018.2) Width. The minimum width of *corridors* specified in Table 1018.2 shall be as determined in Section 1005.1.

Exception: In Group I-2 occupancies, corridors are not required to have a clear width of 96 inches (2438 mm) in areas where there will not be stretcher or bed movement for access to care or as part of the defend in place strategy.

TABLE 1018.2 (IFC TABLE [B] 1018.2)
MINIMUM CORRIDOR WIDTH

Occupancy	Width (min)
Any facilities not listed below	44 inches (1118 mm)
Access to and utilization of mechanical, plumbing or electrical systems or equipment	24 inches (610 mm)
With a required occupancy capacity less than 50	36 inches (914 mm)
Within a dwelling unit	36 inches (914 mm)
In Group E with a *corridor* having a required capacity of 100 or more	72 inches (1829 mm)
In *corridors* and areas serving gurney traffic in occupancies where patients receive outpatient medical care, which causes the patient to be incapable of *self-preservation*	72 inches (1829 mm)
Group I-2 in areas where required for bed movement	96 inches (2438 mm)

Reason: Since hospitals typically include accessory spaces or non separated mixed use occupancies that are not patient care, the code official should have the clear ability to apply judgment in determining the appropriate means of egress components. For example a large assembly space may need certain Group requirements, while a mechanical space with no patient would not need an 8' corridor.

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.

Cost Impact: This proposal could help to decrease the cost of construction by allowing a more efficient use of building square footage.

E122-12

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

E179-12
1104.3, 1107.3, 1107.5.3.1

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:

1104.3 Connected spaces. When a building or portion of a building is required to be *accessible*, an *accessible route* shall be provided to each portion of the building, to *accessible* building entrances connecting *accessible pedestrian walkways* and the *public way*.

Exceptions:

1. In a building, room or space used for assembly purposes with *fixed seating*, an *accessible route* shall not be required to serve levels where *wheelchair spaces* are not provided.
2. In Group I-2 facilities, doors to *sleeping units* shall be exempted from the requirements for maneuvering clearance at the room side provided the door is a minimum of 44 inches (1118 mm) in width.

1107.3 Accessible spaces. Rooms and spaces available to the general public or available for use by residents and serving *Accessible units*, *Type A units* or *Type B units* shall be *accessible*. *Accessible* spaces shall include toilet and bathing rooms, kitchen, living and dining areas and any exterior spaces, including patios, terraces and balconies.

Exceptions:

1. Recreational facilities in accordance with Section 1109.15.
2. In Group I-2 facilities, doors to *sleeping units* shall be exempted from the requirements for maneuvering clearance at the room side provided the door is a minimum of 44 inches (1118 mm) in width.

1107.5.3 Group I-2 hospitals. *Accessible units* and *Type B units* shall be provided in general-purpose hospitals, psychiatric facilities and detoxification facilities of Group I-2 occupancies in accordance with Sections 1107.5.3.1 and 1107.5.3.2.

1107.5.3.1 Accessible units. At least 10 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*.

Exception: Entry doors to Accessible dwelling or sleeping units shall not be required to provide the maneuvering clearance beyond the latch side of the door.

Reason: The intent of the proposal is for coordination with the 2010 ADA Standard of Accessible Design for hospital doors. The 2010 ADA includes the following.

404.2.4 Maneuvering Clearances. Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

EXCEPTION: Entry doors to hospital patient rooms shall not be required to provide the clearance beyond the latch side of the door.

The current IBC text is written for all Group I-2 while the ADA requirements have exceptions for hospitals. The exception for the maneuvering clearances do not match ADA. By relocating the requirement as an exception specifically for the rooms which are required to be Accessible (Section 1107.5.3.1), it is clear that the entrances to the Accessible patient sleeping rooms are the rooms that can use the exception, as well making it clear that the intent is to allow these rooms to not meet the unit entry requirements in ICC A117.1 Section 1002.5.

Patients in hospitals are typically moved around the hospitals on stretchers or gurney's and if not, they are accompanied by staff when being moved in wheelchairs. The ADA recognized this difference in hospitals and included an exception. At this time, the ICC A117.1 does not include an exception specific to hospital room doors.

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.

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.

Cost Impact: None

E179-12

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

E186-12/13
1107.5.1.1, 1107.6.4.1

Proponent: Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

1107.5.1 Group I-1. *Accessible units* and *Type B units* shall be provided in Group I-1 occupancies in accordance with Sections 1107.5.1.1 and 1107.5.1.2.

1107.5.1.1 Accessible units. In Group I-1, other than assisted living facilities, at least 4 percent, but not less than one, of the *dwelling units* and *sleeping unit*s shall be *Accessible units*. In Group I-1 assisted living facilities, at least 10 percent, but not less than one, of the *dwelling units* and *sleeping unit*s shall be *Accessible units*.

1107.5.1.2 Type B units. In structures with four or more *dwelling units* or *sleeping unit*s *intended to be occupied as a residence*, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.
Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

1107.6.4 Group R-4. *Accessible units* and *Type B units* shall be provided in Group R-4 occupancies in accordance with Sections 1107.6.4.1 and 1107.6.4.2.

1107.6.4.1 Accessible units. In Group R-4, other than assisted living facilities, at least one of the *dwelling* or *sleeping unit*s shall be an *Accessible unit*. In Group R-4 assisted living facilities, at least two of the *dwelling* or *sleeping unit*s shall be an *Accessible unit*.

1107.6.4.2 Type B units. In structures with four or more *dwelling units* or *sleeping unit*s *intended to be occupied as a residence*, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

> **Exception:** The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

Reason: 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.

The intent of this code change is to establish a minimum number of Accessible units required in Assisted Living Facilities for Group I-1 and R-4. The 10% Accessible units is based on anticipated need in these types of facilities.

The curre nt ADA requirements address residential facilities and long term care facilities, typically hospitals and nursing homes. The text does not directly address what the International Codes refer to as Assisted Living or Group I-1 facilities. The current text requires the following: 100% Accessible units in Group I-2 rehabilitation facilities; 50% Accessible units in Group I-2 nursing homes; 4% Accessible units in all Group I-1 and 2% Type A units in Group R-2 apartment buildings. The 2009 IBC had 10% Accessible units for residential board and care facilities, but the deletion of that term in the 2012 IBC resulted in the loss of that requirement. This addition will establish a minimum level for Group I-1 assisted living facilities while leaving other Group I-1 facilities to remain at 4%. Facilities can always choose to exceed this limit depending on the needs of their clientele and the desire of the facility to have optimum flexibility. Since these facilities are custodial care, and not nursing care, 10% Accessible units should meet demand.

The committee feels that if the building code addresses the minimum accessibility needs for these types of facilities, then the federal government may not feel that they need to establish additional accessibility requirements.

Cost Impact: Increase

E186-12

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

FG3 – 12
303.3.1 (New); IMC: 901.5 (New), 901.6 (New)

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

THIS IS A 2 PART CODE CHANGE. BOTH PARTS WILL BE HEARD BY THE IFGC COMMITTEE AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THIS COMMITTEE.

PART I – IFGC

Add new text as follows:

303.3.1 Fireplaces and decorative appliances in Group I-2 occupancies. In addition to the requirements of Section 303.3, fuel gas-fired fireplaces and decorative appliances in Group I-2 occupancies shall not be located in sleeping rooms, storage closets, surgical rooms, toilet rooms and bathrooms located in the patient sleeping or dwelling units. Fuel gas-fired fireplaces and decorative appliances are permitted in other areas that open into such rooms or spaces only where the installation complies with all of the following:

1. Combustion air is taken directly from the outdoors,
2. Flue gases are discharged directly to the outdoors.
3. Appliance combustion chambers are separated from the environmental air on the interior of the building.
4. Appliances shall automatically shut down and stop fuel flow upon any of the following events:
   - 4.1 when temperatures exceed the appliance listing,
   - 4.2 when there is failure to ignite
   - 4.3 upon activation of the fire alarm system
5. Appliance controls are located in an approved restricted or locked location.
6. A carbon monoxide detector with a local alarm shall be provided and installed in accordance with Section 908.7 of the IBC.

PART II – IMC

Add new text as follows:

901.5 Fuel gas-fired Fireplaces and appliances in Group I-2. Fuel gas-fired fireplaces and decorative appliances located within smoke compartments containing patient sleeping rooms and surgical rooms in Group I-2 occupancies shall be installed in accordance with Section 303.3.1 of the IFGC.

901.6 Solid fuel-burning fire places and appliances in Group I-2. Solid fuel-burning fireplaces and appliances shall not be located in Group I-2 occupancies.

> **Exception:** Solid fuel-burning fireplaces and appliances shall not be prohibited in Group I-2 nursing homes provided that they are not located in smoke compartments that contain patient sleeping rooms.

Reason: 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 .

The AHC is proposing a revision to address some of the oversights in the I-Codes of long-standing and operational requirements for hospitals and healthcare facilities that has not been specifically addressed. The requirements being proposed in this code change have been long-standing provisions of the construction and operational requirements for healthcare facilities.

Justification: The language proposed in the IFGC prescribes the limitations and conditions to provide the necessary safety and limitations of hazards found within the healthcare environments to the fire and ignition sources inherent to all fireplaces and gas-fired appliances. Combustion air is restricted from being drawn from a healthcare environment for more than the last decade. It is standard practice and operational procedure to control the ignition sources in these occupancies that can contain combustible, flammable (and sometimes even explosive) material. Fire risks need to be limited to the maximum extent feasible and specific requirements for these facilities are not currently or completely addressed in the I-Codes. The physical separation of the combustion chambers of fireplaces and gas-fired equipment is required to separate and provide a barrier between the ignition sources and the environmental air within healthcare occupancies. All combustion air is required to be taken directly from the exterior of the building with one exception that is already provided for in IFGC Section 303.3.

The solid fuel burning fireplaces and appliances (decorative or heating) present open flames that cannot otherwise be controlled or extinguished like similar gas-fired appliances. The attention to and the tending of the open flames from solid fuel burning appliances require the opening any surrounding compartment while the flames and ignition sources are present; thereby, exposing the I-2 environment (within the patient smoke compartment) to the ignition sources. When gas-fired appliances are utilized, the ability to completely control the fuel source and all open flames and ignition sources is possible and does not require exposure to or tending of solid fuel burning materials . The AHC committee is recommending the restriction of solid-fuel burning fireplaces and appliances in the I-2 occupancy.

Future submissions to proposals to the IFC are being drafted to clarify, restrict and limit the ignition source hazards in healthcare occupancies that will reference these requirements being proposed in the IBC, IMC AND IFGC. The code sections that address the installation of fuel gas-fire fireplaces and appliances will also provide alternative means for compliance for existing facilities. Given the hazards present with these appliances in the I-2 Occupancies, the proposed IFC requirements will be 'retro-active' requirements for healthcare occupancies (I-2); please note, these are not new requirements for the I-2 Occupancy facilities but are needed in the I-Codes for coordination of the long-standing provision of the construction and operational requirements for healthcare facilities.

Cost Impact: No increase to the cost of construction for these facilities is associated with these code changes. This change is consistent with existing federal certification requirements.

FG3-12

PART I – INTERNATIONAL FUEL GAS CODE

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

PART II – INTERNATIONAL MECHANICAL CODE

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

FS68 – 12
713.14.1

Proponent: Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

713.14.1 Elevator lobby. An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by fire partitions. In addition to the requirements in Section 708 for fire partitions, doors protecting openings in the elevator lobby enclosure walls shall also comply with Section 716.5.3 as required for corridor walls and penetrations of the elevator lobby enclosure by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

Exceptions:

1. Enclosed elevator lobbies are not required at the level(s) of exit discharge, provided the level(s) of exit discharge is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 712.1 are not required to have enclosed elevator lobbies.
3. Enclosed elevator lobbies are not required where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall comply with the smoke and draft control door assembly requirements in Section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal.
4. Enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. This exception shall not apply to the following:
   4.1 <u>Group I-1, Condition 2 occupancies;</u>
   <u>4.2</u> Group I-2 occupancies;
   <u>4.3</u> ~~4.2~~ Group I-3 occupancies; and
   <u>4.4</u> ~~4.3~~ Elevators serving floor levels over 75 feet above the lowest level of fire department vehicle access in high-rise buildings.
5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. In addition to the requirements in Section 710 for smoke partitions, doors protecting openings in the smoke partitions shall also comply with Sections 710.5.2.2, 710.5.2.3, and 716.5.9 and duct penetrations of the smoke partitions shall be protected as required for corridors in accordance with Section 717.5.4.1.
6. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 909.21.
7. Enclosed elevator lobbies are not required where the elevator serves only open parking garages in accordance with Section 406.5.

Reason: The CTC Care facilities committee is aware of proposals from the CTC Elevator study group and the Adhoc Healthcare committee that will affect elevator lobby requirements. Currently elevator lobbies are required in Group I-2 and I-3 where smoke compartments are part of the emergency evacuation plan. The CTC Care facilities study group has asked for smoke compartments in Group I-1, Condition 2 as part of a plan to allow for staged evacuation for persons who may require limited assistance in evacuation. If the decision of the membership is that elevator lobby protection is needed in smoke compartment, they should also be required in Group I-1, Condition 2.

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.

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

FS68-12

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

713.14.1-FS-BALDASSARRA-CTC

G1 – 12
202

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

Revise as follows:

24-HOUR ~~CARE~~ BASIS. The actual time that a person is an occupant within a facility for the purpose of receiving care. It shall not include a facility that is open for 24 hours and is capable of providing care to someone visiting the facility during any segment of the 24 hours**.**

Reason: This code change is intended to clarify the code. In the last code cycle a change was made attempting to clarify the phrase "24 hour basis". This term is used when determining the appropriate occupancy classification for facilities that provide custodial, medical or supervised care, including Group I-1, I-2 and R-4 (IBC 308.3, 308.4, 310.6). The committee accepted the clarification that in this context 24 hour care was intended to refer to the actual time that a patient is receiving care. Unfortunately, the code change used a phrase that was descriptive of the concept not the actual phrase used in the code. This code change corrects the term to the one used in code.

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 .

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.

Cost Impact: The proposed changes with not increase the cost of construction.

G1-12

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

G3 – 12
202

THIS PROPOSAL IS ON THE AGENDA OF THE IBC STRUCTURAL CODE DEVELOPMENT COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THE IBC STRUCTURAL CODE DEVELOPMENT COMMITTEE.

Proponent: Jason Thompson (jthompson@ncma.org), National Concrete Masonry Association, Phil Samblanet (psamblanet@masonrysociety.org), The Masonry Society, representing Masonry Alliance for Codes and Standards

Revise definitions in Chapter 2 as follows:

~~**BOND BEAM.** A horizontal grouted element within *masonry* in which reinforcement is embedded.~~

~~**CLEANOUT.** An opening to the bottom of a grout space of sufficient size and spacing to allow the removal of debris.~~

MASONRY. A built-up construction or combination of building units or materials of clay, shale, concrete, glass, gypsum, stone or other *approved* units bonded together with or without *mortar* or grout or other accepted methods of joining.

~~**Ashlar masonry.** Masonry composed of various-sized rectangular units having sawed, dressed or squared bed surfaces, properly bonded and laid in *mortar*.~~

~~**Coursed ashlar.** Ashlar masonry laid in courses of stone of equal height for each course, although different courses shall be permitted to be of varying height.~~

Glass unit masonry. Masonry composed of glass units bonded by *mortar*.

Plain masonry. Masonry in which the tensile resistance of the masonry is taken into consideration and the effects of stresses in reinforcement are neglected.

~~**Random ashlar.** Ashlar masonry laid in courses of stone set without continuous *joints* and laid up without drawn patterns. When composed of material cut into modular heights, discontinuous but aligned horizontal *joints* are discernible.~~

Reinforced masonry. Masonry construction in which reinforcement acting in conjunction with the masonry is used to resist forces.

Solid masonry. Masonry consisting of solid masonry units laid contiguously with the *joints* between the units filled with *mortar*.

Unreinforced (plain) masonry. Masonry in which the tensile resistance of masonry is taken into consideration and the resistance of the reinforcing steel, if present, is neglected.

RUBBLE MASONRY. *Masonry* composed of roughly shaped stones.

~~**Coursed rubble.** Masonry composed of roughly shaped stones fitting approximately on level beds and well bonded.~~

~~**Random rubble.** Masonry composed of roughly shaped stones laid without regularity of coursing but well bonded and fitted together to form well-divided *joints*.~~

~~**Rough or ordinary rubble.** Masonry composed of unsquared field stones~~

~~SHEAR WALL~~ ~~(For Chapter 21)~~

~~**Detailed plain masonry shear wall.** A masonry shear wall designed to resist lateral forces neglecting stresses in reinforcement, and designed in accordance with Section 2106.1.~~

~~**Intermediate prestressed masonry shear wall.** A prestressed masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.~~

~~**Intermediate reinforced masonry shear wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.~~

~~**Ordinary plain masonry shear wall.** A masonry shear wall designed to resist lateral forces neglecting stresses in reinforcement, and designed in accordance with Section 2106.1.~~

~~**Ordinary plain prestressed masonry shear wall.** A prestressed masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.~~

~~**Ordinary reinforced masonry shear wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.~~

~~**Special prestressed masonry shear wall.** A prestressed masonry shear wall designed to resist lateral forces considering stresses in reinforcement and designed in accordance with Section 2106.1 except that only grouted, laterally restrained tendons are used.~~

~~**Special reinforced masonry shear wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.~~

~~**STACK BOND.** The placement of *masonry units* in a bond pattern is such that head *joints* in successive courses are vertically aligned. For the purpose of this code, requirements for stack bond shall apply to *masonry* laid in other than *running bond*.~~

STONE MASONRY. *Masonry* composed of field, quarried or *cast stone* units bonded by *mortar*.

~~**Ashlar stone masonry.** Stone masonry composed of rectangular units having sawed, dressed or squared bed surfaces and bonded by *mortar*.~~

~~**Rubble stone masonry.** Stone masonry composed of irregular-shaped units bonded by *mortar*.~~

WALL. A vertical element with a horizontal length-to-thickness ratio greater than three, used to enclose space.

Cavity wall. A wall built of *masonry units* or of concrete, or a combination of these materials, arranged to provide an airspace within the wall, and in which the inner and outer parts of the wall are tied together with metal ties.

~~**Composite wall.** A wall built of a combination of two or more *masonry units* bonded together, one forming the backup and the other forming the facing elements.~~

Dry-stacked, surface-bonded wall. A wall built of concrete *masonry units* where the units are stacked dry, without *mortar* on the bed or *head joints*, and where both sides of the wall are coated with a surface-bonding *mortar*.

~~**Masonry-bonded hollow wall.** A multi-*wythe* wall built of *masonry units* arranged to provide an air space between the *wythes* and with the *wythes* bonded together with *masonry units.*~~

Parapet wall. The part of any wall entirely above the roof line.

Reason: This change proposal deletes masonry-specific terms that are no longer used within Chapter 21 or elsewhere within the IBC.

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

G3-12

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

G31 – 12

PART I – INTERNATIONAL BUILDING CODE
202, 308.3, 308.3.1, 308.3.2, 308.4.1, 310.6, 310.6.1 (NEW), 310.6.2 (NEW), 420, 420.1, 420.4 (NEW), 420.4.1 (NEW), 504.2, 709.5, 1018.1; (IFC [B] 202, 1018.1)
PART II – INTERNATIONAL FIRE CODE
IFC 903.2.6, 903.2.8.1, 903.2.8.2, 903.2.8.3 (NEW), 903.2.8.3.1 (NEW), 903.2.8.3.2 (NEW), 903.3.1.3, 907.2.6.1; (IBC [F] 420.5, 903.2.6, 903.2.8.1, 903.2.8.2, 903.2.8.3 (NEW), 903.2.8.3.1 (NEW), 903.2.8.3.2 (NEW), 903.3.1.3, 907.2.6.1)

Proponent: Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee

THIS IS A 2 PART CODE CHANGES. BOTH PARTS WILL BE HEARD BY HEARD BY THE IBC GENERAL CODE COMMITTEE AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDER FOR THE IBC GENERAL COMMITTEE.

PART I – INTERNATIONAL BUILDING CODE

Revise as follows:

SECTION 202
DEFINITIONS

24-HOUR ~~CARE~~ BASIS. The actual time that a person is an occupant within a facility for the purpose of receiving care. It shall not include a facility that is open for 24 hours and is capable of providing care to someone visiting the facility during any segment of the 24 hours**.**

CUSTODIAL CARE. Assistance with day-to-day living tasks; such as assistance with cooking, taking medication, bathing, using toilet facilities and other tasks of daily living. Custodial care ~~include~~ includes occupants ~~who~~ that have the ability to respond to emergency situations and evacuate at a slower rate and/or who have mental and psychiatric complications.

GROUP HOME. A facility for social rehabilitation, substance abuse or mental health problems that contains a group housing arrangement that provides *custodial care* but does not provide ~~acute~~ medical care.

SECTION 308
INSTITUTIONAL GROUP I

308.3 Institutional Group I-1. This occupancy shall include buildings, structures or portions thereof for more than 16 persons, excluding staff, who reside on a 24 hour basis in a supervised environment and receive *custodial care*. ~~The persons receiving care are capable of self preservation.~~ Buildings of Group I-1 shall be classified as one of the occupancy conditions indicated in Sections 308.3.1 or 308.3.2. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Convalescent facilities
Group homes
Halfway houses
Residential board and ~~*custodial*~~ *care* facilities
Social rehabilitation facilities

308.3.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation.

308.3.2 Condition 2. This occupancy condition shall include buildings in which there are any persons receiving custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

~~**308.3.2**~~ **308.3.3 Six to sixteen persons receiving custodial care.** A facility ~~such as above,~~ housing not fewer than six and not more than 16 persons receiving ~~such~~ custodial care, shall be classified as Group R-4.

~~**308.3.1**~~ **308.3.4 Five or fewer persons receiving custodial care.** A facility ~~such as the above~~ with five or fewer persons receiving ~~such~~ custodial care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.

308.4 Institutional Group I-2. This occupancy shall include buildings and structures used for *medical care* on a 24-hour basis for more than five persons who are *incapable of selfpreservation*. This group shall include, but not be limited to, the following:

Foster care facilities
Detoxification facilities
Hospitals
Nursing homes
Psychiatric hospitals

308.4.1 Five or fewer persons receiving medical care. A facility ~~such as the above~~ with five or fewer persons receiving ~~such~~ medical care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.

SECTION 310
RESIDENTIAL GROUP R

310.6 Residential Group R-4. This occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive *custodial care*. ~~The persons receiving care are capable of self-preservation.~~ Buildings of Group R-4 shall be classified as one of the occupancy conditions indicated in Sections 310.6.1 or 310.6.2 This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Convalescent facilities
Group homes
Halfway houses
Residential board and ~~custodial~~ care facilities
Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

310.6.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care, who without any assistance, are capable of responding to an emergency situation to complete building evacuation.

310.6.2 Condition 2. This occupancy condition shall include buildings in which there are any persons receiving custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

SECTION 420
GROUPS I-1, R-1, R-2, R-3, R-4

420.1 General. Occupancies in Groups I-1, R-1, R-2 ~~and~~ , R-3 and R-4 shall comply with the provisions of Sections 420.1 through ~~420.5~~ 420.6 and other applicable provisions of this code.

420.4 Smoke barriers in Group I-1 Condition 2. Smoke barriers shall be provided in Group I-1 Condition 2 to subdivide every story used by persons receiving care, treatment or sleeping and to provide other stories with an occupant load of 50 or more persons, into no fewer than two smoke compartments. Such stories shall be divided into smoke compartments with an area of not more than 22,500 square feet (2092 m^2) and the travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60 960 mm). The smoke barrier shall be in accordance with Section 709.

420.4.1 Refuge area. Refuge areas shall be provided within each smoke compartment. The size of the refuge area shall accommodate the occupants and care recipients from the adjoining smoke compartment. Where a smoke compartment is adjoined by two or more smoke compartments, the minimum area of the refuge area shall accommodate the largest occupant load of the adjoining compartments. The size of the refuge area shall provide the following:

1. Not less than 15 net square feet (1.4 m^2) for each care recipient.
2. Not less than 6 net square feet (0.56 m^2) for other occupants.

Areas or spaces permitted to be included in the calculation of the refuge area are corridors, lounge or dining areas and other low hazard areas.

[F] 420.4 420.5 Automatic sprinkler system. *(No change)*

[F] 420.5 420.6 Smoke detection and fire alarm system. *(see Part II)*

SECTION 504
BUILDING HEIGHT

504.2 Automatic sprinkler system increase. Where a building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, the value specified in Table 503 for maximum *building height* is increased by 20 feet (6096 mm) and the maximum number of *stories* is increased by one. These increases are permitted in addition to the *building area* increase in accordance with Sections 506.2 and 506.3. For Group R buildings equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.2, the value specified in Table 503 for maximum *building height* is increased by 20 feet (6096 mm) and the maximum number of *stories* is increased by one, but shall not exceed 60 feet (18 288 mm) or four *stories*, respectively.

Exception: The use of an *automatic sprinkler system* to increase *building heights* shall not be permitted for the following conditions:

1. Buildings, or portions of buildings, classified as ~~a~~ Group I-1 Condition 2, of Type IIB, III, IV or V construction or Group I-2 ~~occupancy~~ occupancies of Type IIB, III, IV or V construction.
2. Buildings, or portions of buildings, classified as a Group H-1, H-2, H-3 or H-5 occupancy.
3. Buildings where an *automatic sprinkler system* is substituted for fire-resistance rated construction in accordance with Table 601, Note d.

SECTION 709
SMOKE BARRIERS

709.5 Openings. Openings in a *smoke barrier* shall be protected in accordance with Section 716.

Exceptions:

1. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, where doors are installed across *corridors*, a pair of opposite- swinging doors without a center mullion shall be installed having vision panels with fire-protection- rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested. The doors shall be close fitting within operational tolerances, and shall not have undercuts in excess of 3/4-inch, louvers or grilles. The doors shall have head and jamb stops, astragals or rabbets at meeting edges and shall be automatic-closing by smoke detection in accordance with Section 716.5.9.3. Where permitted by the door manufacturer's listing, positive-latching devices are not required.
2. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, horizontal sliding doors installed in accordance with Section 1008.1.4.3 and protected in accordance with Section 716.

SECTION 1018 (IFC [B] 1018)
CORRIDORS

1018.1 (IFC [B] 1018.1) Construction. *Corridors* shall be fire-resistance rated in accordance with Table 1018.1. The *corridor* walls required to be fire-resistance rated shall comply with Section 708 for *fire partitions*.

Exceptions:

1. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has at least one door opening directly to the exterior and rooms for assembly purposes have at least one-half of the required *means of egress* doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
2. A *fire-resistance rating* is not required for *corridors* contained within a dwelling or sleeping unit in an occupancy in Group I-1 and Group R.
3. A *fire-resistance rating* is not required for *corridors* in *open parking garages*.
4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B which is a space requiring only a single *means of egress* complying with Section 1015.1.
5. *Corridors* adjacent to the *exterior walls* of buildings shall be permitted to have unprotected openings on unrated *exterior walls* where unrated walls are permitted by Table 602 and unprotected openings are permitted by Table 705.8.

PART II – INTERNATIONAL FIRE CODE

Revise as follows:

IBC [F] ~~420.5~~ 420.6 ~~Smoke detection and~~ fire alarm systems and smoke alarms. Fire alarm systems and smoke alarms shall be provided in Group I-1, R-1, ~~and~~ R-2 and Group R-4 occupancies in accordance with Sections 907.2.6, 907.2.8, ~~and~~ 907.2.9 and 907.2.10, respectively. Single-or multiple-station smoke alarms shall be provided in Groups I-1, R-2, R-3 and R-4 in accordance with Section 907.2.11.

SECTION 903 (IBC [F] 903)
AUTOMATIC SPRINKLER SYSTEMS

903.2.6 (IBC [F] 903.2.6) Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 Condition 1 facilities.
2. ~~An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be allowed in Group I-1 facilities when in compliance with all of the following:~~
~~2.1. A hydraulic design information sign is located on the system riser~~
~~2.2. Exception 1 of Section 903.4 is not applied, and~~
~~2.3. Systems shall be maintained in accordance with the requirements of Section 903.3.1.2.~~
2 ~~3~~. An automatic sprinkler system is not required where Group I-4 day care facilities are at the level of exit discharge and where every room where care is provided has at least one exterior exit door.
3 ~~4~~. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with 903.3.1.1 shall be installed on the entire floor where care is provided and all floors between the level of care and the level of exit discharge, all floors below the level of exit discharge, other than areas classified as an open parking garage.

903.2.8 (IBC [F] 903.2.8) Group R. An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

903.2.8.1 (IBC [F] 903.2.8.1) Group R-3 ~~or R-4 congregate residence~~. An automatic sprinkler system installed in accordance with 903.3.1.3 shall be permitted in Group R-3. ~~or R-4 congregate residence with 16 or fewer residents.~~

903.2.8.2 (IBC [F] 903.2.8.2) Group R-4 Condition 1. An automatic sprinkler system installed in accordance with 903.3.1.3 shall be permitted in Group R-4 Condition 1.

903.2.8.3 (IBC [F] 903.2.8.3) Group R-4 Condition 2. An automatic sprinkler system installed in accordance with 903.3.1.2 shall be permitted in Group R-4 Condition 2. Attics shall be protected in accordance with Sections 903.2.8.3.1 or 903.2.8.3.2.

903.2.8.3.1 (IBC [F] 903.2.8.3.1) Attics used for living purposes, storage or fuel fired equipment. Attics used for living purposes, storage or fuel fired equipment shall be protected throughout with automatic sprinkler system installed in accordance with 903.3.1.2.

903.2.8.3.2 (IBC [F] 903.2.8.3.2) Attics not used for living purposes, storage or fuel fired equipment . Attics not used for living purposes, storage or fuel fired equipment shall be protected in accordance with one of the following:

1. Attics protected throughout by a heat detector system arranged to activate the building fire alarm system in accordance with Section 907.2.10.
2. Attics constructed of non-combustible materials.
3. Attics constructed of fire-retardant-treated wood framing complying with Section 2303.2.
4. The automatic fire sprinkler system shall be extended to provide protection throughout the attic space.

~~903.2.8.2~~ 903.2.8.4 (IBC [F] ~~903.2.8.2~~ 903.2.8.4) Care facilities. An automatic sprinkler system installed in accordance with 903.3.1.3 shall be permitted in care facilities with 5 or fewer individuals in a single family dwelling.

903.3.1.3 (IBC [F] 903.3.1.3) NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one and two-family dwellings, Group R-3, ~~and~~ R-4 ~~congregate residences~~ Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D.

SECTION 907 (IBC [F] 907)
FIRE ALARM AND DETECTION SYSTEMS

907.2.6.1 (IBC [F] 907.2.6.1) Group I-1. In Group I-1 occupancies, an automatic smoke detection system shall be installed in corridors, waiting areas open to corridors and habitable spaces other than sleeping units and kitchens. The system shall be activated in accordance with Section 907.5.

Exceptions:

1. For Group I-1 Condition 1 smoke ~~Smoke~~ detection in habitable spaces is not required where the facility is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Smoke detection is not required for exterior balconies.

Reason: 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.

GENERAL PURPOSE

The current IBC requires all occupants receiving Custodial Care to be able to evacuate on their own without any assistance from others. Most state Custodial Care (assisted living/ residential care/ group homes) licensing agencies allow occupants who require limited assistance with evacuation.[1] The lack of consistency between what the states allow and the IBC Custodial Care provisions causes inconsistent application of the IBC.[2] This proposal resolves that conflict and will result in better consistency. The proposal integrates allowing both residents who require limited assistance with evacuation and those that do not in Custodial Care occupancies. It accomplishes this while maintaining current residential occupancy safeguards along with adding appropriate Group I-2 safeguards, for those requiring assistance with evacuation.

The proposed Group I-1 and R-4 custodial care revisions accomplish the following:

- It provides "condition classifications" for both Groups I-1 and R-4. It makes Condition 1 for the buildings, as currently allowed, with residents capable of responding on their own during emergencies. It adds a Condition 2 for buildings residents who may require some assistance with evacuation.
- The added "condition" classification is already utilized in Group I-3 and is also proposed to be included in Group I-2, under a separate proposal by the ICC Ad Hoc Committee on Healthcare.
- It adds to the new Group I-1 Condition 2, four more stringent requirements due to the new resident type allowed, in addition to the existing current Group I-1 Condition 1 requirements: story limitations, smoke barriers, increased sprinkler protection, and additional smoke detection.
- It adds to the new Group R-4 Condition 2, due to the new resident type allowed, two more stringent requirements in addition to the capable Group R-4 Condition 1 requirements: story limitations, and additional attic detection or protection, considering the smaller facilities.
- It clarifies in the revised Custodial Care definition and in Group I-1 and R-4 Condition 2 occupancies that they are not Group I-2, which provides Medical Care. Group I-1 Custodial Care has persons with some physical or mental limitations, who may require limited assistance in emergency evacuation, but who are still capable enough to participate in complete building evacuation during emergencies. This limit of the level of care or resident type in Group I-1 and R-4 does not include Group I-2 higher acuity occupants who require full nursing care or Medical Care as defined. Those receiving Medical Care in Group I-2 may be bedridden during emergencies, may be on life support systems, or may be semiconscious or unconscious, all in which evacuation concepts allows for defend in place strategies.
- It leaves the other current IBC base I-1/ R-4 requirements, and the capable Group I-1 and R-4 Condition 1 requirements unchanged from the current code, except for minor clerical revisions.
- The substantiation for both the IBC and correlating IFC changes relating to this Group I-1/R4 proposal are integrated below in IBC section order, to provide a comprehensive correlation of both sets of changes for both codes.

GENERAL REASONS AND SUBSTANTIATION

The new Group I-1 Condition 2 requirements add appropriate Group I-2 protection features. It also maintains more restrictive Group I-1 residential protection features than current Group I-2 requirements. Other differences between Group I-1 and Group I-2 are also maintained. The numerous differences between Group I-1/ R-4 Custodial Care and Group I-2 Medical Care occupancies in relation to resident types, care levels, and functional facility design concepts relating to protection noted below, substantiate why it is appropriate to regulate them differently in separate occupancy groups.

- **Group I-1 Condition 2 & Group I-2 similarity:** Group I-1 Condition 2 adds NFPA 13 full sprinkler coverage system requirements, like Group I-2 Medical Care.
- **Group I-1 Condition 2 & Group I-2 similarity & <u>difference:</u>** Group I-1 Condition 2 adds smoke barriers like Group I-2 medical care occupancies. Smoke barriers provide temporary protection for custodial care residents that require assistance from others in an emergency. These Group I-1 facilities still eventually complete building evacuation and residents still participate in fire drills as in the current IFC, versus the "defend in place" and non fire drill participation in Group I-2 Medical Care facilities. The proponent is also proposing minor Group I-1 Condition 2 changes in the IFC, still requiring fire drill participation, and full evacuation, while utilizing smoke compartments to allow for staged building evacuation.
- **Group I-1 Condition 2 & Group I-2 <u>differences:</u>** Group I-1 Condition 2 still has appropriate corridor protections, dwelling and sleeping unit separation, smoke detection, and unit smoke alarms, which Group I-2 Medical Care does not require. This is due to small apartments generally occurring in Custodial Care that may have some domestic cooking appliances, while Group I-2 Medical Care has sleeping rooms where cooking is prohibited in the rooms. It is also due to resident to staff ratios that are generally less in Custodial Care than Group I-2 Medical Care during night time.
- **Group I-1/R-4 Condition 2 & Group I-2 <u>difference:</u>** Group I-1 and R-4 Condition 2 occupancies through state licensing agencies, do not allow residents that must remain in bed during emergency evacuation, so Group I-2 increased means of egress width requirements in Chapter 10 for bed movement are not applied.
- **Group I-1/R-4 Condition 2 & Group I-2 <u>differences:</u>** Other differences between traditional Group I-2 occupancies and new Group I-1 and R-4 Condition 2 occupancies are maintained due to differences between the types of care provided (Medical Care versus Custodial Care), and other characteristics of the two occupancy groups. One example is that Medical Care may have semiconscious or unconscious persons who are totally dependent on others for their safety during emergencies. Custodial Care has persons who are conscious but may not be as functional or responsive to emergencies as compared to the general population. These persons still have sufficient functional ability to participate in evacuation with or without assistance. This aspect of the revised Group I-1 is also consistent with all state assisted living regulations.

These Custodial Care occupancies are also often controlled by individual state licensing agency requirements, which can vary greatly between different states by use, name, and occupant capabilities[2]. This proposal concept clarifies that irrelevant of state licensing regulations, the determining factors for IBC occupancy classification and related safeguards are based on three aspects characterizing the care occupancies:

- **The type of IBC defined care that is provided (Medical or Custodial).** The care level limits Group I-1 to provide Custodial Care and does not allow the higher resident acuity levels allowed in nursing facilities or hospitals (Medical Care).
- **The type of evacuation process and evacuation capability that is allowed in Custodial Care versus Medical Care.** It limits Custodial Care to residents that may require limited assistance in evacuation but who are capable of actively participating in complete building evacuation versus the defend in place concept for Medical Care
- **That they receive care on a 24 hour basis as defined.**

Finally, these concepts proposed herein are already being applied by a majority of the state licensing agencies for custodial care uses, especially in the largest use assisted living/ residential care. State licensing agencies also do control their types of licensed care. All states have nursing licensure and create a line in the sand differentiating nursing licensure from their custodial care licensures. The IBC specifically lists the two uses (nursing and custodial care uses) in separate occupancies, so these proposed changes will not allow for nursing to be in the new Group I-1 Condition 2 occupancy.

<u>ITEMIZED IBC/ IFC SECTION SUBSTANTAITION/ REASONS</u>

The relating substantiation for both the IBC and IFC proposed code changes includes all of the substantiation, in IBC section order, to provide a comprehensive correlation of both sets of changes for both codes.

Section 202 - 24 Hour Basis. The term "24 Hour Basis" revises the old "24 Hour Care" term to reflect the actual term words used throughout the code.

Section 202 - Group Home. The Group Home definition is revised to reflect current defined term of "medical care."

Section 202 - Custodial Care. The revision to the custodial care definition clarifies the difference between custodial care and medical care. Medical care allows for defend in place as is proposed by the ICC Ad Hoc Committee on Healthcare. The revised text clarifies that custodial care includes persons that can still respond to emergencies at a slower rate than the general population for complete building evacuation, due to mental, psychiatric or physical complications.

Section 308.3 Group I-1 is revised to allow persons who can respond to an emergency situation with or without assistance from others. Assisted living is the largest use group of the custodial care uses with over 32,000 facilities. Currently nearly all state licensing agencies allow a majority of their assisted living classifications to have residents that may require limited assistance from others during emergency evacuation. There are also numerous other uses in Group I-1 that have all persons that can evacuation on their own with assistance from others. The "Condition" concept is utilized from the Group I-3 detention occupancy to differentiate Group I-1 occupancies between needing assistance and not needing assistance in evacuation. The "condition" classification is also proposed to be included in Group I-2, under a separate proposal by the ICC Ad Hoc Committee on Healthcare.

The revised section implements language from the existing correlating section in Group I-3, stating that a building shall also be classified with one of the conditions. This clarifies that Group I-1 buildings shall classified on their building permit application and occupancy permit with either a "Group I-1 Condition 1" or "Group I-1 Condition 2" occupancy classification. Most assisted living facilities should be classified as Group I-1 Condition 2 unless the permit application drawings quote licensing regulations limiting the resident type to Condition 1.

The proposed custodial care Condition 2 occupancies include those who may need limited assistance in evacuation. The key aspect of the wording is to differentiate Group I-1 from Group I-2. Group I-1 is limited to custodial care and Group I-2 is for medical care. The intent of using the words "limited verbal or physical assistance" in Group I-1/R-4 Condition 2 is to clarify the difference of capability levels of emergency evacuation between custodial and medical care. Group I-1 Custodial care is limited to those persons

needing limited assistance in evacuation but who can still participate in emergency evacuation response and who can still evacuate with or without assistance. Custodial care evacuation assistance is limited versus medical care which includes those who cannot get out of bed during emergencies, or someone completely incapable of helping themselves by being unconscious or semiconscious, or on life support systems.

Many assisted living, residential care, and some group home facilities have some residents that may fall under the following limited assistance with evacuation condition as paraphrased from the NFPA 101A Guide on Alternative Approaches to Life Safety. This guide has been utilized by many states licensing agencies, starting since the early 1990's, to determine the relative emergency evacuation capability of residents of custodial care types of residents, with or without assistance from others. It is used here to show the relative nuances of evacuation assistance that will be included in custodial care in the IBC. The concepts are similar as proposed herein, that the occupants still actively participate in fire drills and are trained to complete building evacuation during emergencies, with or without assistance from others:

- A person who has mild to more resistance or confusion to respond to an alarm, or needing someone to help them with instructions as found with persons with dementia or persons with Alzheimer's.
- A person needing extra intermediate or continuous help during their emergency evacuation.
- A person who has some physical impairment needing physical assistance to help them evacuate.
- A person who needs some assistance getting out of bed or is considered not self starting, but can continue with or without assistance in building evacuation.
- A person with seconds or even a few minutes of impaired consciousness intermittently a few times over a few months due to medications or illness.
- A person requiring minor or constant supervision or attention to help them receive, comprehend, and follow through instructions during emergencies.
- A person who is on medications, or even exceptionally sound sleepers, making them have some chance of not having a waking response to an alarm.
- All persons still have the capability level to participate in emergency evacuation with or without assistance from others.

308.4 Group I-2 is revised with the clerical change clarifying that Group I-2 provides medical care as defined.

Section 310.6 Group R-4 is revised like the Group I-1 to allow persons who can respond to an emergency situation with or without assistance from others for the same reasons cited in the Section 308.3 Group I-1 Reason section.

Section 420.1 Group R-4 is added to the scoping language clarifying that Group R-4 shall conform to Section 420 requirements. The 2012 IBC did not list R-4 in this section even though it was implied that it also had to comply with section 420, because Group R-4 also had to comply with Group R-3 requirements.

Section 420.4 Smoke barriers are added as a requirement in the Group I-1 Condition 2. Smoke barriers are added due to new proposed resident type allowed and to create similar requirements as Group I-2. Compartmentalization is a key aspect of occupancies with occupants who may need assistance with evacuation. There are also state licensing regulations in a majority of states requiring smoke barriers in their assisted living facilities. The smoke barrier sections utilize and match technical requirements, language and format from the current I-2 Section 407 for smoke barriers. The smoke compartment area matches the current area limit.

Section 420.4.1 Matches the format and requirements of the smoke barrier requirements from Section 407. The 15 square feet refuge area is smaller than the Group I-2 refuge area requirements due to no bedridden residents being allowed in custodial care uses by all state regulatory agencies. The 15 square feet matches over the one third of states that have similar state assisted living refuge areas in their licensing life safety regulations compared to this custodial care proposal.

The "sleeping rooms" are also removed as a refuge area space as compared to Group I-2. This is appropriate because custodial care often includes apartments or sleeping rooms that have domestic cooking facilities with the associated room and corridor smoke and fire separation requirements included in Group I-1 and R. This is also another difference between custodial care and medical care.

(IFC) Section 420.5 and 420.6 The current Section "420.4 Automatic sprinkler system" is moved to Section 420.5 as a clerical change due to the new proposed added sections prior. The current Section "420.5 Smoke detection and fire alrm system" is moved to section 420.6 as a clerical change due to the new proposed added sections prior. There are proposed clerical changes to the new section 420.6 that add all of the actual occupancies cross-referenced in the sections referenced in the section.

Section 504.2 requires that the new Group I-1 and R-4 Condition 2 not be allowed to use sprinklers for story increases in Type IIB, III, IV, or V construction, matching the current exception for Group I-2. The limitation is proposed due to the new resident type. It is also because about 30 states licensing agencies already limit their custodial care facilities with residents needing assistance with evacuation to less than the four stories that are currently allowed in Group I-1 in the combustible construction types.

This proposal also essentially matches Oregon's State building code, based on the IBC but with amendments in Groups I-1 and R-4. Oregon's state building code has utilized the specific concepts proposed here in this proposal since 1991. It has the longest history of implementing hybrid Group I and R occupancy requirements by allowing residents needing assistance with evacuation in custodial care, with NFPA 13 sprinklers, smoke barriers, 3 story wood frame limits along with Group R corridor and apartment separation and protections. Oregon has had no multiple fire death fires in over 100 buildings using these concepts and requirements, and all fires were contained.

Section 709.5 includes adding cross corridor doors in the new required smoke barriers in Group I-1 Condition 2, matching the same exceptions allowed for I-2. Adding compartmentalization is a key provision in dealing with occupants that move as individuals or as a group at slower pace, with or without assistance, than the general population during emergency evacuation.

(IFC) Section 903.2.6 requires full NFPA 13 sprinkler coverage in the Group I-1 Condition 2 facility fire areas. The NFPA 13 requirement is added due to the new proposed resident type allowed. Full sprinkler coverage provided by a NFPA 13 system is a key aspect of larger occupancies with residents needing some assistance with evacuation. Currently over half the states licensing agencies already require NFPA 13 sprinklers in their large assisted living facilities with residents needing assistance with evacuation. The exception is revised to allow NFPA 13R in other Group I-1 Condition 1 facilities, maintaining the current exception

for the current capable Group I-1 uses.

The exception number 2 is deleted since a NFPA 13D system for single family residential or other small facilities was never intended to be allowed in and Group I-1 facility serving more than 16 residents, irrelevant of whether they require assistance with evacuation.

(IFC) Section 903.2.8.1 is revised to separate the Group R-3 and Group R-4 provisions.

(IFC) Section 903.2.8.2 is added as a clerical revision maintaining the current requirement of sprinklers in accordance with Section 903.3.1.3 in capable Group R-4 which is the new Group R-4 Condition 1.

(IFC) Section 903.2.8.3 is revised to allow for the new R-4 Condition 2 occupancy. The R-4 Condition 2 occupancy would have both an NFPA13R sprinkler system required as well as added attic protection. In attics not used for living purposes, storage or fuel fired equipment, there are four options offered. Either the smoke detection system will provide early warning of an attic fire, or the chance of a fire in the attic is reduced by construction or sprinklers. Automatic sprinklers in the unheated attic space would have a freezing issue in group homes in northern climates, so additional options are necessary.

(IFC) Section 903.3.1.3 Automatic sprinkler system requirement is revised to reflect the proposed changes to the Group R-4 occupancy.

(IFC) Section 907.2.6.1 is revised to eliminate the smoke detection exception only in buildings housing Group I-1 Condition 2 occupancies. This proposal still allows the exception to be applied to other buildings with Group I-1 Condition 1 as defined by fire walls or exterior walls.

Section 1018.1 Corridor Construction is revised to allow halls within dwelling units in Group I-1 be non-rated just like R occupancies as a missed oversight from previous editions of the code.

Footnotes

1. The substantiation of residents needing some assistance with evacuation occurring in assisted living and other custodial care uses was cited in the original G21 proposal for IBC changes during the 2009/10 code change cycle. It substantiated findings from a national analysis on assisted living performed for the State of Hawaii in 2007 titled "Assisted Living Analysis of All State Regulations Relative to Building Codes and Life Safety Codes." It showed that virtually all states allow residents needing limited assistance with evacuation in at least one of their categories of assisted living/ residential care facilities and that about two-thirds of all categories allow this occupant type. The analysis confirmed that assisted living/ residential care facilities receive custodial care (older IBC term personal care) and not medical care, and also confirmed the division of size of facilities in Groups I-1 and R-4, so it is appropriately categorized in the IBC relative to care type and sizes. It substantiated that assisted living/ residential care is the largest and fastest growing use in Groups I-1 and R-4. The analysis also confirmed other various aspects of a custodial care program, uses, and protection features differentiating it from medical (health) care. It presented findings and conclusions that a combination of both Group I and R protection features for custodial care with residents needing some assistance with evacuation as is proposed here, is the consistent to what the largest number of various state licensing agencies have implemented in regulating life safety protection for this use by individual states. It showed that the concepts proposed herein are also consistent or similar to what at least three states have already incorporated into their statewide amendments for the IBC (California, Oregon, and Washington.)
2. Industry representatives confirmed in information provided to the CTC that custodial care and especially assisted living/ residential care IBC occupancy classification varies greatly across the country. Industry substantiated that it is mostly due to the IBC stating that only occupants who can evacuate on their own occur in IBC custodial care occupancies versus what actually occurs nationally. This conflict then causes some custodial care to be classified as a hybrid of Group I-1 and I-2 in states amending the IBC, some classified as Group I-2, some classified as general I-1 or I-2 hybrids in states enforcing other varying standards (NFPA 101), some individual projects applying alternative means creating a hybrid occupancy, and some miss-applying the capability standard. The industry representatives were associated with the American Health Care Association, Assisted Living Federation of America, and Leading Age as the three industry trade associations representing almost all assisted living/ residential care in the country.

Cost Impact: The proposed changes will not increase the cost of construction. Reduction

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PART I – INTERNATIONAL BUILDING CODE

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

PART II – INTERNATIONAL FIRE CODE

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

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PART I – INTERNATIONAL BUILDING CODE

202, 308.1, 308.4, 308.7 (NEW), 404.5, 425 (NEW),Table 503, 504.2, Table 509, 710.8, 712.1.8, 713.14.1, 717.5.5, Table 1016.2, Table 1018.1, Table 1018.2, 1018.4, 1107.5.3.1, 3304.8 (NEW), 3311.3 (NEW); (IFC [B] 202, Table 1016.2, Table 1018.1, Table 1018.2, 1018.4)

PART II – INTERNATIONAL FIRE CODE

IFC 903.2.6, 903.3.2, 907.2.6, 907.2.6.2, 907.2.6.4 (NEW), 909.4.6; (IBC [F] 425.5, 425.6, 425.7, 903.2.6, 903.3.2, 907.2.6, 907.2.6.2, 907.2.6.4 (NEW), 909.4.6)

Proponent: Jeff Bresette, FP&C Consultants, Inc.

THIS IS A 2 PART CODE CHANGES. BOTH PARTS WILL BE HEARD BY HEARD BY THE IBC GENERAL CODE COMMITTEE AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDER FOR THE IBC GENERAL COMMITTEE.

Revise as follows:

SECTION 202
DEFINITIONS

CARE SUITE. In Group I-5 occupancies, a group of treatment rooms, care recipient sleeping rooms and the support rooms or spaces and circulation space within the suite where staff are in attendance for supervision of all care recipients within the suite, and the suite is in conformance with the requirements of Section 425.4.2.

CARE SUITE. Within Group I-2 occupancies, a group of treatment rooms, care recipient sleeping rooms and their associated support rooms or spaces and circulation space ~~within Group I-2 occupancies~~ where staff are in attendance for supervision of all care recipients within the suite, and the suite is in compliance with the requirements of Section 407.4.3.

DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

Revise as follows:

308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which care or supervision is provided to persons who are or are not capable of self-preservation without physical assistance or in which persons are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3, ~~or~~ I-4 or I-5.

308.4 Institutional Group I-2. This occupancy shall include buildings and structures used for ~~*medical care*~~ *custodial care* on a 24-hour basis for more than five persons who are *incapable of self-preservation*. This group shall include, but not be limited to, the following:

Foster care facilities
Detoxification facilities
~~*Hospitals*~~
Nursing homes
~~*Psychiatric hospitals*~~

308.7 Group I-5, Hospitals. This occupancy shall include buildings and structures used for *medical care*, on a 24-hour basis for more than five persons who are *incapable of self-preservation*. This group shall include, but not be limited to, the following:

Hospitals and psychiatric hospitals.

Revise as follows:

404.5 Smoke control. A smoke control system shall be installed in accordance with Section 909.

Exception: In other than Groups I-2 and I-5, smoke control is not required for *atriums* that connect only two *stories.*

SECTION 425
GROUP I-5 HOSPITALS AND PSYCHIATRIC HOSPITALS

425.1 General. Occupancies in Group I-5 shall comply with the provisions of Sections 425.1 through 425.9 and other applicable provisions of this code.

425.2 Corridors. *Corridors* in occupancies in Group I-5 shall be continuous to the *exits* and separated from other areas in accordance with Section 424.3 except spaces conforming to Sections 425.2.1 through 425.2.3.

425.2.1 Areas open to corridor unlimited area shall be permitted to be open to a *corridor*, provided there is no treatment, patient sleeping or hazardous areas open to the *corridor* and are constructed as required for *corridors* and where all of the following criteria are met:

1. The open space is protected by an automatic fire detection system installed in accordance with Section 907.
2. The *corridors* onto which the spaces open, in the same smoke compartment, are protected by an automatic fire detection system installed in accordance with Section 907, or the smoke compartment in which the spaces are located is equipped throughout with quick-response sprinklers in accordance with Section 903.3.2.
3. The space is arranged so as not to obstruct the *exit access* to the required *exits*.

425.2.2 Care providers' stations. Spaces for care providers', supervisory staff, doctors' and nurses' charting, communications and related clerical areas shall be permitted to be open to the *corridor*, when such spaces are constructed as required for *corridors*.

425.2.3 Gift shops. Gift shops and associated storage less than 500 square feet (46.5 m^2) in area shall be permitted to be open to the *corridor* provided the gift shop and storage areas are fully sprinklered and storage areas are protected in accordance with Section 509.4.

425.3 Corridor walls. *Corridor* walls shall be constructed as smoke partitions in accordance with Section 711.

425.3.1 Corridor doors. *Corridor* doors, other than those in a wall required to be rated by Section 509.4 or for the enclosure of a vertical opening or an *exit*, shall not have a required *fire protection rating* and shall not be required to be equipped with self-closing or automatic-closing devices, but shall provide an effective barrier to limit the transfer of smoke and shall be equipped with positive latching. Roller latches are not permitted. Other doors shall conform to Section 716.5.

425.3.2 Locking devices. Locking devices that restrict access to the patient room from the *corridor*, and that are operable only by staff from the *corridor* side, shall not restrict the *means of egress* from the patient room except for patient rooms in mental health facilities.

425.4 Means of egress. Group I-5 occupancies shall be provided with a means of egress complying with Chapter 10 and Sections 407.4.1 through 407.4.3.6.2 and this section. The fire safety and evacuation plans provided in accordance with Section 1001.4 shall identify the building components necessary to support a *defend in place* emergency response in accordance with Sections 404 and 408 and the International Fire Code.

425.4.1 Travel distance. The travel distance between any point in a Group I-5 occupancy sleeping room, not located in a *care suite*, and an *exit access* door in that room shall be not greater than 50 feet (15 240 mm).

425.4.2 Group I-5 care suites. *Care suites* in Group I-5 shall comply with Section 425.4.2.1 through 425.4.2.2 and either Section 425.4.2.3 or 425.4.2.4.

425.4.2.1 Exit access through care suites. *Exit access* from all other portions of a building not classified as a *care suite* shall not pass through a *care suite*. In a *care suite* required to have more than one *exit*, one *exit access* is permitted to pass through an adjacent *care suite* provided all of the other requirements of Sections 425.4 and 1014.2 are satisfied.

425.4.2.2 Separation. *Care suites* shall be separated from other portions of the building by a smoke partition complying with Section 710.

425.4.2.3 Access to Corridor. Movement from habitable rooms shall not require passage through no more than 3 doors and 100 feet (30 480 mm) travel distance within the suite.

> **Exception:** The travel distance shall be permitted to be increased to 125 feet (38 100 mm) where an automatic smoke detection system is provided throughout the *care suite* and installed in accordance with NFPA 72.

425.4.2.4 Care suites containing sleeping room areas. Sleeping rooms shall be permitted to be grouped into *care suites* if one of the following conditions is met:

1. The *care suite* is not used as an *exit access* for more than eight care recipient beds.
2. The arrangement of the *care suite* allows for direct and constant visual supervision into the sleeping rooms by care providers.
3. An automatic smoke detection system is provided in the sleeping rooms and installed in accordance with NFPA 72.

425.4.2.4.1 Area. *Care suites* containing sleeping rooms shall be not greater than 7,500 square feet (696 m^2) in area.

> **Exception:** *Care suites* containing sleeping rooms shall be permitted to be not greater than 10,000 sq feet (929 m^2) in area where an automatic smoke detection system is provided throughout the *care suite* and installed in accordance with NFPA 72.

425.4.2.4.2 Exit access. Any sleeping room, or any *care suite* that contains sleeping rooms, of more than 1,000 square feet (93 m^2) shall have no fewer than two *exit access* doors from the care suite located in accordance with Section 1015.2.

425.4.2.5 Care suites not containing sleeping rooms. Areas not containing sleeping rooms, but only treatment areas and the associated rooms, spaces or circulation space shall be permitted to be grouped into *care suites* and shall conform to the limitations in Section 425.4.2.5.1 and 425.4.2.5.2.

425.4.2.5.1 Area. *Care suites* of rooms, other than sleeping rooms, shall have an area not greater than 10,000 square feet (929 m^2).

425.4.2.5.2 Exit access. *Care suites*, other than sleeping rooms, with an area of more than 2,500 square feet (232 m^2) shall have no fewer than two *exit access* doors from the *care suite* located in accordance with Section 1015.2.

425.4 Smoke barriers. *Smoke barriers* shall be provided to subdivide every *story* used by persons receiving care, treatment or sleeping and to divide other *stories* with an *occupant load* of 50 or more persons, into no fewer than two *smoke compartments*. Such *stories* shall be divided into *smoke compartments* with an area of not more than 22,500 square feet (2,092 m^2) in Group I-2 occupancies and not more than 40,000 square feet in Group I-5 hospitals and the travel distance from any point in a *smoke compartment* to a *smoke barrier* door shall be not greater than 200 feet (60,960 mm). The *smoke barrier* shall be in accordance with Section 709.

> **Exception:** Atriums provided with smoke control complying with Section 404 are not limited in area for a smoke compartment.

425.4.1 Refuge area. Refuge areas shall be provided within each *smoke* compartment. The size of the refuge area shall accommodate the occupants and care recipients from the adjoining *smoke compartments*. Where a *smoke compartment* is adjoined by two or more *smoke compartments* the minimum area of the refuge area shall accommodate the largest *occupant load* of the adjoining compartments. The size of the refuge area shall provide the following:

1. Not less than 30 net square feet (2.8 m^2) for each care recipient confined to bed or gurney.
2. Not less than 6 square feet (0.6 m^2) for each ambulatory care recipient not confined to bed or gurney and for other occupants.

425.4.2 Independent egress. A *means of egress* shall be provided from each smoke compartment created by *smoke barriers* without having to return through the smoke compartment from which *means of egress* originated.

425.4.3 Horizontal assemblies. *Horizontal assemblies* supporting *smoke barriers* required by this section shall be designed to resist the movement of smoke and shall comply with Section 711.9.

(For Sections 425.5 through 425.7 see Part II)

425.8 Hyperbaric facilities. Hyperbaric facilities in Group I-5 occupancies shall meet the requirements contained in Chapter 20 of NFPA 99.

425.9 Additions. Additions shall be separated from any existing structure, which is not conforming to the provisions for new construction, by fire walls per Table 706.4 or fire barriers per Table 707.3.10 with not less than 2-hour fire resistance construction.

425.10 Elevator Lobbies. Elevator lobbies required by Sections 711.9 and 713.14.1 shall comply with all of the following:

1. Be a minimum of 120 square feet (11.1 m^2) in area.
2. Constructed as required for *smoke partitions* in accordance with Section 710.

Revise as follows:

TABLE 503
ALLOWABLE BUILDING HEIGHTS AND AREAS[a, b]
Building height limitations shown in feet above grade plane. Story limitations shown as stories above grade plane.
Building area limitations shown in square feet, as determined by the definition of "Area, building," per story

		TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
GROUP	HEIGHT (feet)	A	B	A	B	A	B	HT	A	B
	STORIES (S) AREA (A)									
I-5	S A	UL UL	4 UL	2 15,000	1 11,000	1 12,000	NP NP	1 12,000	1 9,500	NP NP

(Portions of table not shown remain unchanged)

504.2 Automatic sprinkler system increase. Where a building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, the value specified in Table 503 for maximum *building height* is increased by 20 feet (6096 mm) and the maximum number of *stories* is increased by one. These increases are permitted in addition to the *building area* increase in accordance with Sections 506.2 and 506.3. For Group R buildings equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.2, the value specified in Table 503 for maximum *building height* is increased by 20 feet (6096 mm) and the maximum number of *stories* is increased by one, but shall not exceed 60 feet (18 288 mm) or four *stories*, respectively.

Exception: The use of an *automatic sprinkler system* to increase *building heights* shall not be permitted for the following conditions:

1. Buildings, or portions of buildings, classified as a Group I-2 and I-5 ~~occupancy~~ occupancies of Type IIB, III, IV or V construction.
2. Buildings, or portions of buildings, classified as a Group H-1, H-2, H-3 or H-5 occupancy.
3. Buildings where an *automatic sprinkler system* is substituted for fire-resistance rated construction in accordance with Table 601, Note d.

TABLE 509
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, ~~located in Group E or I-2 occupancy~~	1 hour or provide automatic sprinkler system
In Group I-2 and I-5 occupancies, laboratories not classified as a Group H	1 hour and provide automatic sprinkler system
In ambulatory care facilities, laboratories not classified as a Group H	1 hour or provide automatic sprinkler system
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system

ROOM OR AREA	SEPARATION AND/OR PROTECTION
In Group I-2 and I-5 occupancies, laundry rooms over 100 square feet	1 hour
Group I-3 cells and Group I-2 and I-5 patient rooms equipped with padded surfaces	1 hour
In Group I-2 and I-5**,** physical plant maintenance shops.	1 hour
In Group I-2 and I-5 or ambulatory care facilities, 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 and I-5, Waste and linen collection rooms over 100 square feet	1 hour or provide automatic sprinkler system
In Group I-2 and I-5 or ambulatory care facilities, 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 uninterruptable power supplies	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I, and R occupancies

Revise as follows:

710.8 Ducts and air transfer openings. The space around a duct penetrating a smoke partition shall be filled with an *approved* material to limit the free passage of smoke. Air transfer openings in smoke partitions shall be provided with a *smoke damper* complying with Section 717.3.2.2.

Exceptions:

1. Where the installation of a *smoke damper* will interfere with the operation of a required smoke control system in accordance with Section 909, *approved* alternative protection shall be utilized.
2. Smoke dampers shall not be required in duct penetrations of smoke partitions in fully ducted heating, ventilating and air-conditioning systems and the mechanical system will shut down upon detection of smoke and in buildings provided with an *automatic sprinkler system* complying with Sections 903.3.1.1 and 903.3.2.

712.1.8 Two-story openings. In other than Groups ~~I-2 and~~ I-3, a floor opening that is not used as one of the applications listed in this section shall be permitted if it complies with all of the items below.

1. Does not connect more than two stories.
2. Does not contain a stairway or ramp required by Chapter 10.
3. Does not penetrate a horizontal assembly that separates fire areas or smoke barriers that separate smoke compartments.
4. Is not concealed within the construction of a wall or a floor/ceiling assembly. 5. Is not open to a corridor in Group I and R occupancies.
6. Is not open to a corridor on nonsprinklered floors.
7. Is separated from floor openings and air transfer openings serving other floors by construction conforming to required shaft enclosures.

713.14.1 Elevator lobby. An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three *stories*. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by *fire partitions*. In addition to the requirements in Section 708 for *fire partitions*, doors protecting openings in the elevator lobby enclosure walls shall also comply with Section

716.5.3 as required for *corridor* walls and penetrations of the elevator lobby enclosure by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 717.5.4.1. Elevator lobbies shall have at least one *means of egress* complying with Chapter 10 and other provisions within this code. Elevator lobbies within Group I-5 occupancies shall comply with Section 425.10

Exceptions:

1. through 7. *(Exceptions not shown remain unchanged)*

717.5.5 Smoke barriers. A *listed smoke damper* designed to resist the passage of smoke shall be provided at each point a duct or air transfer opening penetrates a *smoke barrier*. *Smoke dampers* and *smoke damper* actuation methods shall comply with Section 717.3.3.2.

Exceptions:

1. *Smoke dampers* are not required where the openings in ducts are limited to a single *smoke compartment* and the ducts are constructed of steel.
2. Smoke dampers shall not be required in Ambulatory Care Facilities and Groups I-2 and I-5 occupancies where the HVAC is fully ducted in accordance with Section 603 of the International Mechanical Code and where buildings are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and equipped with quick response sprinklers in accordance with Section 903.3.2.

Revise as follows:

TABLE 1016.2 (IFC [B] 1016.2)
EXIT ACCESS TRAVEL DISTANCE[a]

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)
A, E, F-1, M, R, S-1	200	250[b]
I-1	Not Permitted	250[c]
B	200	300[c]
F-2, S-2, U	300	400[c]
H-1	Not Permitted	75[c]
H-2	Not Permitted	100[c]
H-3	Not Permitted	150[c]
H-4	Not Permitted	175[c]
H-5	Not Permitted	200[c]
I-2, I-3, I-4, I-5	Not Permitted	200[c]

For SI: 1 foot = 304.8 mm.

a. See the following sections for modifications to *exit access* travel distance requirements:
Section 402.8: For the distance limitation in *malls*.
Section 404.9: For the distance limitation through an *atrium* space.
Section 407.4: For the distance limitation in Group I-2.
Sections 408.6.1 and 408.8.1: For the distance limitations in Group I-3.
Section 411.4: For the distance limitation in special amusement buildings.
Section 425.3: For the distance limitation in Group I-5.
Section 1015.4: For the distance limitation in refrigeration machinery rooms.
Section 1015.5: For the distance limitation in refrigerated rooms and spaces.
Section 1021.2: For buildings with one *exit*.
Section 1028.7: For increased limitation in assembly seating.
Section 1028.7: For increased limitation for assembly open-air seating.
Section 3103.4: For temporary structures.
Section 3104.9: For pedestrian walkways.

b. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where *automatic sprinkler systems* are permitted in accordance with Section 903.3.1.2.

c. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

TABLE 1018.1 (IFC [B] TABLE 1018.1)
CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system
I-2[a], I-4, I-5	All	Not permitted	0

(Portions of Table not shown remain unchanged)

TABLE 1018.2 (IFC [B] TABLE 1018.2)
MINIMUM CORRIDOR WIDTH

Occupancy	Width (minimum)
Any facilities not listed below	44 inches
Access to and utilization of mechanical, plumbing or electrical systems or equipment	24 inches
With a required occupancy capacity less than 50	36 inches
Within a dwelling unit	36 inches
In Group E with a *corridor* having a required capacity of 100 or more	72 inches
In *corridors* and areas serving gurney traffic in occupancies where patients receive outpatient medical care, which causes the patient to be incapable of *self-preservation*	72 inches
Group I-2 and I-5 in areas where required for bed movement	96 inches

For SI: 1 inch = 25.4 mm.

1018.4 (IFC [B] 1018.4) Dead ends. Where more than one *exit* or *exit access doorway* is required, the *exit access* shall be arranged such that there are no dead ends in *corridors* more than 20 feet (6096 mm) in length.

Exceptions:

1. In occupancies in Group I-3 of Occupancy Condition 2, 3 or 4 (see Section 308.5), the dead end in a *corridor* shall not exceed 50 feet (15 240 mm).
2. In occupancies in Groups B, E, F, I-1, M, R-1, R-2, R-4, S and U, where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, the length of the dead-end *corridors* shall not exceed 50 feet (15 240 mm).
3. A dead-end *corridor* shall not be limited in length where the length of the dead-end *corridor* is less than 2.5 times the least width of the dead-end *corridor*.
4. In occupancies in Group I-5 occupancies where the building is equipped throughout with an *automatic sprinkler system* in accordance with Sections 903.3.1.1 and 903.3.2 the length of the dead-end corridor shall not exceed 30 feet (9 144 mm).

Revise as follows:

1107.5.3 Group I-2 hospitals. *Accessible units* and *Type B units* shall be provided in general-purpose hospitals, psychiatric facilities and detoxification facilities of Group I-2 and Group I-5 occupancies in accordance with Sections 1107.5.3.1 and 1107.5.3.2.

1107.5.3.1 Accessible units. At least 10 percent, but not less than one, of the *dwelling units* and *sleeping units* shall be *Accessible units*.

Exception: Entry doors to Accessible dwelling or sleeping units shall not be required to provide the maneuvering clearance beyond the latch side of the door.

Revise as follows:

3304.8 Group I-5. For buildings employing a *defend in place* method in Group I-5 occupancies, an on-site fire watch shall be provided in accordance with the Section 901.7 of the *International Fire Code*.

3311.3 Group I-5. Temporary construction within corridors serving bed or stretcher movement in Group I-5 occupancies shall not reduce the corridor width to less than 60 inches.

PART II – INTERNATIONAL FIRE CODE

Add new definition as follows:

IBC [F] 425.5 Automatic sprinkler system. Quick-response or residential sprinklers shall be provided in accordance with Section 903.3.2

IBC [F] 425.6 Fire alarm system. A fire alarm system shall be provided in accordance with Section 907.2.6.

IBC [F] 425.7 Automatic fire detection. Group I-5 occupancies shall be equipped with smoke detection as required in Section 425.2.

Revise as follows:

903.2.6 (IBC [F] 903.2.6) Group I. An *automatic sprinkler system* shall be provided throughout buildings with a Group I *fire area*.

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 facilities.
2. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be allowed in Group I-1 facilities when in compliance with all of the following:
   2.1. A hydraulic design information sign is located on the system riser;
   2.2. Exception 1 of Section 903.4 is not applied; and
   2.3. Systems shall be maintained in accordance with the requirements of Section 903.3.1.2.
3. An *automatic sprinkler system* is not required where day care facilities are at the *level of exit discharge* and where every room where care is provided has at least one exterior exit door.
4. In buildings where Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided and all floors between the level of care and the level of *exit discharge*, all floors below the *level of exit discharge*, other than areas classified as an open parking garage.
5. In Group I-5 occupancies, an *automatic sprinkler system* is not required in closets less than 6 square feet in area.

903.3.2 (IBC [F] 903.3.2) Quick-response and residential sprinklers. Where *automatic sprinkler systems* are required by this code, quick-response or residential automatic sprinklers shall be installed in the following areas in accordance with Section 903.3.1 and their listings:

1. Throughout all spaces within a smoke compartment containing care recipient *sleeping units* in Group I-2 in accordance with this code.
2. Throughout all spaces within a smoke compartment containing treatment rooms in ambulatory care facilities.

3. *Dwelling units* and *sleeping units* in Group I-1 and R occupancies.
4. Light-hazard occupancies as defined in NFPA 13.
5. Group I-5 occupancies.

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 and 907.2.6.4.

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.

907.2.6.2 (IBC [F] 907.2.6.2) Group I-2. An automatic smoke detection system shall be installed in *corridors* in nursing homes, long-term care facilities, detoxification facilities and spaces permitted to be open to the *corridors* by Section 407.2. The system shall be activated in accordance with Section 907.5.

Exceptions:

1. Corridor smoke detection is not required in smoke compartments that contain sleeping units where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each sleeping unit and shall provide an audible and visual alarm at the care provider station attending each unit.
2. Corridor smoke detection is not required in smoke compartments that contain sleeping units where sleeping unit doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

907.2.6.4 (IBC [F] 907.2.6.4) Group I-5. Hospitals shall be equipped with smoke detection as required in Section 425.

909.4.6 (IBC [F] 909.4.6) Duration of operation. All portions of active or passive smoke control systems shall be capable of continued operation after detection of the fire event for a period of not less than either 20 minutes or 1.5 times the calculated egress time, whichever is ~~less~~ greater.

Reason: Hospitals historically are treated differently than other occupancies based on the need to defend in place during an emergency and that exit corridors are a work area in a hospital setting. This code change recognizes that hospitals are to be treated as a separate and distinct occupancy within the confines of the codes. The basic premise for the change is to remove health care hospitals and psychiatric hospitals from the I-2 umbrella and create a new Group I-5 category. Each of the code changes above have been brought forth by the Ad Hoc Committee for Health Care during the course of 2011, with a few exceptions. Although creating different Conditions of use within a Group I-2 occupancy is one approach, it doesn't recognize the need for separating hospitals into their own occupancy category.

Group I-3 occupancies are defined by different Conditions and are meant for restraint with different levels of securing occupants based on their level of movement capacities, from less secure to more secure. Institutional occupancies have not only different levels of supervision but also different levels of care. The current Group I-2 occupancy category has similar care levels for those that are incapable of self-preservation, but there are historical reasons why hospitals have more restrictive and prescriptive requirements than the other classifications within Group I-2, such as detoxification facilities and nursing homes. Switching hospitals to a separate occupancy is the next logical step in the progression of hospital development for the I-codes.

The scoping classification in Section 308.4 has been revised to reflect that those in nursing home, detoxification facilities, and foster care facilities receive custodial care as defined within the Section 202. Section 308.5 has been added for Group I-5 to reflect the need for medical care, also defined in Section 202.

Section 425 has been created specifically for Group I-5 occupancies. There are some code sections that overlap each of the I-2 and I-5 occupancy classifications and those are reflected above as well. The proposals brought forth by the Ad Hoc Committee for Health Care have been researched thoroughly in 2011 and all reasoning statements are well documented. Based on the work of the Ad Hoc Committee for Health Care, all of these code changes are based on the requirements of external agencies enforcing life

safety requirements from the NFPA standards. It is no secret that The Joint Commission has required the use of NFPA 101 for hospitals for decades. For this agency to change from using NFPA 101 to the IBC, drastic changes in the perception of the IBC and ease of its use for hospitals are needed.

Cost Impact: There is no cost impact for these changes as the industry has been using similar guidelines for many years as within the proposed changes through The Joint Commission regulations.

G32-12
PART I – IBC – G

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

PART II – IFC

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

G33 – 12
202, 308.1.1 (NEW), 408.1, 425 (NEW), Chapter 35

Proponent: Dave Frable, U.S General Services Administration, Public Buildings Service, representing U.S. General Services Administration, Public Buildings Service (dave.frable@gsa.gov)

Revise as follows:

SECTION 202
DEFINITIONS

Lock-Up. An area located in an occupancy, other than an I-3 occupancy, where occupants are detained by the use of security measures not under such occupants' control.

Revise as follows:

SECTION 308
INSTITITUIONAL GROUP I

308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which care or supervision is provided to persons who are or are not capable of self-preservation without physical assistance or in which persons are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

308.1.1 Lockups. Lockups located in occupancies, other than Group I-3 occupancies, shall comply with the requirements of the main occupancy of the building in which the lockup is located and with the requirements of Section 425.

Revise as follows:

SECTION 408
GROUP I-3

408.1 General. Occupancies in Group I-3 shall comply with the provisions of Sections 408.1 through 408.11 and other applicable provisions of this code (see Section 308.5). Lockups located in occupancies, other than I-3 occupancies, shall comply with the requirements of Section 425.

SECTION 425
LOCKUPS.

425.1 General. Lockups in occupancies, other than Group I-3 occupancies, where the holding area has capacity for more than 50 detainees or where any individual is detained for more than 24 hours, shall be classified as Group I-3 occupancies and shall comply with the requirements of Section 408. Lockups in occupancies, other than Group I-3 occupancies, where the holding area has capacity for not more than 50 detainees, and where no individual is detained for more than 24 hours, shall comply with Section 425.2 or Section 425.3.

425.2 Lockup Option 1. The lockup shall comply with the requirements for the main occupancy of the building in which the lockup is located, and all of the following criteria:

1. Doors and other physical restraints to free egress by detainees can be readily released by staff within 2 minutes of the onset of a fire or similar emergency.
2. Staff is in sufficient proximity to the lockup so as to be able to cause the 2-minute release required by 425.2(1) whenever detainees occupy the lockup.

3. Staff is authorized to cause the release required by 425.2(1).
4. Staff is trained and practiced in effecting the release required by 425.2(1).
5. Where the release required by 425.2(1) is caused by means of remote release, detainees are not to be restrained from evacuating without the assistance of others.

425.2.1 Fire department notification. The fire department with responsibility for responding to a building that contains a lockup shall be notified of the presence of the lockup.

425.3 Lockup Option 2. Where the lockup does not comply with all the provisions of Section 425.2 the requirements of this Section shall be met.

425.3.1 Main occupancy. The requirements applicable to the main occupancy of the building in which the lockup is located shall be met.

425.3.2 Means of egress. Where security operations necessitate the locking of required means of egress, the following shall apply:

1. Detention-grade hardware meeting the requirements of ASTM F 1577 shall be provided on swinging doors within the required means of egress.
2. Sliding doors within the required means of egress shall be designed and engineered for detention and correctional use, and lock cylinders shall meet the cylinder test requirements of ASTM F 1577.

425.3.3 Smoke detection. The lockup shall be provided with a smoke detection system in accordance with Section 907.4.3.

425.3.4 Fire alarm system. Where the requirements applicable to the main occupancy of the building do not mandate a fire alarm system, the lockup shall be provided with a fire alarm system meeting all of the following criteria:

1. The fire alarm system shall be installed in accordance with Section 907.6.
2. Initiation of the fire alarm system shall be accomplished by all of the following:
   2.1. Manual fire alarm boxes in accordance with Section 907.4.2
   2.2. Smoke detection system in accordance with Section 425.3.3
   2.3. Automatic sprinkler system required by the provisions applicable to the main occupancy of the building.
3. Staff and occupant notification shall be provided automatically in accordance with Section 907.5.
4. Emergency force notification shall be provided in accordance with Section 907.6.5.

425.3.5 Fire department notification. The fire department with responsibility for responding to a building that contains a lockup shall be notified of the presence of the lockup.

Add new definition to Chapter 35 as follows:

ASTM – F 1577-05 Standard Test Methods for Detention Locks for Swinging Doors

Reason: The intent of this code change proposal is to address the subject matter of 'lockups". A lockup is basically a holding area in which persons are detained with some degree of security imposed on them that are commonly located in different types of occupancies. For example, lockups are typically located in immigration and naturalization facilities at border crossings, customs facilities at international airports, prisoner holding facilities at courthouses, local police department holding areas, security offices at sports stadia, security offices at shopping mall complexes, etc. Currently, the requirements within the IBC require "lockups" to meet the rigorous defend in place requirements applicable for Group I-3 occupancies. This code change proposal provides requirements specifically for lockups located in other than Group I-3 occupancies and provide a reasonable set of safe guards applicable to the main occupancy of the building in which the lockup is located. The subject provisions for lockups are meant to apply to holding areas of limited capacity in which no individual is detained for 24 or more hours.

New Section 425.1 establishes that if the holding area has the capacity for more than 50 detainees, it is classified as Group I-3 occupancy. Similarly, new Section 425.2 requires that, if an individual is detained for 24 or more hours, the holding area must be classified as Group I-3 occupancy.

Lockups subject to the provisions in Sections 425.3 are offered two options of compliance. Option #1 in Section 425.2 requires a system of safeguards, so that doors and physical restraints to free egress by detainees can be readily released by trained staff with the authority to cause such release, within 2 minutes of the onset of a fire or similar emergency. Option #1 will apply to holding areas that either (1) are staffed at all times when detainees are present or (2) have staff in close proximity and the detection and notification technology needed to summon such trained staff immediately upon the onset of an emergency. Option #2 provides alternate provisions for when all the criteria of the 2-minute release option in compliance Option #1 cannot be satisfied. This alternate set of provisions relies heavily on the presence of complete smoke detection within the lockup and its use to summon trained staff and emergency forces via the fire alarm system, which is required even if otherwise exempted for the main occupancy of the building. In addition, if the Code provisions applicable to the main occupancy of the building require sprinkler protection, the water flow in the sprinkler system must initiate the required alarm system. This option also imposes requirements for detention-grade doors hardware to address any reliability concerns by referencing ASTM F 1577-05, Standard Test Methods for Detention Locks for Swinging Doors. The subject standard's test methods will help ensure that detention locks perform at acceptable levels to control passage to unauthorized or secure areas, to confine detainees, and to delay escape attempts.

Please note that the subject code change proposal is based on the requirements for lockups in the National Fire Protection Association, Life Safety Code (2012 edition).

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

Analysis: A review of the standard proposed for inclusion in the code, ASTM F 1577-05 with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2012.

G33-12

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

G34 – 12
308.3, 310.6

Proponent: Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee

Revise as follows:

308.3 Institutional Group I-1. This occupancy shall include buildings, structures or portions thereof for more than 16 persons who reside on a 24 hour basis in a supervised environment and receive *custodial care*. The persons receiving care are capable of self preservation. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
~~Convalescent facilities~~
Group homes
Halfway houses
Residential board and *custodial care* facilities
Social rehabilitation facilities

310.6 Residential Group R-4. This occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive *custodial care*. The persons receiving care are capable of self-preservation. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
~~Convalescent facilities~~
Group homes
Halfway houses
Residential board and *custodial care* facilities
Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

Reason: This term is outdated and should be deleted from Group I-1. The term 'convalescent home' is being currently being incorrectly used in IMC Table 403.3 as a Group I-2 facility. There is a correlative proposal to delete the term from IMC Table 403.3.

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.

Cost Impact: The proposed changes will not increase the cost of construction.

G34-12

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

G35 – 12
202, 308.3, 308.4 (IFC [B] 202)

Proponent: Jerry Rosendahl, President, National Association of State Fire Marshals (jerry.rosendahl@state.mn.us)

Revise as follows:

308.3 Institutional Group I-1. This occupancy shall include buildings, structures or portions thereof for more than 16 persons who reside on a 24 hour basis in a supervised environment and receive *custodial care*. The persons receiving care are capable of self preservation. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities <u>with residents capable of self preservation</u>
Congregate care facilities
Convalescent facilities
Group homes
Halfway houses
Residential board and *custodial care* facilities
Social rehabilitation facilities

308.4 Institutional Group I-2. This occupancy shall include buildings and structures used for *medical care* on a 24-hour basis for more than five persons who are *incapable of self preservation*. This group shall include, but not be limited to, the following:

Foster care facilities
Detoxification facilities
Hospitals
Nursing homes
Psychiatric hospitals
<u>Assisted living facilities</u> <u>with residents incapable of self preservation</u>

Revise as follows:

<u>ASSISTED LIVING FACILITIES</u><u>. Custodial care congregate residential settings that provide or coordinate personal and health care services, 24-hour supervision, and assistance (scheduled and unscheduled) for the *health care maintenance* of adults who are aged, infirm or disabled and who are cared for in a primarily residential setting.</u>

<u>HEALTH CARE MAINTENANCE.</u> <u>The protection, general supervision and oversight of the physical and mental well-being of an aged, infirm or disabled individual. Residents may or may not need assistance to evacuate.</u>

CUSTODIAL CARE. Assistance with day-to-day living tasks; such as assistance with cooking, taking medication, bathing, using toilet facilities and other tasks of daily living. Custodial care include<u>s</u> occupants who evacuate at a slower rate and/or who have mental and psychiatric complications<u>.</u> ~~,~~ an<u>d may be incapable of self preservation.</u>

Reason: The current code language limits I-2 to only medical care facilities, which in itself would be in conflict with foster child care facilities. There are many facilities housing residents incapable of self-preservation that are not medical facilities by state definitions. This represents a huge gap in the code. With I-2 as a classification for only those facilities providing medical care and I-1 for only those capable of self-preservation, the IBC has no classification for a facility in which residents are under the care, supervision, protection or under the responsible care of the facility operator, and who are not capable of self-preservation. We do not object to what the CTC committee is attempting to do, but the CTC should recognize that the code certainly should be clear about the protection required for all individuals who are under the care of others and develop provisions that will protect all individuals. In

order to make the proper distinction and close the code's gap, the definition of "assisted living facilities" is offered. The phrase "health care maintenance" appears only in the definition of "assisted living facilities".

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

G35-12

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

G36 – 12
308.3.1, 308.4.1, 310.5.1(IFC [B] 202)

THIS PROPOSAL IS ON THE AGENDA OF THE IBC GENERAL CODE DEVELOPMENT COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THE IBC GENERAL CODE DEVELOPMENT COMMITTEE.

Proponent: Betsy Lease, representing Brown County Partnership

Revise as follows:

SECTION 308
INSTITUTIONAL GROUP I

308.3.1 Five or fewer persons receiving care. A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the *International Residential Code*. ~~provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.~~

308.4.1 Five or fewer persons receiving care. A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the *International Residential Code*. ~~provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.~~

SECTION 310
RESIDENTIAL GROUP R

310.5.1 Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the *International Residential Code*. ~~provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.~~

Reason: The purpose of this proposal is to let the IRC determine if a sprinkler system is required in what it typically a single family home. The sprinkler system should not be 'hidden' within the IBC for homes constructed under the IRC. It is discriminatory to require only these homes to have sprinkler systems if the state has decided to not require sprinklers under IRC.

I am Chairman of a community-wide accessibility committee that works with and supports organizations that helps people with disabilities, often with limited mobility live in home in their community. These individuals may be temporarily physically disabled, or permanently disabled, or even in hospice. We advocate for them get custodial care and medical care on a regular basis – anywhere from a visit per day to a live-in helper. When it is a long term situation, we assist people to make modifications to their home to accommodate the care needs, or the client may choose to build a new home with what is commonly called a 'mother-in-law's suite' or nursery. Some of the officials I have talked to say this requirement is only for where home care is a business, but the text is not written that way. Therefore, this could be applicable to any home where one person needs custodial care or medical care. Was the intent was to apply this to foster care, or if someone I am taking care of in my home is not related? It is discriminatory under Fair Housing Act to define 'family' by blood or marriage. In addition, I am not aware of a state that licenses facilities with 5 or fewer residents.

Cost Impact: The proposed changes will not increase the cost of construction.

G36-12

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

G37 – 12
202, 308.5, 308.5.6 (NEW) (IFC [B] 202)

Proponent: Charles S. Bajnai, Chesterfield County, VA., ICC Building Code Action Committee

Revise as follows:

308.5 Institutional Group I-3. This occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally *incapable of selfpreservation* due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

Correctional centers
Detention centers
Jails
Lockup facility
Prerelease centers
Prisons
Reformatories

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.5.1 through 308.5.5 (see Section 408.1).

308.5.6 Lockup facilities. A *lockup facility* for five or less persons shall be classified as a Group B occupancy or as part of the primary occupancy provided they comply with the following provisions**:**

1. The area containing a lockup facility shall be separated from other rooms, spaces or areas by approved smoke barrier complying with Section 709.
2. The area containing a lockup facility shall be protected with an automatic fire sprinkler system complying with Section 903.
3. The area containing a lockup facility shall be provided with an automatic smoke detection system installed in accordance with Section 907.

Ad new definition as follows:

SECTION 202
DEFINITIONS

LOCKUP FACILITY. Buildings containing holding cells, rooms or areas where occupants are restrained or detained.

Reason: This proposal is submitted by the ICC Building Code Action Committee (BCAC) The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 3 open meetings and over 15 workgroup calls which included members of the BCAC as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Part 1 of this code proposal is the revision of Section 308.5 and the addition of Section 308.5.6. The revision removes more than five persons, and adds buildings and structures containing a room, holding cell or cellblock used to place persons under restraint or security. The new section adds lockup facilities and also clarifies that an approved smoke barrier complying with Section 709 be provided, and also fire sprinkler and smoke detectors be installed.

Part 2 of this code proposal adds a definition for lockup facilities that is needed in the Code that clarifies the use occupancies for buildings/spaces that contain five or less occupants under restraint or detained.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) The BCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the BCAC has held 3 open meetings and over 15 workgroup calls which included members of the BCAC as

well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: http://www.iccsafe.org/cs/BCAC/Pages/default.aspx.

Cost Impact: This proposal will increase the cost of construction of rooms or spaces used to restrain or detain occupants.

G37-12

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

308.2-G-BAJNAI-BCAC

G54– 12
404.5, 712.1.8

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Healthcare and Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee (CTC)

Revise as follows:

404.5 Smoke control. ~~A~~ In other than Group I-2. smoke control system shall be installed in accordance with Section 909.

Exception: Smoke control is not required for *atriums* that connect only two *stories*.

712.1.8 Two-story openings. In other than ~~Groups I-2 and~~ Group I-3, a floor opening that is not used as one of the applications listed in this section shall be permitted if it complies with all of the items below.

1. Does not connect more than two stories.
2. Does not contain a stairway or ramp required by Chapter 10.
3. Does not penetrate a horizontal assembly that separates fire areas or smoke barriers that separate smoke compartments.
4. Is not concealed within the construction of a wall or a floor/ceiling assembly.
5. Is not open to a corridor in Group I and R occupancies.
6. Is not open to a corridor on nonsprinklered floors.
7. Is separated from floor openings and air transfer openings serving other floors by construction conforming to required shaft enclosures.

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.

This proposal is intended to correct a misapplication of the intent of the code and coordinate with federal requirements. Currently the language in Section 404.5 and 404.6 would allow a two story atrium to be open to the floors without providing a smoke control system or any passive separation. While this may be appropriate for many occupancy groups, exposing patients who are incapable of self preservation to a large vertical opening is an unacceptable risk. Practically, this would never occur because federal requirements that fund and regulate these types of facilities would not allow an opening without either smoke control or passive separation.

Two story vertical openings are design features that hospitals typically employ to create a more calming and welcoming environment for the patients and their families. The intent of the code appears to allow multiple methods for dealing vertical openings. The AHC believed that a reasonable solution was to restrict the unprotected atrium language and concurrently add language to allow the use of two story openings in 712.1.8. This trade off would protect the corridor from the large opening between floors. It would also provide facilities and designers two options for dealing with these openings.

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

G54-12

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

G55 – 12
404.5

Proponent: Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee (CTC)

Revise as follows:

404.5 Smoke control. ~~A~~ In other than Group I-2 and Group I-1. Condition 2, smoke control system shall be installed in accordance with Section 909.

Exception: Smoke control is not required for *atriums* that connect only two *stories*.

Reason: The Adhoc Healthcare committee has a proposal to require smoke control for 2 story atriums in Group I-2 due to concerns about smoke compartmentation. The CTC care committee would like to include the new Group I-1, Condition 2 based on the same theory of protection.

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.

Cost Impact: The proposed changes will not increase the cost of construction.

G55-12

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

G56 – 12
404.5

Proponent: Sarah A. Rice, C.B.O., The Preview Group (srice@preview-group.com)

Revise as follows:

404.5 Smoke control. A smoke control system shall be installed in accordance with Section 909.

Exceptions:

1. A smoke control system is not required for *atriums* that connect only two *stories*.
2. A smoke control system is not required for atriums connecting more than two stories when all of the following are met:
   - 2.1. Only the 2 lowest stories shall be permitted to be open to the atrium. Unprotected openings shall be permitted.
   - 2.2. All stories above the lowest 2 stories must be separated from the atrium in accordance with Section 404.6.
   - 2.3 No operable openings shall be allowed in the walls of the atrium above the lowest 2 stories.

Reason: As stated in Section 909, the purpose of a smoke control systems is to provide a tenable environment for the evacuation or relocation of occupants. A smoke control system is NOT intended for the preservation of contents, the timely restoration of operations or for assistance in fire suppression or overhaul activities. Smoke control systems that are required and regulated by the IBC serve a different purpose than the smoke- and heat-venting provisions found in Section 910 and they are not considered exhaust systems under Chapter 5 of the International Mechanical Code.

In an atrium that connects more than 2 stories, the smoke control systems is intended to maintained the height of the lowest horizontal surface of the smoke layer interface to at least 6 feet above any walking surface that forms a portion of a required egress system within the smoke zone for a period of not less than either 20 minutes or 1.5 times the calculated egress time, whichever is less.

But what if the only walking surfaces in the atrium are on the 2 lowest stories of the atrium? What if all the walls above the 2 lowest stories are solid without operable openings? What purpose does the smoke control system then serve? We contend none. And if the smoke control system has no real value, then why install it?

This proposed change seeks to make exempt atriums that may connect more than 2 stories but which do not have any walking surfaces above the 2 lowest stories of the atrium when the walls of the atrium above the 2 lowest stories do not have any operable openings.

Cost Impact: The proposed changes will not increase the cost of construction. The cost of construction would be reduced by this proposal.

G56-12

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

G65 – 12
407.2.5 (NEW)

Proponent: Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee (CTC)

Add new text as follows:

407.2.5 Cooking facilities. In Group I-2 nursing homes, rooms or spaces that contain domestic cooking facilities shall be permitted to be open to the corridor where the number of sleeping units within the smoke compartment is limited to 30 residents and all of the following requirements are met:

1. Only one area with domestic cooking facilities is permitted within a smoke compartment.
2. The types of cooking appliances are are limited to ovens, cooktops, ranges, warmers and microwaves.
3. The corridor is a clearly identified space delineated by construction or floor pattern, material or color.
4. The space containing domestic cooking facilities shall be arranged so as not to obstruct access to the required exit.
5. A domestic cooking hood installed and constructed in accordance with Section 505 of the International Mechanical Code is provided over cooktops and ranges.
6. The domestic cooking hood provided over the cooktop or range shall be equipped with an automatic fire-extinguishing system of a type recognized for protection of domestic cooking equipment. Pre-engineered automatic extinguishing systems shall be tested in accordance with UL 300A and listed and labeled for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer's instructions.
7. A manual actuation device for the hood suppression system shall be installed in accordance with Section 904.11.1 and 904.11.2 of the International Fire Code.
8. A shutdown for the fuel and electrical power supply to the cooking equipment shall be provided and shall be accessible only to staff.
9. A portable fire extinguisher shall be installed within 30 feet (9144 mm) of domestic cooking appliances complying with Section 906.

Reason: 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.

As nursing homes move away from institutional models, it is critical to have a functioning kitchen that can serve as the hearth of the home. Instead of a large centralized, institutional kitchen where all meals are prepared and delivered to a central dining room or the resident's room, the new "household model" nursing home uses de-centralized kitchens and small dining areas to create the feeling and focus of home. For persons with dementia, it is particularly important to have spaces that look familiar, like the kitchen in their former home ,to increase their understanding and ability to function at their highest level.

Allowing kitchens, that serve a small, defined group of residents, to be open to common spaces, and in some instances corridors, are critically important to enhancing the feeling and memories of home for older adults. This allows residents to see and smell the food being prepared, which can enhance their appetites and evoke positive memories. Some residents, based on their abilities and cognition level may even be able to participate in food preparation activities such as stirring, measuring ingredients, peeling vegetables, or folding towels. This becomes a social activity, where they can easily converse with the staff member cooking, as well as a way for the resident to maintain their functional abilities and to feel that they are still an important contributing member of society.

We know that unattended cooking equipment is the leading cause of fires. However, allowing the kitchen to be open also allows the nursing home staff to more carefully supervise the space so that if an incident were to occur, it would be spotted and dealt with faster than if the kitchen was completely behind closed doors. Health care facilities have the benefit of having awake-staff 24 hours a day. These staff members know the building layout and the residents well, and are trained to handle emergencies. The locked fuel shut-off switch will prevent cooking activities occurring without staff knowledge.

Moreover, studies have shown that a single low-flow residential sprinkler head is effective "to control both [a] cooking oil fire and [an] appliance fire, despite shielding by the cabinets, while extinguishing the fire spread to the cabinets and walls." [ref: NIST special publication 1066: Residential kitchen fire suppression research needs, Madrzykowski, Hamins & Mehta, Feb. 2007] As all nursing homes are already required to have quick-response sprinklers throughout, we believe that more than adequate safety is being provided when preparing food up to 16 residents, and by adding the automatic chemical suppression in the hood, we are also

providing more than adequate safety for up to 30 residents. The volume of meals prepared in both of these cases are much more similar to a single-family home rather than a commercial restaurant setting.

The fire safety record for nursing homes is one of the lowest of any occupancy in the United States based on NFPA fire data. The number of fire deaths from multiple death fires has averaged 1.7 deaths/year for the last 20 years. The number of single fire deaths in nursing averages 3-5 deaths/ year. The population of nursing homes is 1.7 million. Compared to the number of residents 65 or over living in residential occupancies (32 million) and the number of fire deaths/year of this population, **a resident over 65 in a nursing home is 12 times less likely to die in a fire than a resident over 65 living in a private residential occupancy.**

All new nursing homes have been required to be sprinklered since 2003, and currently 95% of all existing nursing homes are sprinklered. All existing nursing homes are required by federal regulations to be fully sprinklered by August 13, 2013. **There has never been a multiple death fire in a fully sprinklered nursing home** based on 15 years of NFPA fire data. A review of nursing home fire data from 1970 (41 years) not a single multiple death nursing home fire resulted from a fire originating in a kitchen. The majority of single death fires are the result of a resident smoking while on oxygen or the ignition of their clothing or bedding from smoking material. We could find no fire data of any resident of a nursing home, single or multiple death fire, dying from a fire that originated in a kitchen.

In nursing home occupancies, the strategy is to defend in place, taking advantage of the smoke compartments to move residents away from smoke and fire. The smaller size of the household units that would contain these open kitchens, rather than the larger institutional style nursing homes many of us know, means that evacuations to an adjacent compartment or to the exterior is faster and the smaller size of any one of these units limits the number of people at risk.

An additional safety feature, in this proposal, is the inclusion of a deactivation switch that is locked and only accessible to staff. This will prevent unauthorized use of the cooking appliance without staff supervision. Staff members would need to be trained not only in basic food handling precautions but also in basic fire safety and extinguisher use. A fire extinguisher would be required in each kitchen area in addition to the suppression required in the hood and the sprinklers in the facility. These are all additional levels of safety that are being added to this application and will help to protect the residents.

The choice of thirty or fewer residents as the limiting number of residents that could be housed within a single unit with an open kitchen was based on a requirement from the Veterans Administration to serve the needs in their facilities, as well as current trends in the design of these types of facilities. These small nursing homes or nursing home “household” units generally range in size from 10 to 30 residents. The committee that drafted this proposal included providers, industry representatives, code and design professionals who are familiar with this design model and its operation. This group’s conclusion was that 30 residents allowed this open kitchen application for the overwhelming majority of facilities in the industry because staffing for thirty is widely considered an economical staffing ratio for the majority of organizations. Yet the designs for this number are still relatively small in size. These designs range from around 6,000 square feet for the smallest 10 person units to around 17,000 square feet even for units housing as many as 30. In general, at these unit sizes, the distances to exits, either to the exterior or to other compartments is much shorter than commonly seen in traditional nursing homes. This committee felt that in combining the added safety features proposed along with the improved evacuation distances and reduced number of people at risk, the limitation of 30 people maintained good safety, yet met the needs of a majority of the industry.

If this proposal is approved, there will be a reference in Table 906.1 for fire extinguishers.

Example of Kitchen open to Corridor.

Example of shutdown

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

G65-12

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

407.2.5#1-G-BALDASSARRA-CTC

G66 – 12
407.2.5 (NEW)

THIS PROPOSAL IS ON THE AGENDA OF THE IBC GENERAL CODE DEVELOPMENT COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THE IBC GENERAL CODE DEVELOPMENT COMMITTEE.

Proponent: Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee (CTC)

Add new text as follows:

407.2.5 Nursing home housing units. In Group I-2 nursing homes, within areas where nursing home residents are housed, shared living spaces, group meeting or multipurpose therapeutic spaces shall be permitted to be open to the *corridor*, where all of the following criteria are met:

1. The walls and ceilings of the space are constructed as required for *corridors*.
2. The spaces are not occupied as resident sleeping rooms, treatment rooms, incidental uses in accordance with Section 509, or hazardous uses.
3. The open space is protected by an automatic fire detection system installed in accordance with Section 907.
4. The *corridors* onto which the spaces open, in the same *smoke compartment*, are protected by an automatic fire detection system installed in accordance with Section 907, or the *smoke compartment* in which the spaces are located is equipped throughout with quick-response sprinklers in accordance with Section 903.3.2.
5. The space is arranged so as not to obstruct access to the required *exits*.

Reason: 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.

In nursing home occupancies, residents are encouraged to spend time outside of their rooms. Wayfinding and orientation problems are common in nursing homes residents, and research has shown that direct visibility to a desired location is more effective for cuing than signage. Therefore, having a variety of shared living spaces open to the corridor encourages socialization, encourages interaction, and is important to resident well-being. Further, being able to preview activities that are occurring helps to encourage joining and allows reluctant participants to join at their own pace. Finally, a more open plan allows staff to more easily see residents throughout the course of the day.

Adhoc Health has a proposal to limit storage to containers with 10 cubic feet or greater in Table 509. This would address the issue of storage within areas open to the corridor.

Example of Living room

Example of Dining Room

Cost Impact: The proposed changes will not increase the cost of construction. There will be a reduction in cost.

G66-12

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

G68 – 12
202, 407.4, 422.3.1 (NEW)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Healthcare and Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee (CTC)

THIS CODE CHANGE WILL BE HEARD BY THE IBC MEANS OF EGRESS COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEE.

Revise as follows:

407.4 Means of egress. Group I-2 occupancies shall be provided with means of egress complying with Chapter 10 and Sections 407.4.1 through 407.4.3. The fire safety and evacuation plans provided in accordance with Section 1001.4 shall identify the building components necessary to support a *defend in place* emergency response in accordance with IFC Sections 404 and 408.

422.3.1 Means of egress. Where ambulatory care facilities require smoke compartmentation in accordance with Section 422.3 the fire safety evacuation plans provided in accordance with Section 1001.4 shall identify the building components necessary to support a *defend in place* emergency response in accordance with IFC Sections 404 and 408.

Add new definition to Chapter 2 as follows:

DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

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, 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 code change defines a commonly used concept with a broadly accepted term for use with Group I-2 and identifies several instances where the defend in place concept should be permitted and recognized.

Defend in place, or protect in place, is a concept that has long been employed as the preferred method of fire response in hospitals due to the fragile nature of the occupants. Occupants in this setting are often dependent upon the building infrastructure and immediate evacuation would place their lives at risk. This infrastructure typically includes life support systems such as medical gases, emergency power, and environmental controls that rely on continued building operation. Previous versions of this code and legacy codes have created a tried and tested set of requirements to support this concept, such as smoke compartmentation and areas of refuge. However, previous codes have not specifically described the concept of occupants remaining within a building during a fire emergency which leads to confusion and misapplication during design and enforcement.

This change identifies Group I-2 as a location where this type of emergency response is permitted. The codes governing hospitals, nursing homes, and other Group I-2 classes are designed to support the defend in place use. While the code has been silent on the underlying concept, the defend in place strategy has been the commonly accepted practice in these facilities. When the new Ambulatory Care Facilities section was being drafted, the goal was to create a type of defend in place. Defend in place is only appropriate when smoke compartments are created, therefore the allowance to use this strategy is predicated on the smoke compartmentation section.

A proposal is being submitted to the IFC to clarify further the defend in place concept in Section 404 and 408. [Should we place draft IFC proposal here]

Cost Impact: This proposal will not increase the cost of construction; the healthcare industry already has this documentation and information on file for compliance with state licensing and federal certification standards.

G68-12

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

G73 – 12
407.4.3 (NEW), 1005.7.1.2; (IFC [B] 1005.7.1.2)

Proponent: Carl Baldassarra, P.E., FSFPE Chair, ICC Code Technology Committee (CTC)

THIS CODE CHANGE WILL BE HEARD BY THE IBC MEANS OF EGRESS COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEE.

Add new text as follows:

407.4.3 Projections in corridors. In Group I-2 nursing homes, where the *corridor* width is a minimum of 96 inches (2440 mm), projections shall be permitted for furniture where all of the following conditions are met:

1. The furniture is attached to the floor or to the wall.
2. The furniture does not reduce the clear width of the *corridor* to less than 72 inches (1830 mm) except where other encroachments are permitted in accordance with Section 1005.7.
3. The furniture is positioned on only one side of the *corridor.*
4. Each arrangement of furniture is 50 square feet (4.6 square meters) maximum in area.
5. Furniture arrangements are separated by 10 feet (3050 mm) minimum.
6. Placement of furniture is considered as part of the fire and safety plans in accordance with Section 1001.4.

Revise as follows:

1005.7.2 (IFC [B] 1005.7.2) Other projections. *Handrail* projections shall be in accordance with the provisions of Section 1012.8. Other nonstructural projections such as trim and similar decorative features shall be permitted to project into the required width a maximum of 1½ inches (38 mm) on each side.

Exception: Projections are permitted in corridors within Group I-2 nursing homes in accordance with Section 407.4.3.

Reason: 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.

Many nursing homes have long corridors that residents must traverse. Current interpretation of the IBC precludes the provision of resident seating in nursing home hallways/corridors to assure that egress is unobstructed in the event of an emergency. Residents who are physically unable to traverse the distance without being able to rest periodically have little recourse but use a wheelchair, an outcome counter to maintaining their ambulatory skills.

In addition, changes to facility operations in health care facilities no longer require staff to routinely move residents in beds, coupled with the relatively low occupant load in healthcare facilities, makes 8 ft of clear corridor width often unnecessary.

The primary substantiation to the proposal is as follows:

1. Furniture appropriately placed at defined intervals along hallways/corridors can promote a resident's ability to maintain his/her highest practical level of functioning and maintain independence. Allowing rest areas (small chairs, benches or grouped seating placed at different points) affords residents the opportunity to walk a distance, rest and then continue independently to their destination, and can enhance resident quality of life and help prevent resident falls and preventable decline in function.
2. In addition to promoting resident independence and mobility, seating placed in hallways/corridors may help to foster social opportunities and create a more homelike environment. Prohibiting such seating areas could diminish opportunities for socialization, and independence. The use of such seating areas will allow resident and staff greater flexibility in choosing safe places to rest.
3. This provision would require that furniture located within the corridor be fixed in place to eliminate the risk that the furniture could be moved into needed egress path. Furniture could be fixed to the floor or wall using a bracket, which would allow removal for maintenance and cleaning purposes.
4. For the fixed furniture, this provision maintains a minimum clear egress width of 6 feet. It also limits the frequency of such furniture groupings so that the 8 ft width is otherwise maintained.

5. This provision also requires that all of the groupings be located to one side of the corridor, so that in an emergency event, the path of travel would be clear on one side of the corridor and zig zagging the corridor would not be required.

Cost Impact: The proposed changes will not increase the cost of construction. There will be a reduction

G73-12

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

407.4.3-G-BALDASSARRA-CTC

G79 – 12
407.11 (NEW)

Proponent: Lynn W. Manley, Illinois Department of Public Health - Health Care Facilities and Programs, representing self (lynn.manley@illinois.gov)

Add new text as follows:

407.11 Residential Cooking Appliances. Residential type cooking appliances that include: griddles, stoves, range tops, electric skillets, portable gas fired burners and portable cooking device shall not be permitted in hospitals.

Exceptions:

1. Cooking installations that are approved by all applicable authorities having jurisdiction and that are installed with a commercial cooking hood and protected with a hood suppression system in accordance with Section 904.11 of the International Fire Code shall be permitted. In no case shall any cooking operation be permitted in a space that is open to a corridor.
2. Residential appliances that are provided for training purposes as part of a hospital program shall be permitted under the following conditions:
   - 2.1. A detailed program narrative must be provided and maintained that includes all safety issues, and indicates when and how the appliance may be used for training purposes.
   - 2.2. The appliance must be located within a training room that is separated from other non-related spaces and from corridors by smoke partitions constructed in accordance with Section 710. Such training room shall be separated from any patient sleeping area by a smoke barrier.
   - 2.3. The appliance is used only under direct supervision of trained hospital personnel and shall have safety devices to prevent unauthorized use.
   - 2.4. A kitchen hood suppression system shall not be required.
   - 2.5 A Type K portable fire extinguisher is required in the room within easy reach of the cooking appliance.
3. Microwave ovens, warming plates that are designed for warming and not cooking, ovens and other appliances that do not produce any airborne grease laden vapors shall be permitted in spaces that are separated from corridors by smoke partitions constructed in accordance with Section 710.

Reason: If any staff person or visitor in hospital wants to eat, they can easily go to the vending areas, cafeteria and/or café type food services that are typically available.

Food for patients is prepared and provided in commercial food preparation facilities (catered or prepared on site by trained staff). Patient food service is under the supervisions of a dietician. Most patients would not be permitted to eat anything that was not approved by the dietician.

The history and statistical data for cooking fires in residential construction, for fires in fire departments and for fires in restaurants with or without hood suppression systems is well documented. There are simply too many every year. Hospitals continue to have small fires in microwaves, toasters, etc. and occasionally have a fire in a commercial cooking appliance. The outcome of such events is minimal because of the level of staff training during a fire event, and because any of the real fire hazards are controlled by suppression systems that are maintained in accordance with national standards. Also, fire and smoke migration in hospitals is limited by the extensive compartmentation that is required.

The need to clarify the use of minor warming appliances and to identify use of residential appliances for training purposes is justified. However, there is no justification to allow residential stoves in hospitals, except as indicated above and any proposal to allow cooking appliances in spaces open to corridors goes in the face of the historical evidence that clearly indicates fires will result and loss of life of more than one person would be likely.

This change is proposed as part of the requirements for new hospitals and should result in conditions that are safer or at least no less safe than previous requirements. This proposal recognizes that other code changes may be proposed in this cycle to allow cooking in areas open to corridors and that a code change proposal to separate the requirements from Hospitals from the requirements for Nursing Homes also may be proposed in this cycle. If there is a demand to create exceptions in nursing homes, then the requirements should be justified under a separate section for nursing homes that allows the requirements for hospital and nursing homes to be considered separately.

Cost Impact: There will be no cost impact. The above changes are already implemented in many jurisdictions. The code change is needed for clarification and could reduce costs where jurisdictions have required commercial cooking hoods and suppression in

Hospitals where residential equipment is used for patient rehabilitation and training purposes. We are unaware of any fires that have occurred on residential stoves used only for training purposes.

G79-12

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

G91 – 12
420, 420.1, 420.6 (NEW)

Proponent: Daniel E. Nichols, P.E., New York State Division of Code Enforcement and Administration (dan.nichols@dos.state.ny.us)

Revise as follows:

SECTION 420
GROUPS I-1, R-1, R-2, R-3, R-4

420.1 General. Occupancies in Groups I-1, R-1, R-2 ~~and~~ R-3 and R-4 shall comply with the provisions of this section and other applicable provisions of this code.

420.6 Protection of Attics. Attic spaces that are not used for living purposes, storage, or fuel-fired equipment in Group I-1 and Group R-4 occupancies shall meet one of the following conditions:

1. Be protected by an automatic sprinkler system in accordance with Section 903.3;
2. Be constructed of non-combustible construction; or
3. Be constructed of fire-retardant-treated wood in accordance with Section 2303.2.

Reason: In March, 2009, a fire at the Riverview Independent Residential Alternative (IRA) home for persons with developmental disabilities claimed the lives of 4 residents and injured the remaining 5 residents and 2 staff. The building was 1-story in height, approximately 3,000 square feet, of Type 5b construction and was built to the 2003 edition of the International Building Code (with additional requirements by the State of New York) just 1 year prior. The building was protected by a fully operational NFPA 13D fire sprinkler system (that was connected to a municipal water supply), automatic fire detection system throughout the habitable areas, a heat detection system within the attic space, and several non-required fire- and/or smoke-separations.

It has been determined that the fire origin was exterior to the building and the fire had a significant lead time prior to occupant notification. Whereas the non-required heat detection was placed every 1000 square feet within the attic space, the near zero temperatures and the arrangement of the attic space delayed the prompt activation of the detectors. At the time of fire alarm activation, smoke was already present within the sleeping area corridors and inhibited staff movement of residents. Prior to evacuation of all residents (which initially moved them near the main exit door, fire from the roof structure above the main door and he interior smoke conditions prevented further staff evacuation of the residents to the exterior.

The purpose of this code change proposal is to address a known hazard in occupancies that house residents with special needs but are permitted to have unsprinklered attic spaces. Addressing the goal of minimizing fire spread in attic spaces is presented in this code change by provided options that meet this goal; either by providing extinguishment or by limiting the fuel load. The location of 310.6.1 (new) for Group R-4 occupancies is so it applies to all Group R-4 occupancies but is scoped to keep the "5 and under" allowances consistent throughout the Group I Section. Section 308.3.3 (new) is proposed to address larger group homes as well as the other types of characteristic occupancies listed within 308.3 under Group I-1 since all occupancies have occupants that are expected to do a full evacuation during an emergency but may have issues getting to the exit.

Cost Impact: This will increase the cost of construction. However, the increase will be variable since three options are being proposed.

G91-12

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

G244 – 12
3412 (IEBC [B] Chapter 14)

Proponent: David S. Collins, The Preview Group, Inc., representing the American Institute of Architects (dcollins@preview-group.com); Michael A. Crowley, P.E., FSFPE, RJA Group (mcrowley@rjagroup.com)

Revise as follows:

3412.2 (IFC [B] 1401.2) Applicability. Structures existing prior to [DATE TO BE INSERTED BY THE JURISDICTION. NOTE: IT IS RECOMMENDED THAT THIS DATE COINCIDE WITH THE EFFECTIVE DATE OF BUILDING CODES WITHIN THE JURISDICTION], in which there is work involving *additions*, *alterations* or changes of occupancy shall be made to comply with the requirements of this section or the provisions of Sections 3403 through 3409. The provisions in Sections 3412.2.1 through 3412.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R, S and U. These provisions shall not apply to buildings with occupancies in Group H or ~~I.~~ I-1, I-3 or I-4.

3412.6 (IFC [B] 1401.6) Evaluation process. The evaluation process specified herein shall be followed in its entirety to evaluate existing buildings in Groups A, B, E, F, M, R, S and U. For existing buildings in Group I-2, the evaluation process specified herein shall be followed and applied to each and every individual smoke compartment. Table 3412.7 shall be utilized for tabulating the results of the evaluation. References to other sections of this code indicate that compliance with those sections is required in order to gain credit in the evaluation herein outlined. In applying this section to a building with mixed occupancies, where the separation between the mixed occupancies does not qualify for any category indicated in Section 3412.6.16, the score for each occupancy shall be determined and the lower score determined for each section of the evaluation process shall apply to the entire building, or to each smoke compartment for Group I-2 occupancies.

Where the separation between mixed occupancies qualifies for any category indicated in Section 3412.6.16, the score for each occupancy shall apply to each portion, or smoke compartment of the building based on the occupancy of the space.

3412.6.2 (IFC [B] 1401.6.2) Building area. The value for building area shall be determined by the formula in Section 3412.6.2.2. Section 503 and the formula in Section 3412.6.2.1 shall be used to determine the allowable area of the building. This shall include any allowable increases due to frontage and automatic sprinklers as provided for in Section 506. Subtract the actual *building area* in square feet from the allowable area and divide by 1,200 square feet. Enter the area value and its sign (positive or negative) in Table 3412.7 under Safety Parameter 3412.6.2, Building Area, for fire safety, means of egress and general safety. In determining the area value, the maximum permitted positive value for area is 50 percent of the fire safety score as *listed* in Table 3412.8, Mandatory Safety Scores. Group I-2 occupancies shall be scored zero.

3412.6.4 (IFC [B] 1401.6.4) Tenant and dwelling unit separations. Evaluate the *fire-resistance rating* of floors and walls separating tenants, including *dwelling units*, and not evaluated under Sections 3412.6.3 and 3412.6.5. Group I-2 occupancies shall evaluate the rating of the separations between patient sleeping rooms.

Under the categories and occupancies in Table 3412.6.4, determine the appropriate value and enter that value in Table 3412.7 under Safety Parameter 3412.6.4, Tenant and Dwelling Unit Separations, for fire safety, means of egress and general safety.

TABLE 3412.6.4 (IFC [B] TABLE 1401.6.4)
SEPARATION VALUES

OCCUPANCY	CATEGORIES				
	a	b	c	d	e
A-1	0	0	0	0	1
I-2	0	1	2	3	4

(Portions of table not shown remain unchanged)

3412.6.5 (IFC [B] 1401.6.5) Corridor walls. Evaluate the *fire-resistance rating* and degree of completeness of walls which create *corridors* serving the floor, and constructed in accordance with Section 1018. This evaluation shall not include the wall elements considered under Sections 3412.6.3 and 3412.6.4. Under the categories and groups in Table 3412.6.5, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.5, Corridor Walls, for fire safety, means of egress and general safety.

TABLE 3412.6.5 (IFC [B] TABLE 1401.6.5)
CORRIDOR WALL VALUES

OCCUPANCY	CATEGORIES			
	a	b	c[a]	d[a]
A-1	-10	-4	0	2
I-2	-10	0	1	2

(Portions of table not shown remain unchanged)

3412.6.7 (IFC [B] 1401.6.7) HVAC systems. Evaluate the ability of the HVAC system to resist the movement of smoke and fire beyond the point of origin. Under the categories in Section 3412.6.7.1, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.7, HVAC Systems, for fire safety, means of egress and general safety. Facilities in Group I-2 occupancies meeting Categories a, b or c shall be considered to fail the evaluation.

3412.6.8 (IFC [B] 1401.6.8) Automatic fire detection. Evaluate the smoke detection capability based on the location and operation of *automatic fire detectors* in accordance with Section 907 and the *International Mechanical Code*. Under the categories and occupancies in Table 3412.6.8, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.8, Automatic Fire Detection, for fire safety, means of egress and general safety. Facilities in Group I-2 occupancies meeting Categories a, b or c shall be considered to fail the evaluation.

TABLE 3412.6.8 (IFC [B] TABLE 1401.6.8)
AUTOMATIC FIRE DETECTION VALUES

OCCUPANCY	CATEGORIES					
	a	b	c	d	e	f
A-1, A-3, F, M, R, S-1	-10	-5	0	2	6	-
A-2	-25	-5	0	5	9	-
A-4,B,E,S-2	-4	-2	0	4	8	-
I-2	NP	NP	0	4	5	2

3412.6.8.1 (IFC [B] 1401.6.8.1) Categories. The categories for automatic fire detection are:

1. Category a—None.
2. Category b—Existing *smoke detectors* in HVAC systems and maintained in accordance with the *International Fire Code*.
3. Category c—*Smoke detectors* in HVAC systems. The detectors are installed in accordance with the requirements for new buildings in the *International Mechanical Code*.
4. Category d—*Smoke detectors* throughout all floor areas other than individual *sleeping units*, tenant spaces and *dwelling units*.
5. Category e—*Smoke detectors* installed throughout the floor area.

6. Category f – Smoke detectors in corridors only.

3412.6.9 (IFC [B] 1401.6.9) Fire alarm systems. Evaluate the capability of the *fire alarm system* in accordance with Section 907. Under the categories and occupancies in Table 3412.6.9, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.9, Fire Alarm Systems, for fire safety, means of egress and general safety.

TABLE 3412.6.9 (IFC [B] TABLE 1401.6.9)
FIRE ALARM SYSTEM VALUES

OCCUPANCY	CATEGORIES			
	a	b[a]	c	d
A-1, A-2, A-3, A-4, B, E, R	-10	-5	0	5
F, M, S	0	5	10	15
I-2	-4	1	2	5

a. For buildings equipped throughout with an automatic sprinkler system, add 2 points for activation by a sprinkler water flow device.

3412.6.10 (IFC [B] 1401.6.10) Smoke control. Evaluate the ability of a natural or mechanical venting, exhaust or pressurization system to control the movement of smoke from a fire. Under the categories and occupancies in Table 3412.6.10, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.10, Smoke Control, for means of egress and general safety.

TABLE 3412.6.10 (IFC [B] TABLE 1401.6.10)
SMOKE CONTROL VALUES

OCCUPANCY	CATEGORIES					
	a	b	c	d	e	f
A-1, A-2, A-3	0	1	2	3	6	6
A-4, E	0	0	0	1	3	5
B, M, R	0	2(a)	3(a)	3(a)	3(a)	4(a)
F, S	0	2(a)	2(a)	3(a)	3(a)	3(a)
I-2	-4	0	0	0	3	0

a. This value shall be 0 if compliance with Category d or e in Section 3412.6.8.1 has not been obtained.

3412.6.11 (IFC [B] 1401.6.11) Means of egress capacity and number. Evaluate the *means of egress* capacity and the number of exits available to the building occupants. In applying this section, the *means of egress* are required to conform to the following sections of this code: 1003.7, 1004, 1005, 1014.2, 1014.3, 1015.2, 1021, 1024.1, 1027.2, 1027.5, 1028.2, 1028.3, 1028.4 and 1029. The number of exits credited is the number that is available to each occupant of the area being evaluated. Existing fire escapes shall be accepted as a component in the *means of egress* when conforming to Section 3406.

Under the categories and occupancies in Table 3412.6.11, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.11, Means of Egress Capacity, for means of egress and general safety.

TABLE 3412.6.11 (IFC [B] TABLE 1401.6.11)
MEANS OF EGRESS VALUES

OCCUPANCY	CATEGORIES				
	a[a]	b	c	d	e
A-1, A-2, A-3, A-4, E	-10	0	2	8	10
M	-3	0	1	2	4
B, F, S	-1	0	0	0	0
R	-3	0	0	0	0
I-2	-10	0	2	8	10

a. The values indicated are for buildings six stories or less in height. For buildings over six stories above grade plane, add an additional -10 points.

3412.6.12 (IFC [B] 1401.6.12) Dead ends. In spaces required to be served by more than one *means of egress*, evaluate the length of the *exit* access travel path in which the building occupants are confined to a single path of travel. Under the categories and occupancies in Table 3412.6.12, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.12, Dead Ends, for means of egress and general safety.

TABLE 3412.6.12 (IFC [B] TABLE 1401.6.12)
DEAD-END VALUES

OCCUPANCY	CATEGORIES			
	a	**b**	**c**	**d**
A-1, A-3, A-4, B, E, F, M, R, S	-2	0	2	-
A-2, E	-2	0	2	-
I-2	-2	0	2	-6

a. For dead-end distances between categories, the dead-end value shall be obtained by linear interpolation.

3412.6.12.1 (IFC [B] 1401.6.12.1) Categories. The categories for dead ends are:

1. Category a—Dead end of 35 feet (10 670 mm) in nonsprinklered buildings or 70 feet (21 340 mm) in sprinklered buildings.
2. Category b—Dead end of 20 feet (6096 mm); or 50 feet (15 240 mm) in Group B in accordance with Section 1018.4, exception 2.
3. Category c—No dead ends; or ratio of length to width (l/w) is less than 2.5:1.
4. Category d – Dead ends exceeding Category a.

3412.6.16 (IFC [B] 1401.6.16) Mixed occupancies. Where a building has two or more occupancies that are not in the same occupancy classification, the separation between the mixed occupancies shall be evaluated in accordance with this section. Where there is no separation between the mixed occupancies or the separation between mixed occupancies does not qualify for any of the categories indicated in Section 3412.6.16.1, the building shall be evaluated as indicated in Section 3412.6 and the value for mixed occupancies shall be zero. Under the categories and occupancies in Table 3412.6.16, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.16, Mixed Occupancies, for fire safety and general safety. For buildings without mixed occupancies, the value shall be zero.

3412.6.16.1 (IFC [B] 1401.6.16.1) Categories. The categories for mixed occupancies are:

1. Category a—Occupancies separated by minimum 1-hour *fire barriers* or minimum 1-hour *horizontal assemblies*, or both.
2. Category b—Separations between occupancies in accordance with Section 508.4.
3. Category c—Separations between occupancies having a *fire-resistance rating* of not less than twice that required by Section 508.4.4.

TABLE 3412.6.16 (IFC [B] TABLE 1401.6.16)
MIXED OCCUPANCY VALUES[a]

OCCUPANCY	CATEGORIES		
	a	**b**	**c**
A-1, A-2, R	-10	0	10
A-3, A-4, B, E, F, M, S	-5	0	5
I-2	NP	0	5

a. For fire-resistance ratings between categories, the value shall be obtained by linear interpolation.

3412.6.17 (IFC [B] 1401.6.17) Automatic sprinklers. Evaluate the ability to suppress a fire based on the installation of an *automatic sprinkler system* in accordance with Section 903.3.1.1. “Required sprinklers” shall be based on the requirements of this code. Under the categories and occupancies in Table 3412.6.17, determine the appropriate value and enter that value into Table 3412.7 under Safety

Parameter 3412.6.17, Automatic Sprinklers, for fire safety, means of egress divided by 2 and general safety.

TABLE 3412.6.17 (IFC [B] TABLE 1401.6.17)
SPRINKLER SYSTEM VALUES

OCCUPANCY	CATEGORIES					
	a	**b**	**c**	**d**	**e**	**f**
A-1, A-3, F, M, R, S-1	-6	-3	0	2	4	6
A-2	-4	-2	0	1	2	4
A-4, B, E, S-2	-12	-6	0	3	6	12
I-2	NP	NP	NP	8	10	NA

NP not permitted
NA not applicable

3412.6.18 (IFC [B] 1401.6.18) Standpipes. Evaluate the ability to initiate attack on a fire by making a supply of water available readily through the installation of standpipes in accordance with Section 905. Required standpipes shall be based on the requirements of this code. Under the categories and occupancies in Table 3412.6.18, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.18, Standpipes, for fire safety, means of egress and general safety.

TABLE 3412.6.18 (IFC [B] TABLE 1401.6.18)
STANDPIPE SYSTEM VALUES

OCCUPANCY	CATEGORIES			
	a[a]	**b**	**c**	**d**
A-1, A-3, F, M, R, S-1	-6	0	4	6
A-2	-4	0	2	4
A-4, B, E, S-2	-12	0	6	12
I-2	-2	0	1	2

a. This option cannot be taken if Category a or b in Section 3412.6.17 is used.

3412.6.20 (IFC [B] 1401.6.20) Smoke Compartmentation. Evaluate the smoke compartments for compliance with Section 417.5. Using Table 3412.6.20, determine the appropriate smoke compartmentation value (*SCV*) and enter that value into Table 3412.7 under Safety Parameter 3412.6.20, Smoke Compartmentation, for fire safety, means of egress and general safety.

TABLE 3412.6.20 (IFC [B] TABLE 1401.6.20)
SMOKE COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES[a]		
	a Compartment size equal to or less than 22,500 square feet	**b Compartment size greater than 22,500 square feet**	**c No smoke Compartment**
A, B, E, F, M, R and S	0	0	0
I-2	0	NP	NP

For SI: 1 square foot = 0.093 m^2.
a. For areas between categories, the smoke compartmentation value shall be obtained by linear interpolation.

3412.6.21 (IFC [B] 1401.6.21) Patient ability, concentration, smoke compartment location and ratio to attendant. In I-2 occupancies, the ability of patients, their concentration and ratio to attendants shall be evaluated and applied per this section. Evaluate each smoke compartment using the categories in Sections 3412.6.21.1, 3412.6.21.2 and 3412.6.21.3 and enter the value in Table 3412.8. To determine the safety factor, multiply the three values together, if the sum is 9 or greater, compliance has failed.

3412.6.21.1 (IFC [B] 1401.6.21.1) Patient ability for self-preservation. Evaluate the ability of the patients for self-preservation in each smoke compartment in an emergency. Under the categories and occupancies in Table 3412.6.21.1 determine the appropriate value and enter that value in Table 3412.7

under Safety Parameter 3412.6.21.1, Patient Ability for Self-Preservation, for means of egress and general safety.

3412.6.21.1.1 (IFC [B] 1401.6.21.1.1) Categories: The categories for patient ability for self-preservation are:

1. Category a – (mobile) Patients are capable of self preservation without assistance.
3. Category c – (not mobile) Patients rely on assistance for evacuation or relocation.
4. Category d – (not movable) Patients cannot be evacuated or relocated

TABLE 3412.6.21.1 (IFC [B] TABLE 1401.6.21.1)
PATIENT ABILITY VALUES

OCCUPANCY	CATEGORIES		
	a	b	c
I-2	1	2	3

3412.6.21.2 (IFC [B] 1401.6.21.2) Patient Concentration. Evaluate the concentration of patients in each smoke compartment under Section 3412.6.21.2. Under the categories and occupancies in Table 3412.6.21.2 determine the appropriate value and enter that value in Table 3412.7 under Safety Parameter 3412.6.21.2, Patient Concentration, for means of egress and general safety.

3412.6.21.2.1 (IFC [B] 1401.6.21.2.1) Categories: The categories for patient concentration are:

1. Category a – smoke compartment has 1 to 10 patients.
2. Category b – smoke compartment has more than 10 to 40 patients
3. Category d – smoke compartment has greater than 40 patients

TABLE 3412.6.21.2 (IFC [B] TABLE 1401.6.21.2)
PATIENT CONCENTRATION VALUES

OCCUPANCY	CATEGORIES		
	a	b	c
I-2	1	2	3

3412.6.21.3 (IFC [B] 1401.6.21.3) Attendant-to-Patient Ratio. Evaluate the attendant-to-patient ratio for each compartment under Section 3412.6.21.3. Under the categories and occupancies in Table 3412.6.21.3 determine the appropriate value and enter that value in Table 3412.7 under Safety Parameter 3412.6.21.3, Attendant-to-Patient Ratio, for means of egress and general safety.

3412.6.21.3.1 (IFC [B] 1401.6.21.3.1) Categories: The categories for attendant-to-patient concentrations are:

1. Category a – attendant-to-patient concentrations is 1:5.
3. Category b – attendant-to-patient concentrations is 1:6 to 1:10.
4. Category c – attendant-to-patient concentrations is greater than 1:10 or no patients

TABLE 3412.6.21.3 (IFC [B] 1401.6.21.3)
ATTENDANT-TO-PATIENT RATIO VALUES

OCCUPANCY	CATEGORIES		
	a	b	c
I-2	1	2	3

TABLE 3412.7 (IFC [B] 1401.7)
SUMMARY SHEET – BUILDING CODE

Existing occupancy		_____
Proposed occupancy		_____
Year building was constructed		_____
Number of stories		_____
Height in feet		_____
Type of construction		_____
Area per floor		_____
Percentage of open perimeter increase		_____%
Completely suppressed:		Yes_____ No _____
Type		_____
Corridor wall rating		_____
Compartmentation:		Yes_____ No _____
Required door closers:		Yes_____ No _____
Fire-resistance rating of vertical opening enclosures		_____
Type of HVAC system:		_____
Serving number of floors		_____
Automatic fire detection:		Yes_____ No _____
Type and location		_____
Fire alarm system:		Yes_____ No _____
Type		_____
Smoke control:		Yes_____ No _____
Type		_____
Adequate exit routes:		Yes_____ No _____
Dead ends:		Yes_____ No _____
Maximum exit access travel distance		_____
Elevator controls:		Yes_____ No _____
Means of egress emergency lighting:		Yes_____ No _____
Mixed occupancies:		Yes_____ No _____
Standpipes:		Yes_____No_____
Incidental Use:		Yes_____No_____
Smoke Compartmentation less than 22,500		Yes_____No_____
Patient Ability for Self-preservation:		_____
Patient Concentration:		_____
Attendant-to-Patient Ratio:		_____

3412.8 (IFC [B] 1401.8) Safety scores. The values in Table 3412.8 are the required mandatory safety scores for the evaluation process listed in Section 3412.6.

TABLE 3412.8 (IFC [B] 1401.8)
MANDATORY SAFETY SCORES[a]

OCCUPANCY	FIRE SAFETY (MFS)	MEANS OF EGRESS (MME)	GENERAL SAFETY (MGS)
I-2	19	34	34

a.
MFS = Mandatory Fire Safety;
MME = Mandatory Means of Egress;
MGS = Mandatory General Safety.

(Portions of table not shown remain unchanged)

Reason: When initially developed, Chapter 34 did not include provisions for I-2 or H occupancies. The rationale was that the life safety system developed by NFPA was adequate for those I-2 occupancies and H occupancies were not likely to be a part of a building renovation, nor were the drafters of the original code change comfortable with development of values for an H occupancy.

Recently, ICC and ASHE have begun working together to develop changes to the IBC to remove some of the conflicts that exist between the I-Codes and the licensing and funding standards used for hospitals. Part of that effort included discussion of the process for evaluation of an existing I-2. A small group of volunteers has developed this code change to incorporate I-2 into Chapter 34's compliance alternatives.

The ongoing issue is how to identify the appropriate levels of performance and how to integrate the criteria in in Chapter 34. The following is an approach identified by the volunteers demonstrating how this can best be achieved. The original Chapter 34 used “risk factors” as an element of the analysis. Chapter 34 was developed using risk factors that formed the basis for development of the BOCA building code and the criteria in NYC Local Law 5 for high-rise business occupancies. Other occupancies were extrapolated using those numbers.

When the IBC was developed a “zero based” revision was undertaken to establish compliance as a zero in all categories of compliance in Chapter 34’s compliance alternatives. Values have been inserted into the categories where Chapter 34 is silent. Additional text has been developed to describe how these categories will be satisfied and some categories have been added to address specific elements of an existing I-2 occupancy which should play a role in achieving compliance.

Because the building is an existing I-2, elements that would not be known in a new building such as the ability of the patients or the number of persons providing care are documented as part of the ongoing licensing for these facilities. (WHAT DO WE DO ABOUT CHANGE OF OCCUPANCY?)

Evaluations were performed on several existing buildings to determine the appropriateness of the scoring. Areas of evaluation which would be untenable for typical patients and other persons in an I-2 occupancy were found and successful changes to upgrade the facility were identified, although not all would pass.

Cost Impact: The increased utility of Chapter 34 to address an I-2 occupancy will significantly reduce the cost of design and review.

G244-12

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

G257-12

308.4, 308.4.1, 308.4.1.1(new), 308.4.1.2(new)

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

Revise as follows:

308.4 Institutional Group I-2. This occupancy shall include buildings and structures used for *medical care* on a 24-hour basis for more than five persons who are *incapable of self preservation*. This group shall include, but not be limited to, the following:

Foster care facilities
Detoxification facilities
Hospitals
Nursing homes
Psychiatric hospitals

308.4.1 Occupancy Conditions. Buildings of Group I-2 shall be classified as one of the occupancy conditions indicated in Sections 308.4.1.1 through 308.4.1.2.

308.4.1.1 Condition 1. This occupancy condition shall include facilities that provides nursing and medical care and could also provide emergency care, surgery, obstetrics, or in-patient stabilization units for psychiatric or detoxification, including, but not limited to hospitals.

308.4.1.2 Condition 2. This occupancy condition shall include facilities that provides nursing and medical care but does not provide emergency care, surgery, obstetrics, or in-patient stabilization units for psychiatric or detoxification, including, but not limited to nursing homes and foster care facilities.

~~**308.4.1**~~ **308.4.2 Five or fewer persons receiving care.** A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.

Reason: This proposal is to provide a subset of occupancy uses amongst those healthcare uses that have been regulated together as one unit for many years.

Due to the diversification of how medical care is provided in the 5 characteristic occupancies given currently in the IBC for Group I-2 occupancies, this proposal splits the I-2 into two basic conditions; short-term care (hospitals) and long-term care (nursing homes). Whereas both of these subsets are based on medical treatment and are an occupancy group that the occupants are provided with a defend-in-place method of safety, changes in the delivery of care in the two different subgroups has changed in the past 10-20 years. Some examples of the changes include:

- Within Hospitals, there has been a general increase in the floor area per patient due to the increase in diagnostic equipment and the movement towards single occupant patient rooms.
- Within Nursing Homes, there has been a trend to provide more residential-type accommodations, such as group/suite living, fuel-fired appliances, and cooking facilities in residential areas.

The 'condition' concept is based on Group I-3 occupancies and the split this occupancy needs to effectively regulate amongst several levels of restraint. The benefit to the 'condition' concept, when compared to new use groups (i.e. I-5 or I-6) is that a majority of code requirements will still apply to all Group I-2 occupancies; such as mechanical systems, property maintenance, and rehabilitation. Furthermore, it removes potentially confusing code language from requirements when 'building specific' language is placed into code sections; such as the case with the current fire alarm section pertaining to Group I-2.

Detoxification facilities and facilities where patients receive psychiatric treatment can vary from hospitals where patients are at the beginning stages or detoxification or at psychiatric extremes that require medical care. These would be classified as Occupancy Condition 1. If the facilities were more along the line of counseling and rehabilitation in a care environment, the facility could be classified as Condition 2, or even as a Group I-1.

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: None

G257-12

Committee:	AS	AM	D
Assembly:	ASF	AMF	DF

M10–12
303.3

Proponent: Shawn Strausbaugh, Chair, Plumbing/Mechanical/Gas Code Action Committee

Revise as follows:

303.3 Prohibited locations. Fuel-fired appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces:

1. Sleeping Rooms
2. Bathrooms
3. Toilet Rooms
4. Storage Closets
5. Surgical Rooms

Exception: This section shall not apply to the following appliances:

1. Direct-vent appliances that obtain all combustion air from the outdoors.
2. Solid fuel-fired appliances, provided that ~~the room is not a confined space and the building is not of unusually tight construction~~ combustion air is provided in accordance with the manufacturers' instructions.
3. Appliances installed in a dedicated enclosure in which all combustion air is taken directly from the outdoors, in accordance with Chapter 7. Access to such enclosure shall be through a solid door, weather-stripped in accordance with the exterior door leakage requirements of the International Conservation Code and equipped with an approved self-closing device.

Reason: The concepts of confined space and unusually tight construction are no longer valid and were deleted from the IFGC along with the definitions of such.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the PMGCAC has held 2 open meetings, multiple conference calls and multiple workgroup calls which included members of the PMGCAC. Interested parties also participated in all of the meetings and conference calls to discuss and debate the proposed changes.

Cost Impact: None

M10-12

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

M35–12
[B] 309.2 (NEW)

Proponent: Shawn Strausbaugh, Chair, Plumbing/Mechanical/Gas Code Action Committee

THIS CODE CHANGE PROPOSAL WILL BE HEARD BY THE IBC-GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEE.

Add new text as follows:

[**B] 309.2 Space-cooling systems.** Where the Dry bulb 2 ½ % Summer Design Temperature as determined in accordance with Appendix D of the *International Plumbing Code* is 92° F or greater, occupancies in groups E, I1, I2, I4 and R shall be provided with active or passive space-cooling systems capable of maintaining an indoor temperature of 75° F on the design day. Wall mounted and window mounted cooling units used to comply with this section shall not obstruct any required emergency escape and rescue openings.

Reason: Section 309 addresses the requirements for space heating in interior spaces and requires that the system be able to maintain a temperature of at least 68 degrees. This is considered to be necessary to make the space occupiable. However, the code does not have any cooling requirements for hospitals, operating rooms, health care facilities, nursing homes, etc. In warm humid climates, space cooling can become a life safety issue for some members of society. This is not about luxury; rather, it can be the difference between life and death.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the PMGCAC has held 2 open meetings, multiple conference calls and multiple workgroup calls which included members of the PMGCAC. Interested parties also participated in all of the meetings and conference calls to discuss and debate the proposed changes.

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

M35-12

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

M36-12

401.2, Table 403.3; 407 (New); Chapter 15, IBC 1203.1

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

THIS IS A 2 PART CODE CHANGE, BOTH PARTS WILL BE HEARD BY THE MECHANICAL CODE COMMITTEE AS 2 SEPARATE CODE CHANGES. SEE THE TENTATIVE HEARING ORDERS FOR THIS COMMITTEE.

PART I – IMC

Revise as follows:

Section 401.2 Ventilation required. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403. Where the air infiltration rate in a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2-inch water column (50 Pa) in accordance with Section 402.4.1.2 of the *International Energy Conservation Code*, the dwelling unit shall be ventilated by mechanical means in accordance with Section 403. Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407.

TABLE 403.3
MINIMUM VENTILATION RATES

OCCUPANCY CLASSIFICATION	OCCUPANT DENSITY #/1,000 FT² [a]	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE, R_p CFM/PERSON	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE, R_a CFM/FT² [a]	EXHAUST AIRFLOW RATE CFM/ FT² [a]
Food and Beverage Service				
Bars, cocktail lounges	100	7.5	0.18	--
Cafeteria, fast food	100	7.5	0.18	--
Dining rooms	70	7.5	0.18	--
Kitchens (cooking) [b]	--	--	--	0.7
~~**Hospitals, Nursing and convalescent homes**~~				
~~Autopsy rooms~~ [b]	~~--~~	~~--~~	~~--~~	~~0.5~~
~~Medical procedure rooms~~	~~20~~	~~15~~	~~--~~	~~--~~
~~Operating rooms~~	~~20~~	~~30~~	~~--~~	~~--~~
~~Patient rooms~~	~~10~~	~~25~~	~~--~~	~~--~~
~~Physical therapy~~	~~20~~	~~15~~	~~--~~	~~--~~
~~Recovery and ICU~~	~~20~~	~~15~~	~~--~~	~~--~~
Hotels, motels, resorts and dormitories				
Multipurpose assembly		5	0.06	--
Bathrooms/toilets-private[g]		--	--	25/50[f]

(Portions of table and footnotes not shown remain unchanged)

Add new text as follows:

SECTION 407
AMBULATORY CARE FACILITIES AND GROUP I-2 OCCUPANCIES

Section 407.1 General. Mechanical ventilation for ambulatory care facilities and Group I-2 occupancies shall be designed and installed in accordance with this code and ASHRAE 170.

Add new referenced standard to Chapter 15:

ASHRAE

Standard Reference Number	Title	Referenced in code section number
170-2008	Ventilation of Health Care Facilities (with addendums a through h – 2011)	407.1

PART II- IBC GENERAL

Revise as follows:

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the *International Mechanical Code*. Where the air infiltration rate in a *dwelling unit* is less than 5 air changes per hour when tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with Section 402.4.1.2 of the *International Energy Conservation Code*, the *dwelling unit* shall be ventilated by mechanical means in accordance with Section 403 of the *International Mechanical Code*. Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407 of the *International Mechanical Code.*

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.

Currently Table 403.3 if the IMC has a limited number of spaces identified with ventilation rates, additionally if a room is not identified in the table then one is required to use the ventilation rate of an adjacent room that is on the list which is problematic if the space usage is vastly different. ASHRAE Standard 170, Table 7-1 has more comprehensive in the spaces that are identified as well as the design parameter requirements. Facility Guidelines Institute (FGI) has also incorporated ASHRAE 170 into the ventilation design requirements at health care facilities. ASHRAE 170 is similar in nature to the IMC referenced standard for the International Institute for Ammonia Refrigeration.

Cost Impact: The code change proposal should not increase the cost of construction because compliance with the standard is already required by facility licensure requirements.

Analysis: A review of the standard proposed for inclusion in the code, [ASHRAE170-2008] with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2012.

M36-12

PART I – INTERNATIONAL MECHANICAL CODE

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

PART II – INTERNATIONAL BUILDING CODE

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

M47-12/13
Table 403.3

Proponent: Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

TABLE 403.3
MINIMUM VENTILATION RATES

OCCUPANCY CLASSIFICATION	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE, *Rp* CFM/PERSON	AREA OUTDOOR AIRFLOW RATE IN BREATHIN ZONE, *Ra* CFM/FT2	DEFAULT OCCUPANT DENSITY #/1000 FT2	EXHAUST AIRFLOW RATE CFM/FT2
Hospitals~~,~~ and nursing ~~and convalescent~~ homes *j*				
Autopsy rooms[b]				
Medical procedure rooms				
Operating rooms				
Patient rooms				
Physical therapy				
Recovery and ICU				

(Portions of table and notes not shown remain unchanged)

Reason: The term 'convalescent home' is currently being used incorrectly in IMC Table 403.3 as a Group I-2 facility. These facilities are currently listed as Group I-1 and R-4, therefore the requirements listed in the ventilation tables are not correct. In addition, there is a correlative change to delete this term from Group I-1 and R-4 as an outdated term.

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.

Cost Impact: None

M47-12

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

M76-12
505.1, 505.3(NEW), 507.2.3

Proponent: Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee

Revise as follows:

SECTION 505
DOMESTIC KITCHEN EXHAUST EQUIPMENT

505.1 Domestic systems. Where domestic range hoods and domestic appliances equipped with downdraft exhaust are ~~located within dwelling units~~ provided, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems.

Exceptions:

1. In other than Group I-1 and I-2, where installed in accordance with the manufacturer's installation instructions and where mechanical or *natural ventilation* is otherwise provided in accordance with Chapter 4, *listed* and *labeled* ductless range hoods shall not be required to discharge to the outdoors.
2. Ducts for domestic kitchen cooking appliances equipped with downdraft exhaust systems shall be permitted to be constructed of Schedule 40 PVC pipe and fittings provided that the installation complies with all of the following:
   2.1. The duct shall be installed under a concrete slab poured on grade.
   2.2. The under floor trench in which the duct is installed shall be completely backfilled with sand or gravel.
   2.3. The PVC duct shall extend not more than 1 inch (25 mm) above the indoor concrete floor surface.
   2.4. The PVC duct shall extend not more than 1 inch (25 mm) above grade outside of the building.
   2.5. The PVC ducts shall be solvent cemented.

505.2 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cfm (0.19 m^3/s) shall be provided with *makeup air* at a rate approximately equal to the *exhaust air* rate. Such *makeup air* systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

505.3 Other than Group R. In other than Group R occupancies, where domestic cooking appliances are utilized for domestic purposes, such appliances shall be provided with domestic range hoods. Hoods and exhaust systems shall be in accordance with Sections 505.1 and 505.2.

SECTION 507
COMMERCIAL KITCHEN HOODS

507.2.3 Domestic cooking appliances used for commercial purposes. Domestic cooking appliances utilized for commercial purposes shall be provided with Type I or Type II hoods as required for the type of appliances and processes in accordance with Sections 507.2, 507.2.1 and 507.2.2. Domestic cooking appliances utilized for domestic purposes shall comply with Section 505.

Reason: The intent of this proposal is to clarify requirements and address new situations as Assisted Living and Nursing Home designs change.

Current requirements for domestic appliances used for domestic purposes are geared towards Group R facilities. When a stove is located in another use group, often a requirement for commercial hoods is misapplied. In a residential dwelling unit, often a

range hood is not required if there is enough ventilation. Given the different types of facilities, this proposal would always require a hood when a range was provided in another use group.

As the style of assisted living facilities and nursing homes attempts to produce a more residential atmosphere, domestic ranges are provided either within the unit (some assisted living) or in common use areas (assisted living or nursing home residential 'suites'). Residents use this equipment for light cooking duties (few people and only occasional meals) or special cooking (i.e., cookies, cakes). If this equipment is used for cooking for a large number of residents on a regular basis, it is being used for commercial purposes, and it would fall under 507.2.3.

Hospitals or outpatient rehab facilities sometimes have domestic ranges in occupational therapy and dietician areas. The goal being to provide residents with training on good eating habits when they are at home.

Changes to 505.1 would allow residential and areas such as business break rooms to allow for recirculation if the mechanical system is designed for it.

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.

Cost Impact: Reduction

M76-12

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

M101–12
507

Proponent: Shawn Strausbaugh, Chair, Plumbing/Mechanical/Gas Code Action Committee

Revise as follows:

SECTION 507
COMMERCIAL KITCHEN HOODS

507.1 General. Commercial kitchen exhaust hoods shall comply with the requirements of this section. Hoods shall be Type I or II and shall be designed to capture and confine cooking vapors and residues. A Type I or Type II hood shall be installed at or above all *commercial cooking appliances* in accordance with Sections 507.2 and 507.3. Where any cooking *appliance* under a single hood requires a Type I hood, a Type I hood shall be installed. Where a Type II hood is required, a Type I or Type II hood shall be installed. ~~Commercial kitchen exhaust hood systems shall operate during the cooking operation.~~

Exceptions:

1. Factory-built commercial exhaust hoods that are listed and labeled in accordance with UL 710, and installed in accordance with Section 304.1 shall not be required to comply with Sections 507.1.5, 507.2.3, 507.2.5, 507.2.8, 507.3.1, 507.3.3, 507.4 and 507.5. ~~507.4, 507.5, 507.7, 507.11, 507.12, 507.13, 507.14, and 507.15.~~
2. Factory-built commercial cooking recirculating systems that are listed and labeled in accordance with UL 710B, and installed in accordance with Section 304.1 shall not be required to comply with Sections 507.1.5, 507.2.3, 507.2.5, 507.2.8, 507.3.1, 507.3.3, 507.4 and 507.5. ~~507.4, 507.5, 507.7, 507.11, 507.12, 507.13, 507.14, and 507.15~~. Spaces in which such systems are located shall be considered to be kitchens and shall be ventilated in accordance with Table 403.3. For the purpose of determining the floor area required to be ventilated, each individual *appliance* shall be considered as occupying not less than 100 square feet (9.3 m2).
3. ~~Net exhaust volumes for hoods shall be permitted to be reduced during part-load cooking conditions, where engineered or *listed* multispeed or variable speed controls automatically operate the exhaust system to maintain capture and removal of cooking effluents as required by this section. Reduced volumes shall not be below that required to maintain capture and removal of effluents from the idle cooking appliances that are operating in a standby mode.~~
3. Where cooking appliances are equipped with integral down-draft exhaust systems and such appliances and exhaust systems are listed and labeled for the application in accordance with NFPA 96, a hood shall not be required at or above them.

507.1.1 Operation. Commercial kitchen exhaust hood systems shall operate during the cooking operation. The hood exhaust rate shall comply with the listing of the hood or shall comply with Section 507.5. ~~Type I~~ Hood systems shall be designed and installed to automatically activate the exhaust fan whenever cooking operations occur. The activation of the exhaust fan shall occur through an interlock with the cooking appliances, by means of heat sensors or by means of other approved methods. A method of interlock between an exhaust hood system and appliances equipped with standing pilot burners shall not cause the pilot burners to be extinguished. A method of interlock between an exhaust hood system and cooking appliances shall not involve or depend upon any component of a fire extinguishing system.

The net exhaust volumes for hoods shall be permitted to be reduced during part-load cooking conditions, where engineered or *listed* multispeed or variable speed controls automatically operate the exhaust system to maintain capture and removal of cooking effluents as required by this section. Reduced

volumes shall not be below that required to maintain capture and removal of effluents from the idle cooking appliances that are operating in a standby mode.

~~**507.2 Where required.** A Type I or Type II hood shall be installed at or above all *commercial cooking appliances* in accordance with Sections 507.2.1 and 507.2.2. Where any cooking *appliance* under a single hood requires a Type I hood, a Type I hood shall be installed. Where a Type II hood is required, a Type I or Type II hood shall be installed.~~

> ~~**Exception:** Where cooking appliances are equipped with integral down-draft exhaust systems and such appliances and exhaust systems are listed and labeled for the application in accordance with NFPA 96, a hood shall not be required at or above them.~~

507.1.23 Domestic cooking appliances used for commercial purposes. Domestic cooking appliances utilized for commercial purposes shall be provided with Type I or Type II hoods as required for the type of appliances and processes in accordance with Sections 507.2 and 507.3.

507.1.3 Fuel-burning appliances. Where vented fuel-burning appliances are located in the same room or space as the hood, provisions shall be made to prevent the hood system from interfering with normal operation of the *appliance* vents.

507.1.4 Cleaning. A hood shall be designed to provide for thorough cleaning of the entire hood.

507.1.5 Exhaust outlets. Exhaust outlets located within the hood shall be located so as to optimize the capture of particulate matter. Each outlet shall serve not more than a 12-foot (3658 mm) section of hood.

507.2~~.1~~ Type I hoods. Type I hoods shall be installed where cooking *appliances* produce grease or smoke as a result of the cooking process. Type I hoods shall be installed over *medium-duty*, *heavy-duty* and *extra-heavy duty cooking appliances*. Type I hoods shall be installed over *light-duty cooking appliances* that produce grease or smoke.

> **Exception:** A Type I hood shall not be required for an electric cooking appliance where an approved testing agency provides documentation that the appliance effluent contains 5 mg/m3 or less of grease when tested at an exhaust flow rate of 500 cfm (0.236 m3/s) in accordance with Section 17 of UL 710B.

~~**507.2.1.1 Operation.** Type I hood systems shall be designed and installed to automatically activate the exhaust fan whenever cooking operations occur. The activation of the exhaust fan shall occur through an interlock with the cooking appliances, by means of heat sensors or by means of other *approved* methods. A method of interlock between an exhaust hood system and appliances equipped with standing pilot burners shall not cause the pilot burners to be extinguished. A method of interlock between an exhaust hood system and cooking appliances shall not involve or depend upon any component of a fire extinguishing system.~~

507.2.1~~.2~~ Type I exhaust flow rate label. Type I hoods shall bear a label indicating the minimum exhaust flow rate in cfm per linear foot (1.55 L/s per linear meter) of hood that provides for capture and containment of the exhaust effluent for the cooking appliances served by the hood, based on the cooking appliance duty classifications defined in this code.

507.2.2 Type I extra-heavy-duty. Type I hoods used over *extra-heavy-duty cooking appliances* shall not cover *heavy-*, *medium-* or *light-duty appliances*. Such hoods shall discharge to an exhaust system that is independent of other exhaust systems.

507.2.3 Type I materials. Type I hoods shall be constructed of steel having a minimum thickness of 0.0466 inch (1.181 mm) (No. 18 gage) or stainless steel not less than 0.0335 inch [0.8525 mm (No. 20 MSG)] in thickness.

507.2.4 Type I supports. Type I hoods shall be secured in place by non-combustible supports. All Type I hood supports shall be adequate for the applied load of the hood, the unsupported ductwork, the effluent loading and the possible weight of personnel working in or on the hood.

507.2.5 Type I joints, seams and penetrations. External hood joints, seams and penetrations for Type I hoods shall be made with a continuous external liquid-tight weld or braze to the lowest outermost perimeter of the hood. Internal hood joints, seams, penetrations, filter support frames and other appendages attached inside the hood shall not be required to be welded or brazed but shall be otherwise sealed to be grease tight.

Exceptions:

1. Penetrations shall not be required to be welded or brazed where sealed by devices that are *listed* for the application.
2. Internal welding or brazing of seams, joints and penetrations of the hood shall not be prohibited provided that the joint is formed smooth or ground so as to not trap grease, and is readily cleanable.

507.2.6 Clearances for Type I hood. A Type I hood shall be installed with a *clearance* to combustibles of not less than 18 inches (457 mm).

Exception: *Clearance* shall not be required from gypsum wallboard or 1/2-inch (12.7 mm) or thicker cementitious wallboard attached to noncombustible structures provided that a smooth, cleanable, nonabsorbent and noncombustible material is installed between the hood and the gypsum or cementitious wallboard over an area extending not less than 18 inches (457 mm) in all directions from the hood.

507.2.7 Type I hoods penetrating a ceiling. Type I hoods or portions thereof penetrating a ceiling, wall or furred space shall comply with Section 506.3.11. Field-applied grease duct enclosure systems, as addressed in Section 506.3.11.2, shall not be utilized to satisfy the requirements of this section.

507.2.8 Type I grease filters. Type I hoods shall be equipped with grease filters listed and labeled in accordance with UL 1046 and designed for the specific purpose. Grease-collecting *equipment* shall be provided with access for cleaning. The lowest edge of a grease filter located above the cooking surface shall be not less than the height specified in Table 507.2.8.

TABLE 507.2.8
MINIMUM DISTANCE BETWEEN THE LOWEST EDGE OF A GREASE FILTER AND THE COOKING SURFACE OR THE HEATING SURFACE

Type of Cooking Appliances	Height Above Cooking Surface (feet)
Without exposed flame	0.5
Exposed flame and burners	2
Exposed charcoal and charbroil type	3.5

For SI: 1 foot = 304.8 mm.

507.2.8.1 Criteria. Filters shall be of such size, type and arrangement as will permit the required quantity of air to pass through such units at rates not exceeding those for which the filter or unit was designed or *approved*. Filter units shall be installed in frames or holders so as to be readily removable without the use of separate tools, unless designed and installed to be cleaned in place and the system is equipped for such cleaning in place. Removable filter units shall be of a size that will allow them to be cleaned in a dishwashing machine or pot sink. Filter units shall be arranged in place or provided with drip-intercepting devices to prevent grease or other condensate from dripping into food or on food preparation surfaces.

507.2.8.2. Mounting position of grease filters. Filters shall be installed at an angle of not less than 45 degrees (0.79 rad) from the horizontal and shall be equipped with a drip tray beneath the lower edge of the filters.

507.2.9 Grease gutters for Type I hood. Grease gutters shall drain to an *approved* collection receptacle that is fabricated, designed and installed to allow access for cleaning.

507.3~~2.2~~ Type II hoods. Type II hoods shall be installed above dishwashers and appliances that produce heat or moisture and do not produce grease or smoke as a result of the cooking process, except where the heat and moisture loads from such appliances are incorporated into the HVAC system design or into the design of a separate removal system. Type II hoods shall be installed above all appliances that produce products of *combustion* and do not produce grease or smoke as a result of the cooking process. Spaces containing cooking appliances that do not require Type II hoods shall be provided with exhaust at a rate of 0.70 cfm per square foot (0.00033 m3/s). For the purpose of determining the floor area required to be exhausted, each individual *appliance* that is not required to be installed under a Type II hood shall be considered as occupying not less than 100 square feet (9.3 m2). Such additional square footage shall be provided with exhaust at a rate of 0.70 cfm per square foot [.00356 m3/(s · m2)].

~~**507.2.3 Domestic cooking appliances used for commercial purposes.** Domestic cooking appliances utilized for commercial purposes shall be provided with Type I or Type II hoods as required for the type of appliances and processes in accordance with Sections 507.2, 507.2.1 and 507.2.2.~~

~~**507.2.4 Extra-heavy-duty.** Type I hoods for use over *extra-heavy-duty cooking appliances* shall not cover *heavy-*, *medium-* or *light-duty appliances*. Such hoods shall discharge to an exhaust system that is independent of other exhaust systems.~~

~~**507.3 Fuel-burning appliances.** Where vented fuel-burning appliances are located in the same room or space as the hood, provisions shall be made to prevent the hood system from interfering with normal operation of the *appliance* vents.~~

~~**507.4 Type I materials.** Type I hoods shall be constructed of steel having a minimum thickness of 0.0466 inch (1.181 mm) (No. 18 gage) or stainless steel not less than 0.0335 inch [0.8525 mm (No. 20 MSG)] in thickness.~~

507.3.1~~5~~ Type II hood materials. Type II hoods shall be constructed of steel having a minimum thickness of 0.0296 inch (0.7534 mm) (No. 22 gage) or stainless steel not less than 0.0220 inch (0.5550 mm) (No. 24 gage) in thickness, copper sheets weighing not less than 24 ounces per square foot (7.3 kg/m2) or of other *approved* material and gage.

507.3.2~~6~~ Type II Supports. ~~Type I hoods shall be secured in place by non-combustible supports.~~ All ~~Type I and~~ Type II hood supports shall be adequate for the applied load of the hood, the unsupported ductwork, the effluent loading and the possible weight of personnel working in or on the hood.

~~**507.7 Hood joints, seams and penetrations.** Hood joints, seams and penetrations shall comply with Sections 507.7.1 and 507.7.2.~~

~~**507.7.1 Type I hoods.** External hood joints, seams and penetrations for Type I hoods shall be made with a continuous external liquid-tight weld or braze to the lowest outermost perimeter of the hood. Internal hood joints, seams, penetrations, filter support frames and other appendages attached inside the hood shall not be required to be welded or brazed but shall be otherwise sealed to be grease tight.~~

~~**Exceptions:**~~

~~1. Penetrations shall not be required to be welded or brazed where sealed by devices that are *listed* for the application.~~
~~2. Internal welding or brazing of seams, joints and penetrations of the hood shall not be prohibited provided that the joint is formed smooth or ground so as to not trap grease, and is readily cleanable.~~

507.3.3~~7.2~~ Type II hoods joint, seams and penetrations. Joints, seams and penetrations for Type II hoods shall be constructed as set forth in Chapter 6, shall be sealed on the interior of the hood and shall provide a smooth surface that is readily cleanable and watertight.

~~**507.8 Cleaning and grease gutters.** A hood shall be designed to provide for thorough cleaning of the entire hood. Grease gutters shall drain to an *approved* collection receptacle that is fabricated, designed and installed to allow access for cleaning.~~

~~**507.9 Clearances for Type I hood.** A Type I hood shall be installed with a *clearance* to combustibles of not less than 18 inches (457 mm).~~

~~**Exception:** *Clearance* shall not be required from gypsum wallboard or 1/2-inch (12.7 mm) or thicker cementitious wallboard attached to noncombustible structures provided that a smooth, cleanable, nonabsorbent and noncombustible material is installed between the hood and the gypsum or cementitious wallboard over an area extending not less than 18 inches (457 mm) in all directions from the hood.~~

~~**507.10 Hoods penetrating a ceiling.** Type I hoods or portionsthereof penetrating a ceiling, wall or furred space shall comply with Section 506.3.11. Field-applied grease duct enclosure systems, as addressed in Section 506.3.11.2, shall not be utilized to satisfy the requirements of this section.~~

~~**507.11 Grease filters.** Type I hoods shall be equipped with grease filters listed and labeled in accordance with UL 1046 and designed for the specific purpose. Grease-collecting *equipment* shall be provided with access for cleaning. The lowest edge of a grease filter located above the cooking surface shall be not less than the height specified in Table 507.11.~~

~~**TABLE 507.11**~~
~~**MINIMUM DISTANCE BETWEEN THE LOWEST EDGE OF A GREASE FILTER AND THE COOKING SURFACE OR THE HEATING SURFACE**~~

~~Type of Cooking Appliances~~	~~Height Above Cooking Surface (feet)~~
~~Without exposed flame~~	~~0.5~~
~~Exposed flame and burners~~	~~2~~
~~Exposed charcoal and charbroil type~~	~~3.5~~

~~For SI: 1 foot = 304.8 mm.~~

~~**507.11.1 Criteria.** Filters shall be of such size, type and arrangement as will permit the required quantity of air to pass through such units at rates not exceeding those for which the filter or unit was designed or *approved*. Filter units shall be installed in frames or holders so as to be readily removable without the use of separate tools, unless designed and installed to be cleaned in place and the system is equipped for such cleaning in place. Removable filter units shall be of a size that will allow them to be cleaned in a dishwashing machine or pot sink. Filter units shall be arranged in place or provided with drip-intercepting devices to prevent grease or other condensate from dripping into food or on food preparation surfaces.~~

~~**507.11.2 Mounting position.** Filters shall be installed at an angle of not less than 45 degrees (0.79 rad) from the horizontal and shall be equipped with a drip tray beneath the lower edge of the filters.~~

507.4 Hood size and location. Hoods shall comply with the overhang, set back and height requires in accordance with Sections 507.4.1 and 507.4.2 based on the type hood.

507.4.1 ~~12~~ Canopy hoods. The inside lower edge of canopy-type Type I and II commercial hoods shall overhang or extend a horizontal distance of not less than 6 inches (152 mm) beyond the edge of the top horizontal surface of the *appliance* on all open sides. The vertical distance between the front lower lip of the hood and such surface shall not exceed 4 feet (1219 mm).

Exception: The hood shall be permitted to be flush with the outer edge of the cooking surface where the hood is closed to the *appliance* side by a noncombustible wall or panel.

507.4.2 ~~14~~ Noncanopy hoods. Noncanopy-type hoods shall be located a maximum of 3 feet (914 mm) above the cooking surface. The edge of the hood shall be set back a maximum of 1 foot (305 mm) from the edge of the cooking surface.

507.5 ~~13~~ Capacity of hoods. Commercial food service hoods shall exhaust a minimum net quantity of air determined in accordance with this section and Sections 507.5~~13~~.1 through 507.5~~13~~.5. The net quantity of *exhaust air* shall be calculated by subtracting any airflow supplied directly to a hood cavity from the total exhaust flow rate of a hood. Where any combination of *heavy-duty*, *medium-duty* and *light-duty cooking appliances* are utilized under a single hood, the exhaust rate required by this section for the heaviest duty *appliance* covered by the hood shall be used for the entire hood.

507.5~~13~~.1 Extra-heavy-duty cooking appliances. The minimum net airflow for hoods, as determined by Section 507.1~~2~~, used for *extra-heavy-duty cooking appliances* shall be determined as follows:

Type of Hood	CFM per linear foot of hood
Backshelf/pass-over	Not allowed
Double island canopy (per side)	550
Eyebrow	Not allowed
Single island canopy	700
Wall-mounted canopy	550

For SI: 1 cfm per linear foot = 1.55 L/s per linear meter.

507.5~~13~~.2 Heavy-duty cooking appliances. The minimum net airflow for hoods, as determined by Section 507.1~~2~~, used for *heavy-duty cooking appliances* shall be determined as follows:

Type of Hood	CFM per linear foot of hood
Backshelf/pass-over	400
Double island canopy (per side)	400
Eyebrow	Not allowed
Single island canopy	600
Wall-mounted canopy	400

For SI: 1 cfm per linear foot = 1.55 L/s per linear meter.

507.5~~13~~.3 Medium-duty cooking appliances. The minimum net airflow for hoods, as determined by Section 507.1~~2~~, used for *medium-duty cooking appliances* shall be determined as follows:

Type of Hood	CFM per linear foot of hood
Backshelf/pass-over	300
Double island canopy (per side)	300
Eyebrow	250
Single island canopy	500
Wall-mounted canopy	300

For SI: 1 cfm per linear foot = 1.55 L/s per linear meter.

507.5~~13~~.4 Light-duty cooking appliances. The minimum net airflow for hoods, as determined by Section 507.1~~2~~, used for *light-duty cooking appliances* and food service preparation shall be determined as follows:

Type of Hood	CFM per linear foot of hood
Backshelf/pass-over	250
Double island canopy (per side)	250
Eyebrow	250

Single island canopy	400
Wall-mounted canopy	200

For SI: 1 cfm per linear foot = 1.55 L/s per linear meter.

507.5~~13~~.5 Dishwashing appliances. The minimum net airflow for Type II hoods used for dishwashing appliances shall be 100 CFM per linear foot of hood length.

Exception: Dishwashing appliances and *equipment* installed in accordance with Section 507.3~~2.2~~.

~~**507.14 Noncanopy size and location.** Noncanopy-type hoods shall be located a maximum of 3 feet (914 mm) above the cooking surface. The edge of the hood shall be set back a maximum of 1 foot (305 mm) from the edge of the cooking surface.~~

~~**507.15 Exhaust outlets.** Exhaust outlets located within the hood shall be located so as to optimize the capture of particulate matter. Each outlet shall serve not more than a 12-foot (3658 mm) section of hood.~~

507.6~~16~~ Performance test. A performance test shall be conducted upon completion and before final approval of the installation of a ventilation system serving *commercial cooking appliances*. The test shall verify the rate of exhaust airflow required by Section 507.5~~13~~, makeup airflow required by Section 508 and proper operation as specified in this chapter. The permit holder shall furnish the necessary test *equipment* and devices required to perform the tests.

507.6~~16~~.1 Capture and containment test. The permit holder shall verify capture and containment performance of the exhaust system. This field test shall be conducted with all appliances under the hood at operating temperatures, with all sources of outdoor air providing *makeup air* for the hood operating and with all sources of recirculated air providing conditioning for the space in which the hood is located operating. Capture and containment shall be verified visually by observing smoke or steam produced by actual or simulated cooking, such as with smoke candles, smoke puffers, etc.

Reason: This section needs to be reorganized. The scope of this section has become much too large and non-cohesive due to multiple "tweaks" in the past. Requirements are "jumbled" and bounce around between the different types of hoods. There has been no change to intent in this proposed reorganization, only the presentation of the text has changed.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance an assigned International Code or portion thereof. This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the PMGCAC has held 2 open meetings, multiple conference calls and multiple workgroup calls which included members of the PMGCAC. Interested parties also participated in all of the meetings and conference calls to discuss and debate the proposed changes.

Cost Impact: None

M101-12

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

P69 – 12
422.11(New)

Proponent: Daniel D. Fish, Roda LLC, representing self (info@drainbrain.us)

Add new text as follows:

422.11 Wastewater leak containment, detection and notification. An early-warning wastewater leak containment, detection and notification device shall be required in hospitals and other healthcare occupancies. The device shall contain and detect wastewater leakage from water closets, showers and bathtubs. The device shall be equipped with an auditory alarm, visual signal, and a means for notification to the building occupants, property owners or the property management staff. The auditory alarm shall have a sound pressure level rating of not less than 85 dB when measured at a distance of ten feet.

Reason: Millions of wastewater leaks occur every year in multi-story buildings from leaking drains, waste lines, and toilets. Toilets are especially high risks for water leakage. Research has shown that 30 percent of all toilets in the United States leak. Toilets with unreliable wax gaskets and flanges – a common problem – cause the most damage to the unit below. Also, the float valve that controls water entering the toilet tank often malfunction, which allows water to run into toilet waste line continuously.

Wastewater leaks typically go undetected until considerable damage has been done. These leaks: (1) waste millions of gallons of water, (2) damage property/materials, generating millions of tons of debris that swells landfills, and (3) develop mold on building components, creating property damage and a health hazard. Property owners spend millions of dollars to repair the damage from wastewater leaks and cure mold-related problems

. An early-warning wastewater leak containment, detection, and notification device will give building occupants and facility managers/owners the opportunity to avoid wastewater leak damage and its attendant costs. Taking action early will conserve millions of gallons of water and eliminate the environmental, economic, and health hazards from wastewater leaks. This solution for the age-old wastewater leak problem will meet the intent of this code by safeguarding the public health, safety, and welfare.

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

P69-12

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

P171 – 12
713.12 (New)

Proponent: Daniel D. Fish, Roda LLC, representing self (info@drainbrain.us)

Add new text as follows:

713.12 Wastewater leak containment, detection and notification. An early-warning wastewater leak containment, detection and notification device shall be required in hospitals and other healthcare occupancies stated in section 713.1. This device shall contain and detect a wastewater leak in the building's water closets, showers and bathtubs. This device shall be equipped with an auditory alarm, visual signal, and a means for notification to the affected building occupants, property owners or the property management staff. The auditory alarm shall have a sound pressure level rating of not less than 85 dB when measured at a distance of ten feet.

Reason: Millions of wastewater leaks occur every year in multi-story buildings from leaking drains, waste lines, and toilets. Toilets are especially high risks for water leakage. Research has shown that 30 percent of all toilets in the United States leak. Toilets with unreliable wax gaskets and flanges – a common problem – cause the most damage to the unit below. Also, the float valve that controls water entering the toilet tank often malfunction, which allows water to run into toilet waste line continuously.

Wastewater leaks typically go undetected until considerable damage has been done. These leaks: (1) waste millions of gallons of water, (2) damage property/materials, generating millions of tons of debris that swells landfills, and (3) develop mold on building components, creating property damage and a health hazard. Property owners spend millions of dollars to repair the damage from wastewater leaks and cure mold-related problems.

An early-warning wastewater leak containment, detection, and notification device will give building occupants and facility managers/owners the opportunity to avoid wastewater leak damage and its attendant costs. Taking action early will conserve millions of gallons of water and eliminate the environmental, economic, and health hazards from wastewater leaks. This solution for the age-old wastewater leak problem will meet the intent of this code by safeguarding the public health, safety, and welfare.

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

P171-12

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