

**Adhoc Health Care Committee Report
for Coordination with CTC Care Facilities
Nov. 27, 2012**

Red text is where there is a question.

New Code Changes not previously reviewed by the CTC

Code	Section	K-Tags Number	Comments
IFC	1105(New), 1103.5.2, 1103.7.3		Start Group I-2 section. Move over alarms and sprinklers
IFC	1105.2(New)		Floor level limitations for hospitals
IFC	1105.3(New), 1104.17		Corridor construction for hospitals
IFC	1105.4(New), 1104.5.1, 1104.7, 1104.15, 1104.17.2, Table 1104.17.2, 1104.22		Means of egress for all Group I-2 – mostly a move
IFC	1105.5(New)		Smoke compartments for all Group I-2
IFC	1105.6(New)		Care suites
IFC	1103.7.2		Retrofit – coord. with G31
IFC	1103.1, 1104.1		Exception for hospitals to maintain passive systems after sprinklers added
IFC	5306 and new Section in 1105 to retroactively require medical gas rooms	K143	Correlates with the medical gas transfilling requirements when it occurs within a building.
IFC	604.1.1 (IBC[F] 2702.1.1)		Referencing ASCE 24 for generators.
IFC	1103.4.1	K20	Atriums
IFC	1103.4.8	K71	Trash & Linen Chutes
IFC	1106 (New)	Round 1, Issue 11	Incidental uses
IEBC	1012.1		G31 and G257 separation into conditions
IEBC	607.1.4		Electrical outlets
IEBC	803.3.3		Smoke barriers
IEBC	804.4.1		Fire alarm system

IEBC	805.3.1.2		Fire escapes
IEBC	1002.1		Change of Occupancy

Code changes previously reviewed by the AHC with revisions since the AHC initial review.

Code	Section	KTAG Number	Comments
IFC	605.12		Electrical maintenance
IFC/IBC	IFC 907.2.6.2 (IBC [F] 407.8, 907.2.6.2)		Automatic fire detection – language coordination
IFC	1030.2.1		Security devices and egress locks
IFC	1030.3.1		Maintenance of means of egress
IFC	1104.7		Size of doors – delete?
IEBC	805.10		Refuge area check at alterations
IFC	310.3	K66	No Smoking
IFC	404.2 et. al.	K50 & Round 1, Issue 14	Evacuation
IFC	807.1	Round 1, Issue 1	Decorations
IFC	1103.3	K161	Existing Elevators
IFC	Table 5003.1.1	Round 1, Issue 12A	Alcohol-based hand rub MAQ note
IFC	5306.2.1	K76	Medical Gases
IFC	5705.5, et.al.	Round 1, Issue 12 & K211	ALCOHOL-BASED HAND RUBS

New Code Changes not previously reviewed by the CTC

Fxx-12/13

1105.1(New)

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

IFC SECTION 1105
CONSTRUCTION REQUIREMENTS FOR EXISTING GROUP I-2

IFC 1105.1 General. Existing Group I-2 shall meet the following requirements:

- 1. The minimum fire safety requirements in Section 1103, and**
- 2. The minimum egress requirements in Section 1104, and**

3. The additional egress and construction requirements in Sections 1105.2 through 1105.7.5.2.

Where the provisions of this chapter conflict with the construction requirements that applied at the time of construction, the most restrictive provision shall apply.

1105.7 Group I-2 automatic sprinkler system. An automatic sprinkler system shall be provided throughout existing Group I-2 fire areas. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the level of exit discharge.

1105.8 Group I-2 automatic fire alarm system. An automatic fire alarm system shall be installed in existing Group I-2 occupancies in accordance with Section 907.2.6.2.

Exception: Manual fire alarm boxes in patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.5.2.1 are not exceeded.

Revise IFC Table 1103.1 by adding a new row as follows:

TABLE 1103.1 - OCCUPANCY AND USE REQUIREMENTS^a

Section	Use			Occupancy Classification																			
	High rise	Atrium or covered mall	Underground building	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S	
1104	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1105	=	=	=	=	=	=	=	=	=	=	=	=	=	R	=	=	=	=	=	=	=	=	=

R = The building is required to comply.

a. Existing buildings shall comply with the sections identified as "Required" (R) based on occupancy classification or use, or both, whichever is applicable.

1103.5.2 Group I-2. ~~An automatic sprinkler system shall be provided throughout existing Group I-2 fire areas. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the level of exit discharge.~~ In Group I-2, an automatic sprinkler system shall be provided in accordance with Section 1105.7.

1103.7.3 Group I-2. ~~An automatic fire alarm system shall be installed in existing Group I-2 occupancies in accordance with Section 907.2.6.2.~~ In Group I-2, an automatic fire alarm system shall be installed in accordance with Section 1105.8.

Exception: ~~Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.5.2.1 are not exceeded.~~

Reason:

1105.1 General – Areas in the hospital and nursing homes not in patient care areas will use the general provisions in Section 1103 and 1104. Where there are more restrictive provisions for hospitals, they will be listed in Section 1105. The proposal for new language is limited to hospitals.

These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities. These inspections are required by federal laws for certification and reimbursement. This requirement considers the minimum previously approved construction methods. This is consistent with the federal requirements that these facilities are currently held too.

The provisions for Group I in the following sections would remain in place and applicable.
Sections 1103.4.1, 1104.5

The following sections use the phrase “In other than Group I” – Section 1103.4.2, 1103.4.3, 1103.4.4

Current provisions that were relocated to this section (1105.7 – automatic sprinkler system; 1105.8 – automatic fire alarm system) will remain applicable to all Group I-2.

1105.7 Group I-2 – automatic sprinkler requirements for all Group I-2 relocated from 1103.5.2.

1105.8 Group I-2 automatic fire alarm system – relocated from 1103.7.3.

Fxx-12/13

1105.2(New)

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

1105.2 Construction. Group I-2 Condition 2 shall not be located on a floor level higher than the floor level limitation in Table 1105.2 based on the type of construction.

**Table 1105.2
FLOOR LEVEL LIMITATIONS FOR GROUP I-2 Condition 2**

<u>Construction Type</u>	<u>Automatic Sprinkler System</u>	<u>Allowable Floor Level^a</u>			
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4 or more</u>
<u>IA</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>
	<u>Note c</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>
<u>IB</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>
	<u>Note c</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>
<u>IIA</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>NP</u>
	<u>Note c</u>	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
<u>IIB</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>

<u>IIIA</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
<u>IIIB</u>	<u>Note b</u>	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
<u>IV</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
<u>VA</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
<u>VB</u>	<u>Note b</u>	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>

P = Permitted; NP = Not Permitted

a. Floors level shall be counted based on the number of stories above grade.

b. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

c. The building is equipped with an automatic sprinkler system in accordance with Section 1105.7.

Reason: These provisions are written specifically for hospitals (Group I-2, Condition 2). These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities. These inspections are required by federal laws for certification and reimbursement. This requirement considers the minimum previously approved construction methods. This is consistent with the federal requirements that these facilities are currently held too.

1105.2 Construction - The revision to Section 1105.2 is proposed this retroactive limitation requirement for the allowable height based upon construction type because it is a key component of the regulatory approval for a health care facility, and so that surveying and licensing requirements can be documented and provided for in the IFC. Without these limitations provided for in the IFC, to which the healthcare industry is required to comply and support, the implementation and use of the IFC as a compliance document could not be possible. While most if not all existing hospitals were constructed to comply with these minimum construction requirements, many were constructed using methods that pre-dated the current construction type matrix, and were comprised of an “assembly” (i.e. minimum thickness concrete slab with a metal lath and plaster ceiling below) which provided the necessary fire rating. This section will allow all hospitals to be evaluated on an ongoing basis to verify the system/assembly used to obtain the required fire rating will be maintained or replaced with an equivalent system/assembly.

The existing allowance for the occupancies as stipulated in the proposed table, are less than that for new construction and do not increase the cost of construction and operations beyond what is currently mandated for healthcare facilities.

Fxx-12/13

1105.3(New)

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

202 Definitions:

Dutch door. A door divided horizontally so that the top can be operated independently from the bottom.

1105.3 Corridor construction. In Group I-2, Condition 2 in areas housing patient sleeping or care rooms, corridor walls and the opening protectives therein shall provide a barrier designed to resist the passage of smoke in accordance with Sections 1105.3.1 through 1105.3.4

1105.3.1 Materials. The walls shall be of materials permitted by the building type of construction.

1105.3.2 Fire-resistance rating. Unless required elsewhere in the code, corridor walls are not required to have a fire-resistance rating.

1105.3.3 Corridor Walls Continuity. Corridor walls shall extend from the top of the foundation or floor below to one of the following:

1. The underside of the floor or roof sheathing, deck or slab above.
2. The underside of a ceiling above where the ceiling membrane is constructed to limit the passage of smoke.
3. The underside of a lay-in ceiling system where the ceiling tiles weigh at least one pound per square foot of tile.

1105.3.4 Openings in corridor walls. Openings in corridor walls shall provide protection in accordance with 1105.3.4.1 through 1105.3.4.5.

1105.3.4.1 Windows. Windows in corridor walls shall be sealed to limit the passage of smoke, or the window shall be automatic closing upon detection of smoke, or the window opening shall be protected by an automatic closing device that closes upon detection of smoke.

Exception: In smoke compartments not containing patient sleeping rooms, pass-through windows or similar openings shall not be required to be protected where the openings are not greater than 80 square inches (51 613 mm²) and located with the top edge of the opening below 48 inches above the floor.

1105.3.4.2 Doors. Doors in corridor walls shall comply with Sections 1105.3.4.2.1 through 1105.3.4.2.3.

1105.3.4.2.1 Louvers. Doors in corridor walls shall not include louvers, transfer grills or similar openings.

Exception: Doors shall be permitted to have louvers, transfer grills or similar openings at toilet rooms or bathrooms; storage rooms that do not contain storage of flammable or combustible material;

and storage rooms that are not required to be separated as incidental uses.

1105.3.4.2.2 Corridor doors. Doors in corridor walls shall limit the transfer of smoke by complying with the following:

1. Doors shall be constructed of not less than 1-3/4 inch (44 mm) thick solid bonded core wood or capable of resisting fire for a minimum of 1/3 hours.
2. Frames for side hinged swinging doors shall have stops on the sides and top to limit transfer of smoke.
3. Where provided, vision panels in doors shall be wired glass panels with steel frames or fixed glass window assembly installed to limit the passage of smoke.
4. Doors undercuts shall not exceed 1 inch (25 mm).
5. Doors shall be positive latching with devices that resist not less than 5 pounds (22.2 N). Roller latches are prohibited.

1105.3.4.2.3 Dutch doors. Where provided, dutch doors shall comply with Section 1105.3.4.2.2. In addition, dutch doors shall be equipped with latching devices on either the top or bottom leaf to allow leaves to latch together. The space between the leaves shall be protected with devices such as astragals to limit the passage of smoke.

1105.3.4.2.4 Self- or automatic-closing doors. Where self- or automatic-closing doors are required, closers shall be maintained in operational condition.

1105.3.5 Penetrations. The space around penetrating items shall be filled with an *approved* material to limit the passage of smoke.

1105.3.6 Joints. Joints shall be filled with an *approved* material to limit the passage of smoke.

1105.3.7 Ducts and air transfer openings. The space around a duct penetrating a smoke partition shall be filled with an *approved* material to limit the passage of smoke. Air transfer openings in smoke partitions shall be provided with a *smoke damper* complying with Section 717.3.2.2 of the International Building Code.

Exception: 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.

1104.17 Corridors construction. Corridors serving an occupant load greater than 30 and the openings therein shall provide an effective barrier to resist the movement of

smoke. Transoms, louvers, doors and other openings shall be kept closed or be self closing. In Group I-2, corridors in areas housing patient sleeping or care rooms shall comply with Section 1105.3.

Exceptions:

1. Corridors in occupancies other than in Group H and I-2, which are equipped throughout with an approved automatic sprinkler system.
2. ~~Patient room doors in corridors in occupancies in Group I-2 where smoke barriers are provided in accordance with the International Building Code.~~
- 3.2. Corridors in occupancies in Group E where each room utilized for instruction or assembly has at least one-half of the required means of egress doors opening directly to the exterior of the building at ground level.
- 4.3. Corridors that are in accordance with the *International Building Code*.

Reason:

What do you do when corridors are not smoke partitions? Consistent with IBC 710 terminology and format. These provisions are written specifically for hospitals (Group I-2, Condition 2). These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities. These inspections are required by federal laws for certification and reimbursement. This requirement considers the minimum previously approved construction methods. This is consistent with the federal requirements that these facilities are currently held too.

1105.3 Corridor construction– This provision deals with what would be acceptable for corridors in patient care areas where the spaces is so old that it does not meet smoke barrier provisions. The format and items addressed are consistent with IBC Section 710.

1105.3.1 Material– see IBC 710.2

1105.3.2 Fire-resistance rating – see 710.4

1105.3.3 Corridor walls continuity – see 710.4 – coordinated with FS42

1105.3.4.1 Windows – see 710.5; improvement in language to deal with rolling shutters. The 80 sq.in. in the exception is from NFPA 101 19.3.6.5.

1105.3.4.2 Doors – see 710.5.2

1105.3.4.2.1 Louvers – see 710.5.2.1 – improved language

1105.3.4.2.2 Corridor doors – see 710.5.2.2; for Item 5, the ‘positive’ latching matches 407.3 terminology

1105.2.4.2.3 Dutch Doors – Add new definition and requirements for dutch doors.

1105.4.2.4 Self- or automatic-closing doors – 7105.2.3 (is this already covered under IFC maintenance?)

1105.3.5 Penetrations – see 710.6

1105.3.6 Joints – see 710.7

Fxx-12/13

1105.4(New)

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

1105.4 Means of egress. In addition to the means of egress requirements in Section 1104, Group I-2 facilities shall meet the means of egress requirements in Section 1105.4.1 through 1105.4.7.

1105.4.1 Exit signs and emergency illumination. The power system for exit signs and emergency illumination for the means of egress shall provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator.

1105.4.2 Emergency power for operational needs. The essential electrical system shall be capable of supplying services in accordance with NFPA 99.

1105.4.3 Size of Door. Means of egress doors used for the movement of patients in stretchers or beds shall provide a minimum clear width of 41.5 inches (1054 mm). The height of door opening shall not be less than 80 inches (2032 mm).

Exception: Door closers and door stops shall be permitted to be 78 inches minimum above the floor.

1105.4.4 Ramps. In areas where ramps are used for movement of patients in stretchers or beds, the clear width of the ramp shall not be less than 48 inches (1219 mm).

1105.4.5 Corridor width. In areas where corridors are used for movement of patients in stretchers or beds, the clear width of the corridor shall not be less than 48 inches (1219 mm).

1105.4.6 Dead end corridors. In smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall not exceed 30 feet unless approved by the fire official.

1105.4.7 Separation of exit access doors. Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet shall have at least two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors.

1105.4.8 Aisles. In areas where aisles are used for movement of patients in stretchers or beds, the clear width of the aisle shall not be less than 48 inches (1219 mm).

1104.5.1 Emergency power duration and installation. In other than Group I-2, ~~systems requiring the emergency power system shall provide power for not less than 60 minutes and consist of storage batteries, unit equipment or an on-site generator. In Group I-2, the emergency power essential electrical systems shall comply with Sections 1105.4.1 and 1105.4.2 provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator.~~ The installation of the emergency power system shall be in accordance with Section 604.

1104.7 Size of doors. The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of not less than 28 inches (711 mm). Where this section requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). ~~The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. In Group I-2, doors serving as means of egress doors in an occupancy in Group I-2 and used for the movement of patients in stretchers or beds shall comply with Section 1105.5. provide a clear width not less than 41.5 inches (1054 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal.~~ The height of doors openings shall not be less than 80 inches (2032 mm).

Exceptions:

1. The minimum and maximum width shall not apply to door openings that are not part of the required means of egress in occupancies in Groups R-2 and R-3.
2. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum width.
3. Width of door leaves in revolving doors that comply with Section 1008.1.4.1 shall not be limited.
4. Door openings within a dwelling unit shall not be less than 78 inches (1981 mm) in height.
5. Exterior door openings in dwelling units, other than the required exit door, shall not be less than 76 inches (1930 mm) in height.
6. Exit access doors serving a room not larger than 70 square feet (6.5 m²) shall be not less than 24 inches (610 mm) in door width.
7. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the door.

1104.15 Width of ramps. Existing Ramps are permitted to have a minimum width of 30 inches (762 mm) but not less than the width required for the number of occupants served as determined by Section 1005.1. In Group I-2, ramps serving as a means of egress and used for the movement of patients in stretchers or beds shall comply with Section 1105.8.

1104.17.2 1104.18 Dead ends end corridors. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead ends do not exceed the limits specified in Table 1104.17.2 18. In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall be comply with Section 1105.7.

Exception: A dead-end passageway or corridor shall not be limited in length where the length of the dead end passageway or corridor is less than 2.5 times the least width of the dead-end passageway or corridor.

TABLE 1104.17.2 1104.18 - COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy)

OCCUPANCY	COMMON PATH LIMIT		DEAD-END LIMIT		TRAVEL DISTANCE LIMIT	
	Unsprinkled (feet)	Sprinkled (feet)	Unsprinkled (feet)	Sprinkled (feet)	Unsprinkled (feet)	Sprinkled (feet)
Group I-1	75	75	20	50	200	250
Group I-2 (Health care)	NR ^e	NR ^e	NR-Note f	NR-Note f	150	200 ^c
Group I-3 (Detention and correctional—Use Conditions II, III, IV, V)	100	100	NR	NR	150 ^c	200 ^c
Group I-4 (Day Care Centers)	NR	NR	20	20	200	250

(Portions of table not shown remain unchanged...)

NR = No requirements.

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².

- a. 20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons.
- b. See Section 1028.9.5 for dead-end aisles in Group A occupancies.
- c. This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy chapter.
- d. See the *International Building Code* for special requirements on spacing of doors in aircraft hangars.
- e. In Group I-2, separation of exit access doors within a Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet shall have at least two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors shall comply with Section 1105.7.

Note: Confusion of Table being for common path of travel but note e being for door separation. IBC 407.4.2 and 407.4.3.5.3 set a travel distance at 50 and 100 feet respectively. If we do not want to have this in the table, the reason statement should probably say why.

- f. In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall comply with Section 1105.6.
- g. f. Where a tenant space in Group B, S and U occupancies has an occupant load of not more than 30, the length of a common path of egress travel shall not be more than 100 feet.

1104.22 Minimum aisle width. The minimum clear width of aisles shall be:

1. Forty-two inches (1067 mm) for aisle stairs having seating on each side.
Exception: Thirty-six inches (914 mm) where the aisle serves less than 50 seats.
2. Thirty-six inches (914 mm) for stepped aisles having seating on only one side.
Exception: Thirty inches (760 mm) for catchment areas serving not more than 60 seats.
3. Twenty inches (508 mm) between a stepped aisle handrail or guard and seating when the aisle is subdivided by the handrail.
4. Forty-two inches (1067 mm) for level or ramped aisles having seating on both sides.
Exception: Thirty-six inches (914 mm) where the aisle serves less than 50 seats.
5. Thirty-six inches (914 mm) for level or ramped aisles having seating on only one side.
Exception: Thirty inches (760 mm) for catchment areas serving not more than 60 seats.
6. Twenty-three inches (584 mm) between a stepped stair handrail and seating where an aisle does not serve more than five rows on one side.
7. In Group I-2, where aisles are used for movement of patients in stretchers or beds aisles shall comply with 1105.8.

Reason:

Means of egress in areas where there are movement of patients in stretchers or beds. Reordered to be consistent with IFC 1104.

This is mostly just a move of requirements. Since the current provisions are applicable to all Group I-2, this section is written addressing all Group I-2 where applicable. Many areas of nursing homes do not include movement of patients in beds.

These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities. These inspections are required by federal laws for certification and reimbursement. This requirement considers the minimum previously approved construction methods. This is consistent with the federal requirements that these facilities are currently held to.

1105.4 Means of egress - Means of egress in areas where there are movement of patients in stretchers or beds. The order is consistent with IFC 1104.

1105.4.1 Emergency power for means of egress

1105.4.2 Emergency power for operational needs – similar to IFC 604.3

1105.4.3 Size of door – Transferred from IFC 1104.7; follows format of IBC 1008.1.1.

1105.4.4 Ramps – reference from IFC 1104.15

1105.4.5 Corridor width – Coordinated with IBC 1018 and MOE proposal to IFC 1030 for maintenance of corridor width.

1105.4.6 Dead end corridors – referenced from IFC 1104.17.2

1105.4.7 Separation of exit access doors – note moved from footnote e in Table 1014.7.2

1105.4.8 Aisles – referenced from IFC 1104.22

Fxx-12/13

1105.5(New)

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

1105.5 Smoke compartments. Smoke compartments shall be provided in existing Group I-2, in accordance with Sections 1105.5.1 through 1105.5.4.

1105.5.1 Design. Smoke barriers shall be provided to subdivide each story used for patients sleeping with an occupant load of more than 30 patients into no fewer than two smoke compartments.

1105.5.1.1 Refuge areas. 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 30 net square feet (2.8 m²) for each care recipient confined to bed or stretcher.
2. Not less than 15 square feet (1.4 m²) for each resident in a Group I-2 using mobility assistance devices.
3. Not less than 6 square feet (0.56 m²) for each occupant not addressed in Items 1 and 2.

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

1105.5.2 Smoke barriers. Smoke barriers shall be constructed in accordance with Section 709 of the *International Building Code*.

Exceptions:

1. A 1/2 –hour fire-resistance rating is required for smoke barriers.
2. Smoke barriers shall be permitted to terminate at an atrium enclosure in accordance with Section 404.6 of the *International Building Code*.

1105.5.3 Opening protectives. Openings in smoke barriers shall be protected in accordance with Section 716 of the *International Building Code*. Opening protectives shall have a with a minimum fire-protection-rating of 1/3 hours.

Exception: Wired glass vision panels in doors shall be permitted to remain.

1105.5.4 Duct and air transfer openings. Penetrations in a smoke barrier by duct and air transfer openings shall comply with Section 717 of the *International Building Code*.

Exceptions: Smoke dampers are not required.

Reason: This provision is written smoke compartments for all Group I-2 facilities.

These retroactive requirements are added to assist code officials and surveyors during the ongoing regular inspection of hospital facilities. These inspections are required by federal laws for certification and reimbursement. This requirement considers the minimum previously approved construction methods. This is consistent with the federal requirements that these facilities are currently held too.

1105.5 Smoke compartments –

1105.5.1 Design - This section addresses existing acceptable configuration of smoke barrier walls and smoke barriers for existing hospitals in areas with sleeping rooms.

1105.5.1.1 Refuge area – Adequate sizing of refuge areas. IBC 407.5.1 also includes requirements for independent egress and horizontal assemblies.

1105.5.2 Smoke barriers – The intent is to bring noncompliant smoke barriers to at least ½ hour fire resistance rating. Previously approved smoke barriers are not intended to be reduced to ½. Chapter 7 of the IFC would require maintenance of approved construction.

1105.5.5 Opening protectives - Address doors in smoke barriers in existing Group I-2 occupancies. Reference to 716 is so you that don't loose other requirements.

1105.5.4, Exception 2 addresses hospitals that were originally approved without smoke dampers required. This provision would allow such situations to remain but would prohibit the removal of smoke dampers that were required. Reference to 717 is so you do not loose other requirement for duct and air transfer openings.

Fxx-12/13

1105.6(New)

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

Care Suites

1105.6 Group I-2 care suites. Care suites in existing Group I-2 Condition 2 occupancies shall comply with Section 407.4.3 through 407.4.3.6.2 of the *International Building Code*.

TABLE 1104.17.2 1104.18 - COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy)

OCCUPANCY	COMMON PATH LIMIT		DEAD-END LIMIT		TRAVEL DISTANCE LIMIT	
	Unsprinkled (feet)	Sprinkled (feet)	Unsprinkled (feet)	Sprinkled (feet)	Unsprinkled (feet)	Sprinkled (feet)
Group I-1	75	75	20	50	200	250
Group I-2 (Health care)	NR- <u>Note e</u>	NR- <u>Note e</u>	NR	NR	150	200 ^c
Group I-3 (Detention and correctional—Use Conditions II, III, IV, V)	100	100	NR	NR	150 ^c	200 ^c
Group I-4 (Day Care Centers)	NR	NR	20	20	200	250

(Portions of table not shown remain unchanged...)

NR = No requirements.

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².

- a. 20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons.
- b. See Section 1028.9.5 for dead-end aisles in Group A occupancies.
- c. This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy chapter.
- d. See the *International Building Code* for special requirements on spacing of doors in aircraft hangars.
- e. **In Group I-2, Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet shall have at least two exit access doors placed a distance apart equal to not less than one third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be**

~~served, measured in a straight line between exit access doors shall comply with Section 1105.6.~~

- f. Where a tenant space in Group B, S and U occupancies has an occupant load of not more than 30, the length of a common path of egress travel shall not be more than 100 feet.

Reason:

1105.6 Group I-2 Care Suites – care suites in hospitals can use the provisions revised by Adhoc Health in IBC Section 407.4.3. The new provisions deal with common path of travel, separation of exit access doors, and number of doors passed through (i.e. previously intervening rooms) in suites. This is much more complete than the current text.

Fxx-12/13

1103.7.2

Proponent: Carl Baldassarra, CTC Care Study Group

1103.7.2 Group I-1. An automatic ~~fire alarm~~ smoke detection system shall be installed in existing Group I-1 ~~residential care/assisted living~~ facilities in accordance with Section 907.2.6.1.

Exceptions:

1. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at *exits* if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.5.2 are not exceeded.
2. Where each sleeping room has a *means of egress* door opening directly to an exterior egress balcony that leads directly to the *exits* in accordance with Section 1019, and the building is not more than three stories in height.

Reason: The deletion after Group I-1 is for consistency with the terminology established in G31-12. The change of terminology change is for consistency with Section 907.2.6.1. See below.

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

This will not change the single-station smoke detector requirements in Section 1103.8.

Fxx-12/13

1103.1(New), 1104.1(New), 1105.1(New)

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

SECTION 1103 FIRE SAFETY REQUIREMENTS FOR EXISTING BUILDING

1103.1 Required construction. Existing buildings shall comply with not less than the minimum provisions specified in Table 1103.1 and as further enumerated in Sections 1103.2 through 1103.9.

The provisions of this chapter shall not be construed to allow the elimination of fire protection systems or a reduction in the level of fire safety provided in buildings constructed in accordance with previously adopted codes.

Exceptions:

1. Where approved in accordance with Section 102.4, in Group I-2 **Condition 2** buildings where a sprinkler system installed in accordance with Section 903.3.1.1 (NFPA 13) has been added and the building is now sprinklered throughout, the existing fire resistance ratings, opening protectives, penetrations and joints in assemblies are not required to be maintained where such fire resistance ratings, opening protective, penetrations and joints are not required in new construction for sprinklered buildings.
2. Group U occupancies.

SECTION 1104 MEANS OF EGRESS FOR EXISTING BUILDINGS

1104.1 General. *Means of egress* in existing buildings shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Sections 1104.2 through 1104.23, and the building code that applied at the time of construction. Where the provisions of this chapter conflict with the building code that applied at the time of construction, the most restrictive provision shall apply. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Sections 1104.2 through 1104.24.

Exception: Where approved in Group I-2 **Condition 2** buildings where a sprinkler system installed in accordance with Section 903.3.1.1 (NFPA 13) has been added and the building is now sprinklered throughout, the existing fire resistance ratings, opening protectives, penetrations and joints in assemblies are not required to be maintained where such fire resistance ratings, opening protective, penetrations and joints are not required in new construction for sprinklered buildings.

Reason: Hospitals are now required to be retrofit with a sprinkler system throughout. Once this is accomplished, the hospital should be permitted to allow the same provisions for new construction in a sprinklered buildings when it comes to maintaining rated walls, or altering walls.

While the intent of the new Section 1105 is for hospital specific requirements, there are areas of hospitals that are addressed in the general provisions under Section 1103 and 1104.

If this proposal is successful and the CTC proposal for a new Section 1105 is also approved, the CTC will bring forward a corresponding exception to be applicable for the new Section 1105.1 as follows:

SECTION 1105 – CONSTRUCTION REQUIREMENTS FOR EXISTING GROUP I-2

1105.1 General. Existing Group I-2 shall meet the following requirements:

1. The minimum fire safety requirements in Section 1103, and
2. The minimum egress requirements in Section 1104, and
3. The additional egress and construction requirements in Sections 1105.2 through 1105.7.5.2.

Where the provisions of this chapter conflict with the construction requirements that applied at the time of construction, the most restrictive provision shall apply.

Exception: Where approved in accordance with Section 102.4, in Group I-2 **Condition 2** buildings where a sprinkler system installed in accordance with Section 903.3.1.1 (NFPA 13) has been added and the building is now sprinklered throughout, the existing fire resistance ratings, opening protectives, penetrations and joints in assemblies are not required to be maintained where such fire resistance ratings, opening protective, penetrations and joints are not required in new construction for sprinklered buildings.

F#-13

5306, 1105.XX(New)

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:

SECTION 5306

MEDICAL GASES SYSTEMS

5306.1 General. ~~Compressed Medical gases at healthcare related hospitals and similar facilities intended for patient care, inhalation or sedation including, but not limited to, analgesia systems for dentistry, podiatry, veterinary and similar uses shall comply with Sections 5306.2 through 5306.4 in addition to other requirements of this chapter.~~

5306.2 Interior supply location. Medical gases shall be stored in areas dedicated to the storage of such gases without other storage or uses. Where containers of medical gases in quantities greater than the permit amount are located inside buildings, they shall be in a 1-hour exterior room, a 1-hour interior room or a gas cabinet in accordance with Section 5306.2.1, 5306.2.2 or 5306.2.3, respectively. Rooms or areas where medical gases are stored or used in quantities exceeding the *maximum allowable quantity per control area* as set forth in Section 5003.1 shall be in accordance with the *International Building Code* for high-hazard Group H occupancies.

5306.2.1 One-hour exterior rooms. A 1-hour exterior room shall be a room or enclosure separated from the accordance with Section 707 of the *International Building Code* or *horizontal assemblies* constructed in accordance with Section 711 of the *International Building Code*, or both, with a *fire-resistance rating* of not less than 1 hour.

Openings between the room or enclosure and interior spaces shall be self-closing smoke- and draft-control assemblies having a *fire protection rating* of not less than 1 hour. Rooms shall have at least one exterior wall that is provided with at least two vents. Each vent shall not be less than 36 square inches (0.023 m²) in area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the ceiling. Rooms shall be provided with at least one automatic sprinkler to provide container cooling in case of fire.

5306.2.2 One-hour interior room. When an exterior wall cannot be provided for the room, automatic sprinklers shall be installed within the room. The room shall be exhausted through a duct to the exterior. Supply and exhaust ducts shall be enclosed in a 1-hour-rated shaft enclosure from the room to the exterior. *Approved* mechanical ventilation shall comply with the *International Mechanical Code* and be provided at a minimum rate of 1 cubic foot per minute per square foot [0.00508 m³/(s · m²)] of the area of the room.

5306.2.3 Gas cabinets. Gas cabinets shall be constructed in accordance with Section 5003.8.6 and the following:

1. The average velocity of ventilation at the face of access ports or windows shall not be less than 200 feet per minute (1.02 m/s) with a minimum of 150 feet per minute (0.76 m/s) at any point of the access port or window.
2. They shall be connected to an exhaust system.
3. They shall be internally sprinklered.

5306.3 Exterior supply locations. Oxidizer medical gas systems located on the exterior of a building with quantities greater than the permit amount shall be located in accordance with Section **6534.2.1**.

Note: Find correct section number. Errata.

5306.4 Transfilling. Transfilling areas and operations including, but not limited to, ventilation and separation, shall comply with NFPA 99.

5306.4 5306.5 Medical gas systems. Medical gas systems including, but not limited to, distribution piping, supply manifolds, connections, pressure regulators and relief devices and valves, shall comply with NFPA 99 and the general provisions of this chapter.

11XX.X Medical gases. Medical gases stored and transferred in healthcare related facilities shall be in accordance with Chapter 53.

REASON: This proposal addresses CMS KTag 143. This KTag is concerned with the transferring or what is often termed transfilling of oxygen in a gaseous or liquid form within hospitals and other medical facilities. The current provisions in the IFC are actually fairly consistent with NFPA 99 and the requirements of the KTags in this respect. The only major differences found were that the IFC requirements do not specifically address transfilling which has been defined in this proposal and the type of floor surface allowed. Transfilling is the transfer of oxygen to smaller portable containers from larger storage containers. This can occur in liquid or gaseous state. Currently the provisions only relate to storage. This has been revised by the proposal. Additionally as noted the type of flooring needed to be addressed. The specific revision relates to the CMS guidelines which call for ceramic or concrete flooring. The issue relates to prohibiting surfaces that contain oil such as asphalt. Other terms were considered such as impervious but that does not meet the non combustible intent of the flooring.

There are a couple other issues addressed by this proposal which are as follows:

Title 5306. This was changed to delete the term “systems” since transfilling and storage of oxygen is not necessarily part of a system. This will be a more general title which is more applicable to all of Section 5306.

Section 5306.1. The terms hospitals and similar facilities were deleted in favor of a more all encompassing set of terms “Healthcare related facilities.” The current language seems to give priority to hospitals and can be somewhat unclear that it would apply to ambulatory care facilities and nursing homes.

Retroactive requirement. The other revision was the addition of a retroactive requirement in Chapter 11 which basically sends you to Chapter 53 in general for compressed gases. A general reference was made since it would not simply be compliance with Section 5306 that is necessary. The medical gas requirements are only one aspect of the regulation of compressed gases.

Fxx-12/13

604.1.1 ([F]2702.1.1)

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

Revise as follows:

IFC 604.1.1(IBC [F]2702.1.1) Stationary generators. Stationary emergency and standby power generators required by this code shall be *listed* in accordance with UL 2200.

IFC 604.2.15 (IBC [F] 2702.2.16) Group I-2 Occupancies. Essential electrical power for Group I-2 occupancies shall be in accordance with Section 407.11 of the *International Building Code* and shall be installed in accordance with ASCE 24.

Add to Chapter 80:

ASCE 24 - Flood Resistant Design and Construction

Reason: See G80-12 – IFC 604.2.15

There is no way to get to the requirements or limitations regarding generator placement for healthcare facilities that are in the standard if the code text for the specific code section does not take you there.

The Adhoc committee on healthcare identified this coordination oversight as it has been identified in healthcare facilities and that generators are being installed in areas subject to flooding, and although they were designed to meet the structural loads for the flooding, they would operationally fail.

There is no cost impact for these requirements because the compliance with ASCE 24 is required for these facilities; specific reference to ASCE for coordination of requirements applicable to healthcare facilities that require emergency or standby power systems per federal, state and licensing agency requirements and references.

It is an installation construction requirement that is not specifically addressed in the code; emergency and standby power by generators is necessary for life safety and preservation for healthcare and for other occupancies and uses as specified in 2702.

ASCE 24 is currently referenced in the IBC

Fxx-13
1103.4.1

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

Revise as follows:

IFC 1103.4.1 Group I-2 occupancies. In Group I-2 occupancies, interior vertical openings connecting two or more stories shall be protected with 1-hour fire-resistance-rated construction.

Exceptions:

1. In Group I-2 **Condition 2** equipped throughout with an automatic sprinkler system, vertical opening connecting two or more stories need not be protected with 1-hour fire-resistance-rated construction where both of the following conditions are met:

1.1. The atrium are accounted for in the design of a smoke control system in accordance with Section 909.

1.2 The floor levels within the vertical opening shall contain only low or ordinary fire hazard uses.

2. In Group I-2 **Condition 2** where an automatic sprinkler system is installed in accordance with Section 404.6 of the *International Building Code*, glass walls shall be considered to be equivalent to 1-hour fire-resistance-rated construction for purposes of this section. Where glass doors are provided in the glass wall, they shall be either self-closing or automatic-closing.

3. In Group I-2 **Condition 2** 1-hour fire-resistance-rated construction is not required where a glass-block wall assembly complying with Section 2110 of the *International Building Code* and having a ¾-hour fire protection rating is provided.

Reason: The intent of this code change is to clarify the allowable use and construction of atria in hospitals. This adds language to clarify the fire hazard class allowed in the existing atrium (no higher than ordinary), as opposed to only low hazard class in new. A smoke control system is also acknowledged as a factor when it comes to separation of the atrium, and clarifies that the smoke control system's engineering analysis must account for any spaces open to it.

Glass walls points back to the language in the IBC in an attempt to set that as a minimum, retroactive standard. It is far simpler to address a potential deficiency with addition of a smoke control system or properly installed sprinklers at glass, rather than reconstructing the walls themselves.

This proposal would make the IFC consistent with federal standards that are in place to maintain hospitals, and therefore would not represent an increase in cost.

Fxx-13

1103.4.8 (New)

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

Add new text as follows:

1103.4.8 Waste and linen chutes. In Group I-2 **Condition 2**, existing waste and linen chutes shall comply with Sections 1103.4.8.1 through 1103.4.8.5.

1103.4.8.1 Enclosure. Chutes shall be enclosed with 1-hour fire-resistance-rated construction. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than 1-hour.

1103.4.8.2 Chute intakes. Chute intakes shall comply with Section 1103.4.8.2.1 or 1103.4.8.2.2.

1103.4.8.2.1 Chute intake direct from corridor. Where intake to chutes is direct from a corridor, the intake opening shall be equipped with a chute intake door in accordance with Section 716 of the *International Building Code* and having a fire protection rating of not less than 1-hour.

1103.4.8.2.2 Chute intake via a chute intake room. Where the intake to chutes is accessed through a chute intake room, the room shall be enclosed with 1-hour fire-resistance rated construction. Opening protectives for the intake room shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than ¾ hour. Opening protective for the chute enclosure shall be in accordance with Section 1103.4.8.1.

1103.4.8.3 Automatic sprinkler system. Chutes shall be equipped with an *approved automatic sprinkler system* in accordance with Section 903.2.11.2.

1103.4.8.4 Chute discharge rooms. Chutes shall terminate in a dedicated chute discharge room. Such rooms shall be separated from the remainder of the building by a minimum of 1-hour fire-resistance-rated construction. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than 1-hour.

1103.4.8.5 Chute discharge protection. Chute discharges shall be equipped with a self-closing or automatic-closing opening protective in accordance with Section 716 of the *International Building Code* and having a fire protection rating of not less than 1-hour.

1103.4.9 Flue-fed incinerators. In Group I-2 **Condition 2** the continued use of existing flue-fed incinerators is prohibited. Existing flue-fed incinerator rooms and associated flue shafts shall be protected with 1-hour fire-resistance-rated construction and have no other vertical openings connected with the space other than the associated flue. Opening protectives shall be in accordance with Section 716 of the *International Building Code* and have a fire protection rating of not less than 1-hour.

Reason: The intent of this code change is to clarify the allowable use and construction of chutes and incinerators in ambulatory care facilities and hospitals. These items are still used as an integral part of the operation of a hospital, especially the waste or linen chutes. Some incinerators are still in use, but this proposed requirement seeks to separate them from other vertical openings, especially a trash chute, by requiring a separate discharge room from the incinerator. **Most incinerators are not in use or are otherwise abandoned in existing facilities (some new are permitted – reword)**, due to other regulation from entities such as the EPA, and this requirement seeks to separate and protect any potential hazard from the rest of the building.

This proposal would make the IFC consistent with federal standards that are in place to maintain hospitals, and therefore would not represent an increase in cost.

*Explain when chutes without rooms were permitted
Move into new 1105 if approved.*

Fxx-13

1106 (New)

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

Add new text as follows:

SECTION 1106

INCIDENTAL USES IN EXISTING GROUP I-2 **CONDITION 2**

1106.1 General. Incidental uses associated with and located within existing single occupancy or mixed occupancy Group I-2 **Condition 2** buildings and that generally pose a greater level of risk to such occupancies shall comply with the provisions of Sections 1106.2 through 1106.4.2.1. Incidental uses in Group I-2 **Condition 2** occupancies are limited to those listed in Table 1106.1.

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

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

1106.4 Separation and protection. The incidental uses listed in Table 1106.1 shall be separated from the remainder of the building or equipped with an *automatic sprinkler system*, or both, in accordance with the provisions of that table.

1106.4.1 Separation. Where Table 1106.1 specifies a fire-resistance-rated separation, the incidental uses shall be separated from the remainder of the *building* in accordance with Section 509.4.1 of the *International Building Code*.

1106.4.2 Protection. Where Table 1106.1 permits an *automatic sprinkler system* without a fire-resistance-rated separation, the incidental uses shall be separated from the remainder of the building by construction capable of resisting the passage of smoke in accordance with Section 509.4.2 of the *International Building Code*.

1106.4.2.1 Protection limitation. Except as otherwise specified in Table 1106.1 for certain incidental uses, where an *automatic sprinkler system* is provided in accordance with Table 1106.1, only the space occupied by the incidental use need be equipped with such a system.

TABLE 1106.1

INCIDENTAL USES IN EXISTING GROUP I-2 **CONDITION 2**

<u>ROOM OR AREA</u>	<u>SEPARATION AND/OR PROTECTION</u>
<u>Furnace room where any piece of equipment is over 400,000 Btu per hour input.</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>Refrigerant machinery room</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>Hydrogen cutoff rooms, not classified as Group H</u>	<u>2 hours</u>

<u>Incinerator rooms</u>	<u>2 hours and provide automatic sprinkler system</u>
<u>Paint shops not classified as Group H</u>	<u>2 hours; or 1 hour and provide automatic sprinkler system</u>
<u>Laboratories not classified as Group H</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>Laundry rooms over 100 square feet</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>Patient rooms equipped with padded surfaces</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>Physical plant maintenance shops.</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>Waste and linen collection rooms with containers with total volume of 10 cubic feet or greater.</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>Storage rooms greater than 100 square feet</u>	<u>1 hour or provide automatic sprinkler system</u>
<u>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</u>	<u>2 hours</u>

For SI: 1 square foot = 0.0929 m², 1 pound per square inch (psi) = 6.9 kPa, 1 British thermal unit (Btu) per hour = 0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L.

Reason: The provisions of this code change are being proposed for the IFC to establish requirements for the protection of incidental use areas in existing healthcare facilities. Incidental use area provisions are applicable to new construction in Section 509 of the IBC, however similar provisions are needed for existing healthcare occupancies since the hazards posed by such rooms or spaces are no different for existing buildings than for new. Proposed Section and Table 1106 are very similar to and based upon IBC Section and Table 509, except that references to occupancies other than Group I-2 Condition 2 and ambulatory care facilities are not included. The basic requirements proposed for incidental uses in existing healthcare occupancies rely upon the provisions of the IBC for the specifics of construction and protection. Proposed Sections 1106.2 through 1106.4.2.1 are based on IBC Sections 509.2 through 509.4.2.1, editorially corrected for the IFC and for correlation. These proposed provisions will provide correlation with not only the IBC but also with the current operational and CMS program standards for existing Group I-2 Condition 2 and ambulatory care facilities. A section-by-section summary follows:

1106.1 General: This proposed section establishes the scope of Section 1106 and its applicability to ambulatory care facilities and Group I-2 Condition 2 occupancies. Incidental uses are rooms or areas that constitute special hazards or risks to life safety that are not typically addressed by the provisions for the occupancy group in which they occur even though such rooms or areas may functionally be an extension of the primary use. Only those rooms or areas indicated in Table 1106 are to be regulated as incidental uses. Incidental uses can be located within both single-occupancy and mixed-occupancy buildings. The concern is that those areas designated as incidental uses pose a risk to the remainder of the building, and as such, some degree of protection is required. In general, the nature of these incidental uses is such that they are small areas that are not frequented by the building occupants very often in which a fire could get underway and go unnoticed for a longer time than in a part of the building that is constantly occupied.

1106.2 Occupancy classification: Consistent with the IBC, this proposed section expressly states that incidental uses are not considered as separate and distinct occupancy classifications but, rather, are classified the same as the occupancies in which they are located. As an example, a waste and linen collection room in a hospital would be classified as a portion of the Group I-2 Condition 2 occupancy even though it may present a level of hazard more akin to a Group S-1 occupancy if it were to be classified separately.

1106.3 Area limitations: The proposed floor area limitation of 10 percent for incidental uses emphasizes the ancillary nature of such rooms and areas and correlates with the IBC. Each incidental use would be limited to a maximum floor area of 10 percent of the floor area of the story in which it is located. Where there are two or more tenants located on the same story, the 10 percent limitation is based upon the floor area of each individual tenant space rather than that of the entire story. The application of the limit on a tenant-by-tenant basis is consistent with the concept of incidental uses typically being ancillary only to a portion of the building, i.e., the specific tenant occupancy.

1106.4 Separation and protection: In addition to identifying those rooms or areas that warrant regulation as incidental uses, proposed Table 1106 will also indicate the required degree of protection or separation. The requirements identified in Table 1106 vary depending on the incidental use. In some cases, a specific type of separation and/or protection is required, while in others there is an option.

1106.4.1 Separation: Where a fire-resistance rated separation would be required, the incidental use would need to be separated from other portions of the building in accordance with assemblies complying with the IBC.

TABLE 1106: Proposed Table 1106 identifies the accessory uses and the required separation or other protection that would need to be provided. Consistent with Section 1106.1, whereas the table would apply to all Group I-2 Condition 2 occupancies or ambulatory care facilities, certain of the listed incidental uses would be limited in their applicability to only one or the other of a Group I-2 Condition 2 occupancy or an ambulatory care facility.

1106.4.2 Protection: In this proposed section, where Table 1106 would allow protection by an automatic sprinkler system without a fire-resistance-rated separation, the construction enclosing the incidental use would still need to resist the passage of smoke. Construction details for resisting the passage of smoke are provided in the IBC.

1106.4.2.1 Protection limitation: This proposed section makes it clear that the sprinkler systems stipulated in Table 1106 would be required for the incidental use area only.

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

Analysis: The "Group I-2 Condition 2" terminology used in this proposal in lieu of "Group I-2 hospital" is the result of approved Group A code change G257-12.

Information note: IBC Table 509 was revised by approved Group A code change G130-12, also submitted by the AHC, which is reproduced here below for reference purposes:

EBxx-12/13

1012.1

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

IEBC [B] 407.1 Conformance. No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, or a different condition or specific

use with in the same division unless such building is made to comply with the requirements of the International Building Code for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all of the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

Note:

Pull to subsection and limit to Group I-1 and I-2.

Change Section 1012.1 IEBC.

Reason: This would cover change of occupancy between 'conditions' as well as movement to a specific building type, such as ambulatory health care.

Staff note: This change will need to be held until the 2015 Cycle as it is a change that is a coordinated change with IBC Section 3408.1 which was maintained by the IBC-General committee in 2012. Going forward in 2015, ICC Board action on G201-12 which proposes to delete Chapter 34 of the IBC in favor of a reference to the IEBC may impact which code will be affected in the 2015 Cycle.

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EBxx-12/13

607.1.4

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

IEBC 607.1.4 Group I-2 Condition 2 receptacles. Non-“hospital grade” receptacles in patient bed locations of Group I-2 Condition 2 shall be replaced with “hospital grade” receptacles, as required by NFPA 99 and Article 517 of NFPA 70.

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EBxx-12/13

803.3

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

~~IEBC 803.3 Smoke barriers.~~ Smoke barriers in Group I-2 occupancies shall be installed where required by Sections ~~803.3.1 and 803.3.2~~

~~IEBC 803.3.3 803.3 Compartmentation Smoke barriers.~~ In Group I-2 Condition 2 occupancies where the work area is on a story used for sleeping rooms for more than 30 patients, the story shall be divided into not less than two compartments by smoke barrier walls ~~complying in accordance with Section 407.5 of the International Building Code as required for new construction~~ 803.3.2 such that each compartment does not exceed 22,500 square feet and the travel distance from any point to reach a door in the required smoke barrier shall not exceed 200 feet.

~~Exception.~~ Where neither the length nor the width of the smoke compartment exceeds 150 feet, the travel distance to reach the smoke barrier door shall not be limited.

~~IEBC 803.3.2 Fire-resistance rating.~~ The smoke barriers shall be fire resistance rated for 30 minutes and constructed in accordance with the International building Code.

Note: Need to not separate out nursing homes. Dan to give Kim a proposal for CTC Care.

Reason: Align smoke compartment construction with new requirements.

Staff note: The occupant threshold in Section 407.5 of the IBC is 50 occupants. The IEBC is currently more restrictive than the new construction requirements.

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EBxx-12/13

804.4.1

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

IEBC 804.4.1 Occupancy requirements. A fire alarm system shall be installed in accordance with Sections 804.4.1.1 through 804.4.1.7. Existing alarm-notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-notification appliances within the *work area* shall be provided and automatically activated.

Exceptions:

1. Occupancies with an existing, previously approved fire alarm system.

2. Where selective notification is permitted, alarm notification appliances shall be automatically activated in the areas selected.

IEBC 804.4.1.3 Group I-2. A fire alarm system shall be installed in work areas of Group I-2 occupancies as required by the International Fire Code for ~~existing~~new Group I-2 occupancies.

Reason: Moves the fire alarm to the new requirements, which is what IFC 1103.7.3 already says.

Staff note: Section 1103.7.3 for existing Group I-2 sends you to Section 907.6.2 for new construction requirements however there is an exception for manual fire alarm boxes for existing buildings. Should this exception be applicable?

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EBxx-12/13

805.2

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

IEBC 805.2 General. The means of egress shall comply with the requirements of this section.

Exceptions:

1. Where the work area and the means of egress serving it complies with NFPA 101.
2. Means of egress conforming to the requirements of the building code under which the building was constructed shall be considered compliant means of egress if, in the opinion of the code official, they do not constitute a distinct hazard to life.

805.3.1.2 Fire escapes required. When more than one exit is required, an existing or newly constructed fire escape complying with Section 805.3.1.2.1 shall be accepted as providing one of the required means of egress.

Exception: Fire escapes shall not provide a required means of egress in Group I-2 **Condition 2** occupancies.

805.3.1.2.1 Fire escape access and details. Fire escapes shall comply with all of the following requirements:

5. In all buildings of Group E occupancy, up to and including the 12th grade, buildings of Group I occupancy, rooming houses and childcare centers, ladders of any type are prohibited on fire escapes used as a required means of egress.

805.5.2 Transoms. In all buildings of Group I-1, Group I-2 Condition 2, R-1 and R-2 occupancy, all transoms in corridor walls in work areas shall either be glazed with 1/4-inch (6.4 mm) wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

Reason: The rearrangement of exiting in a Group I-2 should meet new requirements.

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EBxx-12/13

1002.1

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

IEBC 1002.1 Compliance with the building code. Where the character or use of an existing building or part of an existing building is changed to one of the following special use or occupancy categories as defined in the International Building Code, the building shall comply with all of the applicable requirements of the International Building Code:

- 1. Covered and open mall buildings
- 2. – 9. No change
- 10. Ambulatory care facilities
- 11. Group I-2 **Condition 2** occupancies

Reason: When a space undergoes a change of occupancy to a Group I-2 occupancy, it should meet all the new requirements.

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Previous Proposals

Fxx-12/13

605.12 (new), 605.12.1(new)

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

Add new text as follows:

IFC 605.12 Electrical systems maintenance. Electrical components, equipment and systems shall be maintained in compliance with the provisions of NFPA 70.

IFC 605.12.1 Group I-2 maintenance. Group I-2 electrical components, equipment systems shall also be maintained in accordance with the provisions of NFPA 99.

Reason: Existing electrical systems are required to comply with NFPA 70 by the Center for Medicare/Medicaid Services (CMS) in order for a facility to receive federal reimbursement funds. Providing the code language for Group I-2 occupancies will ensure the required electrical systems are maintained per NFPA 70.

Cost Impact: None

Fxx-12/13

IFC 907.2.6.2 (IBC [F] 407.8, 907.2.6.2)

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:

IBC [F] 407.8 Automatic fire ~~smoke~~ detection. An automatic smoke detection system shall be installed in corridors in Group I-2 Condition 1 ~~nursing homes, long-term care facilities, detoxification facilities~~ and spaces permitted to be open to the corridors by Section 407.2 shall be equipped with an automatic fire detection system. The system shall be activated in accordance with Section 907.5. Group I-2 Condition 2 Hospitals shall be equipped with an automatic smoke detection system as required in Section 407.2 and 407.4.3.

Exceptions:

1. Corridor smoke detection is not required where sleeping rooms 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 room and unit and shall provide an audible and visual alarm at the care provider's station attending each unit.
2. Corridor smoke detection is not required where sleeping room 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.

IFC 907.2.6.2 (IBC [F] 907.2.6.2) Group I-2. An automatic smoke detection system shall be installed in *corridors* in Group I-2 Condition 1 ~~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 907.4. Group I-2 Condition 2 Hospitals shall be equipped with an automatic smoke detection system as required in Section 407.

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's 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.

Reason: The proposed language in IBC 407.8 and IBC/IFC 907.2.6.2 coordinates with the proposed language automatic smoke detection system requirements in IBC 407.4.3 submitted by the Adhoc Health Care committee during Group A hearings. The intent is also to make the language consistent between the two sections.

Cost Impact: None

Fxx-12/13

IFC 1030.2.1

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:

1030.2.1 Security devices and egress locks. Security devices, locks, and locking systems affecting *means of egress* shall be subject to approval of the *fire code official*. ~~Special Security devices and~~ locking arrangements including, but not limited to ~~access-controlled egress doors,~~ security grills, mechanical locks and latches, and ~~delayed egress~~ electronic locks, latches, and locking systems shall be installed and maintained as required by this chapter.

Reason: The Adhoc Health Care committee and ICC Code Technologies Committee co-sponsored code changes to update terminology for several of the different locking systems address in the IBC. This change in terminology would make the maintenance provisions in the IFC consistent with the terminology changes.

Fxx-12/13

IFC 1030.3.1(new)

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

Add new text as follows:

IFC 1030.3.1 Group I-2 Condition 2. In Group I-2 **Condition 2**, the required clear width for aisles, corridors and ramps that are part of the required means of egress shall comply with Section 1018.2. The facility shall have a plan to maintain the required clear width during emergency situations.

Exception: In areas required for bed movement, equipment shall be permitted in the required width where all the following provisions are met:

1. The equipment is low hazard and wheeled.
2. The equipment does not reduce the effective clear width for the means of egress to less than 5 feet (1525 mm).
3. The equipment is limited to:
 - 3.1. Equipment and carts in use;
 - 3.2. Medical emergency equipment;
 - 3.3. Infection control carts; and
 - 3.4. Patient lift and transportation equipment.
4. Medical emergency equipment and patient lift and transportation equipment, when not in use, is required to be located on one side of the corridor.
5. The equipment is limited in number to a maximum of one per patient sleeping room or patient care room within each smoke compartment.

Reason: The new language in Section 1030.3.1 is to be placed in the International Fire Code as a procedural requirement. It is recognized that the 8'-0" wide corridor in an institutional occupancy where beds are moved is to remain at 8'-0" in width. The language recognizes and identifies the fact that certain movable pieces of equipment will be present in the corridor during normal operations of the patient care units and seeks to restrict the types and number of such pieces of equipment and the restrictions the equipment may impose on the means of egress.

The language also recognizes that during emergencies facilities must have an emergency management plan that address the steps that must be taken by the facility and responding staff to ensure that the required 8'-0" wide corridor is kept clear of movable obstructions.

The terminology is consistent with NFPA 101.

EBxx-12/13

IEBC 805.10-805.10.3 (new)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care and **Carl Baldassarra, Code Technologies Committee**

Add new text as follows:

IEBC 805.10 Refuge areas. Where alterations affect the configuration of an area utilized as a refuge areas, the capacity of the refuge area shall not be reduced below that required in Section 805.10.1 and 805.10.3.

IEBC 805.10.1 Smoke compartments. In Group I-2 occupancies, the required capacity of the refuge areas for smoke compartments in accordance with Section 407.5.1 and 408.6.2 of the International Building Code shall be maintained.

IEBC 805.10.3 Horizontal exits. The required capacity of the refuge area for horizontal exits in accordance with Section 1025.4 of the International Building Code shall be maintained.

Reason: When a space is being altered the designer needs to check that an alteration does not conflict with the area being used as a refuge area from an adjacent compartment. There was a correlative change proposed for IBC Chapter 34/IEBC Chapter 4.

Cost Impact: None

Adhoc Fire Safety Committee

Fxx-13

310.3.1 (New)

Proponent: John Williams, CBO, Chair, ICC Ad Hoc Committee on Health Care and Carl Baldassarra, Code Technologies Committee

Add new text as follows:

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

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

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

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

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

Fxx - 13

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

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

Revise as follows:

SECTION 404 FIRE SAFETY AND EVACUATION PLANS

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

404.2 Where required. (No change to current text.)

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

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

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

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

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy including the following:
 - ~~2.1 and p~~ 2.1 Procedures for notifying occupants, including areas with a private mode alarm system.
 - ~~2.2 Procedures for relocating occupants under a defend-in-place response.~~
 - 2.3 Procedures for evacuating occupants, including occupants who need assistance in evacuation.
3. Site plans indicating the following:
 - 3.1. The occupancy assembly point.
 - 3.2. The locations of fire hydrants.
 - 3.3. The normal routes of fire department vehicle access.
4. Floor plans identifying the locations of the following:
 - 4.1. Exits.
 - 4.2. Primary evacuation routes.
 - 4.3. Secondary evacuation routes.
 - 4.4. Accessible egress routes.
 - 4.5. Areas of refuge.
 - 4.6. Exterior areas for assisted rescue.

- 4.7. Manual fire alarm boxes.
 - 4.8. Portable fire extinguishers.
 - 4.9. Occupant-use hose stations.
 - 4.10. Fire alarm annunciators and controls.
- 5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
 - 6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
 - 7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

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

TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION
(No change to table or notes)

SECTION 408
USE AND OCCUPANCY RELATED REQUIREMENTS

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

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

- 1. Procedures for evacuation for patients with needs for containment or restrained and post evacuation containment, if present.
- 2. A written plan for maintenance of the means of egress.
- 3. Procedure for a defend-in-place strategy.
- 4. Procedures for a full floor or building evacuation, if necessary.

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

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

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

Exceptions:

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

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

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

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

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

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

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

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

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

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

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

Finally, the requirements for emergency evacuation drill have been merged into a single

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

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

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

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Round 1, Issue 1: DECORATIONS ON WALLS

Fxx-13

IFC 807.1 (IBC [F] 806.1)

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

Revise as follows:

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

Exceptions:

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

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

Exceptions:

1. In Group I-2 Condition 1 and Group I-1, within sleeping units and dwelling units, combustible decorative materials that are limited to not more than 50 percent of the aggregate wall area are not required to comply with NFPA 701.
2. In Group I-2 Condition 1 and Group I-1, combustible decorative materials in areas other than within dwelling and sleeping units that are limited to not more than 30 percent of the aggregate wall area are not required to comply with NFPA 701.

3. In Group I-2 Condition 2, th combustible decorative materials that are limited to not more than 30 percent of the aggregate wall area are not required to comply with NFPA 701.
4. In Groups I-1 and I-2, combustible decorative materials are not required to comply with NFPA 701, including, but not limited to, photographs and paintings in dormitories in Group R-2 where such materials are of limited quantities such that a hazard of fire development or spread is not present.

In Group I-3, combustible decorations are prohibited.

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

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

SECTION 202 (IBC [F] 202) GENERAL DEFINITIONS

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

Reason:

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

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

The 2012 IFC Section 807.4.3.2 and 807.4.4.2 for Group E and I-4 occupancies allow art work and teaching materials on the corridor walls not to exceed 20% of the wall area. These occupancy types are required to be protected with automatic sprinklers in most configurations. There is trained staff in the

facility at all times it is occupied by students, children or clients. Group I-1 and I-2 occupancies have trained staff present 24 hours a day. Similar safe guards are present in these 3 types of occupancies. I-1 and I-2 also have smoke zoning and special protection of hazard requirements to control exposure to the products of combustion.

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

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

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K-tag K161

Fxx-13

1103.3; 1103.3.1 (New); 1103.3.2

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

Revise as follows:

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

1103.3.1 Elevators, escalators, dumbwaiters and moving walks. Existing elevators, escalators, dumbwaiters and moving walks Group I-2 **Condition 2** shall comply with ASME A17.3.

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

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

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

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

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Round 1, Issue 12A

Fxx-13

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

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

Revise as follows:

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

MATERI AL	CLAS S	GROUP WHEN THE MAXIMUM ALLOWAB LE QUANTITY IS EXCEEDE D	STORAGE ^b			USE-CLOSED SYSTEMS ^b			USE-OPEN SYSTEMS ^b	
			Solid poun ds (cubic feet)	Liquid gallons (pound s)	Gas cubi c feet at NTP	Solid poun ds (cubic feet)	Liquid gallons (pound s)	Gas cubi c feet at NTP	Solid poun ds (cubic feet)	Liquid gallons (pound s)

(Portions of table not shown do not change.)

For SI: 1 cubic foot = 0.028 m³, 1 pound = 0.454 kg, 1 gallon = 3.785 L.
NL = Not Limited; N/A = Not Applicable; UD = Unclassified Detonable

a. through o. (No change to current text)

p. The following shall not be included in determining the maximum allowable quantities:

1. Liquid or gaseous fuel in fuel tanks on vehicles.
2. Liquid or gaseous fuel in fuel tanks on motorized equipment operated in accordance with this code.
3. Gaseous fuels in piping systems and fixed appliances regulated by the *International Fuel Gas Code*.
4. Liquid fuels in piping systems and fixed appliances regulated by the *International Mechanical Code*.
5. In Group I-2 **Condition 2**, alcohol based hand rubs classified as Class I or II liquids where installed in accordance with Sections 5705.5 and 5705.5.1. The location of the alcohol based hand rub (ABHR) dispensers shall be provided in the construction documents.

q. (No change to current text)

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

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

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K-tag K76 Medical Gas Ventilation

Fxx-13

5306.2.1

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

Revise as follows:

5306.2.1 One-hour exterior rooms. A 1- hour exterior room shall be a room or enclosure separated from the remainder of the building by fire barriers constructed in accordance with Section 707 of the *International Building Code* or horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both, with a fire- resistance rating of not less than 1- hour. Openings between the room or enclosure and interior spaces shall be self-closing smoke- and draft-control assemblies having a fire protection rating of not less than 1hour. Rooms shall have at least one exterior wall that is provided with at least two non-closable louvered vents. Each vent shall have a minimum free opening area of 24 square inches (155 cm²) for each 1,000 cubic feet (28 m³) at normal temperature and pressure (NTP) of gas stored in the room and shall not be less than ~~36~~ 72 square inches (~~0.023-m²~~ 465 cm²) in aggregate free opening area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the ceiling. Rooms shall be provided with at least one automatic sprinkler to provide container cooling in case of fire.

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

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

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

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.

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Round 1, Issue 12 ALCOHOL-BASED HAND RUB DISPENSERS IN PATIENT ROOMS (See also K-tag K211)

Fxx-13

5705.5, 5705.5.1

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

Revise as follows:

5705.5 Alcohol-based hand rubs classified as Class I or II liquids. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids shall be in accordance with all of the following:

1. The maximum capacity of each dispenser shall be 68 ounces (2 L).
2. The minimum separation between dispensers shall be 48 inches (1219 mm).
3. The dispensers shall not be installed ~~directly adjacent to, directly above, or below, or closer than 1 inch to~~ an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor or intervening counter top shall be free remain clear and unobstructed of electrical receptacles, switches, appliances, devices, or other ignition sources.
4. Dispensers shall be mounted so that the bottom of the dispenser is a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1219 mm) above the finished floor.
5. Dispensers shall not release their contents except when the dispenser is manually activated. Facilities shall be permitted to install and use automatically activated "touch free" alcohol-based hand-rub dispensing devices with the following requirements:
 - 5.1. The facility or persons responsible for the dispensers shall test the dispensers each time a new refill is installed in accordance with the manufacturer's care and use instructions.
 - 5.2. Dispensers shall be designed and must operate in a manner that ensures accidental or malicious activations of the dispensing device are minimized. At a minimum, all devices subject to or used in accordance with this section shall have the following safety features:
 - 5.2.1. Any activations of the dispenser shall only occur when an object is placed within 4 inches (98 mm) of the sensing device.
 - 5.2.2. The dispenser shall not dispense more than the amount required for hand hygiene consistent with label instructions as regulated by the United States Food and Drug Administration (USFDA).
 - 5.2.3. An object placed within the activation zone and left in place will cause only one activation.
6. Storage and use of alcohol-based hand rubs shall be in accordance with the applicable provisions of Sections 5704 and 5705.
7. Dispensers installed in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

5705.5.1 Corridor installations. In addition to the provisions of Section 5705.5, ~~W~~ where wall-mounted dispensers containing alcohol-based hand rubs are installed in corridors or rooms and areas open to the corridor, they shall be in accordance with all of the following:

1. Level 2 and 3 aerosol containers shall not be allowed in corridors.
2. The maximum capacity of each Class I or II liquid dispenser shall be 41 ounces (1.21 L) and the maximum capacity of each Level 1 aerosol dispenser shall be 18 ounces (0.51 kg).
3. The maximum quantity allowed in a corridor within a control area shall be 10 gallons (37.85 L) of Class I or II liquids or 1135 ounces (32.2 kg) of Level 1 aerosols, or a combination of Class I or II liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gallons (37.85 L) or 1,135 ounces (32.2 kg) such that the sum of the ratios of the liquid and aerosol quantities divided by the allowable quantity of liquids and aerosols, respectively, shall not exceed one.
4. The minimum corridor width shall be 72 inches (1829 mm).

5. Projections into a corridor shall be in accordance with Section 1003.3.3.

Reason: This proposed change will reduce the capacity volume of the individual dispenser located in corridors and areas open to corridors in the IFC from 68 ounces to 40.96 ounces to provide correlation with the maximum allowed volume for Group I-2 hospitals in NFPA 101. The 2 L maximum capacity dispenser in all other areas remains.

Section 5705.5(3): Because ABHR dispensers are often installed above fixed casework countertops, Section 5705.5(3) is being revised to address the practical issue of clearances from the dispenser to ignition sources associated with the countertop installation. Establishing the minimum clearance requirements provides clarity to the fire code official and to designers and facility administrators.

Section 5705.5.1: As part of the institution's infection control protocol, many places where ABHR dispensers are installed in healthcare facilities are areas that are open to the corridor as permitted by Section 407 of the *International Building Code*. As such, this section is being revised to include such areas.

Reducing the amount of liquid in the dispensers does not increase a risk within the facility. Establishing the minimum distance requirement provides clarity to the Code Official and to the Designers.

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