

ASHÉ Monograph

Life Safety Code
Comparison

Michael A. Crowley, PE, SASHE

Jeffery E. Harper, PE



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Chicago

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The American Society for Healthcare Engineering (ASHE)
of the American Hospital Association
155 North Wacker Drive, Suite 400
Chicago, IL 60606
312-422-3800

ashe@aha.org
www.ashe.org

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Note: This monograph updates an earlier edition of this document (Michael A. Crowley, ASHE Management Monograph: Life Safety Code *Comparison*, 2008).

About the Authors

Michael A. Crowley, PE, SASHE, is executive vice president of RJA, Inc., a fire protection code consulting firm located in Houston. He has served on numerous NFPA Technical Committees and is an NFPA 101 Instructor.

Jeffery E. Harper, PE, is vice president of RJA, Inc., a fire protection code consulting firm located in Chicago. An expert in the application of the *International Building Code*, he also has served on numerous NFPA Technical Committees.

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Life Safety Code[®]

Comparison

Changes in the 2012 edition of NFPA 101: *Life Safety Code*[®] provide design and compliance options for health care facilities that don't exist in earlier editions. For example, sliding doors from the corridor to patient rooms support the design of universal rooms; the size of sleeping suites has been enlarged to permit larger critical care patient rooms; and a 6-inch projection into the corridor is permitted for mounting equipment and alcohol-based hand-rub dispensers, just to name a few.

Recognizing that not all jurisdictions adopt and use the same editions of NFPA 101 and other building codes as well as the value of the 2012 edition of the *Life Safety Code* for health care design and compliance, the two major enforcers of the code—the Centers for Medicare & Medicaid Services (CMS) and the Joint Commission—permit the use of the most recent edition in its entirety or on a single-element basis. This permission requires additional paperwork in the form of waiver or equivalency requests.

As with any government policy, how these code requirements are applied may vary depending on who surveys a facility. Each health care organization should call the regional CMS office to verify its interpretation of this central office policy.

Use of This Document

Many factors influence whether a health care organization chooses to apply the most recent edition of the *Life Safety Code*[®] to a project. This monograph

is intended as a tool to help readers determine if using the 2012 edition is worth the effort for their facility.

Every attempt has been made to identify significant differences between the major code requirements in the 2000, 2009, and 2012 editions that affect health care facility design and compliance. Similar requirements in the 2009 edition of the *International Building Code*[®] (IBC) are also included in the comparison to help users identify which are the most stringent code requirements. The information provided reflects the latest policies of CMS and the Joint Commission.

Sample letters for seeking waivers or equivalencies to allow an organization to use the 2009 or 2012 edition of the Life Safety Code for a project appear in the appendices of this document.

Caution: The user of this document must be aware that local and state jurisdiction coordination of these waivers and equivalencies may also be required.

Guidance for Requests to Use the 2012 Edition of NFPA 101 in Lieu of the 2000 or 2009 Edition

All health care organizations in the CMS program must comply with the 2000 edition of NFPA 101, or CMS will identify deficiencies during annual or validation surveys. Although CMS will accept the use of other editions of NFPA 101, a waiver request must be prepared for each specific life safety element for which the requirement is less stringent in the newer edition. The waiver and equivalency process applies to existing and new hospitals and ambulatory care facilities.

This monograph presents three approaches to using the 2009 or 2012 edition of NFPA 101 in lieu of the 2000 edition. One is for new hospitals, another is for existing hospitals with Joint Commission accreditation, and the last is for existing hospitals certified by CMS.

When a health care organization plans to apply for Joint Commission accreditation for a new facility, it can request an equivalency to use NFPA 101-2012 in its entirety for the design. Appendix 1 is a letter for inclusion in the initial request documents for Joint Commission accreditation. It is recommended that the comparison table in this monograph be included with the letter to demonstrate that the organization understands the differences between editions. The Joint Commission requires compliance with the entire newer

edition and its reference documents. The use of the newer edition must be identified in the electronic Basic Building Information (eBBI) application.

Existing hospitals with Joint Commission accreditation that also use the CMS reimbursement program should use the sample letter for requesting an equivalency provided in Appendix 2. This should be sent to the Joint Commission when the renovation is being planned or if it is permitted to replace an existing code element under the 2000 edition with the updated element in the 2009 or 2012 edition. The renovated area must comply with the selected edition of NFPA 101 for the entire floor or smoke compartment. The comparison table must be included with this letter, and the eBBI must identify the use of the 2012 edition.

Existing hospitals certified by CMS that receive a list of deficiencies for not complying with NFPA 101-2000 (CMS Form 2786R) can submit a waiver request. This should be recorded in Item K84; see Appendix 3 for an example. In general, the waiver must identify (1) the hardship created by correcting the deficiency and (2) that the waiver item does not adversely affect patient care. The comparison table should be attached as the justification for using the 2012 edition. **Waivers must be renewed each year with the appropriate CMS regional office.** New hospitals must have construction completed and a CMS survey prior to making a waiver request. There is no mechanism within the federal system to apply for a waiver during the design process.

Note: In some instances, a single new requirement of the *Life Safety Code* may be permitted through the equivalency process. This approach is handled on a case-by-case basis. For example, in March 2012, CMS issued a memorandum allowing waivers for corridor clutter, fixed furniture, cooking areas open to the corridor, direct vent fireplaces, and wall decorations. This memorandum (S&C-12-21-LSC) is posted on the ASHE website under the Resources tab.

Comparison of the 2000, 2009, and 2012 Life Safety Code and the 2009 International Building Code

This code summary is based on the following codes and shows requirements for new construction in health care occupancies:

International Building Code®

2009 edition

NFPA 101: *Life Safety Code®*

2000 edition (as adopted by the Joint Commission and CMS)

2009 edition

2012 edition

NFPA 99: *Health Care Facilities Code* (formerly *Standard for Health Care Facilities*)

1999 edition (as referenced by NFPA 101-2000)

2005 edition (as referenced by NFPA 101-2009)

2012 edition (as referenced by NFPA 101-2012)

NFPA 10: *Standard for Portable Fire Extinguishers*

1998 edition (as referenced by NFPA 101-2000)

2007 edition (as referenced by NFPA 101-2009)

2010 edition (as referenced by NFPA 101-2012)

NFPA 13: *Standard for the Installation of Sprinkler Systems*

1999 edition (as referenced by NFPA 101-2000)

2007 edition (as referenced by NFPA 101-2009)

NFPA 14: *Standard for the Installation of Standpipe and Hose Systems*

2000 edition (as referenced by NFPA 101-2000)

2007 edition (as referenced by NFPA 101-2009)

2010 edition (as referenced by NFPA 101-2012)

This code summary is based on the following assumptions:

1. The building occupancy is designated as Health Care I-2.
2. The building is protected throughout by an automatic sprinkler system.
3. The building is 4 stories; it is not a high-rise building.
4. The building is 300,000 sq. ft. in area.
5. The code summary and comparison addresses requirements for “New Health Care Occupancy” only.

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|--|--|-----------------------------------|-----------------------------------|--|
| Occupancy | | | | | |
| | Occupancy classification | I-2 (308.3) | Health care (6.1.5.1) | Health care (6.1.5.1) | Health care (6.1.5.1) |
| Construction Type | | | | | |
| | Minimum construction type | Type IB (Table 503) | Type II (222) (Table 18.1.6.2) | Type II (222) (Table 18.1.6.1) | Type II (222) (Table 18.1.6.1) |
| Height and Area Limits | | | | | |
| | Maximum height allowed | 180 ft. (Table 503, Section 504.2) | N/A | N/A | N/A |
| | Allowable area | UL (Table 503) | N/A | N/A | N/A |
| | Maximum number of stories | 5 stories (Table 503, Section 504.2) | 4 stories (Table 18.1.6.2) | 4 stories (Table 18.1.6.1) | 4 stories. Basements shall not be considered a story. (Table 18.1.6.1) |
| Fire-Resistance Ratings of Exterior Walls | | | | | |
| | Distance to lot line or imaginary line | Where 30 ft. or greater, no requirement. 1-hour rated elsewhere (less than 30 ft.). (Table 602) | N/A | N/A | N/A |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|--|---|---|---|---|
| Specific Occupancy Requirements for Group I-2 | | | | | |
| | Corridors in I-2 | Corridors in Group I-2 must be continuous to the exits and be separated from other areas in accordance with Section 407.3 except as provided in Sections 407.2.1–407.2.4. (407.2) | Corridors shall be separated from all other areas by partitions complying with 18.3.6.2 through 18.3.6.5 unless otherwise permitted. (18.3.6.1) | Corridors shall be separated from all other areas by partitions complying with 18.3.6.2 through 18.3.6.5 unless otherwise permitted. (18.3.6.1) | Corridors shall be separated from all other areas by partitions complying with 18.3.6.2 through 18.3.6.5 unless otherwise permitted. (18.3.6.1) |
| | Waiting areas located off the corridors | Spaces of unlimited area, including waiting areas and similar spaces constructed as required for corridors, are permitted to be open to the corridor provided the spaces are not used for sleeping units, treatment, or hazardous uses; a detection system is used; and exits are not obstructed. (407.2.2) | Waiting areas and similar spaces located off corridors are permitted to be open to the corridor provided the waiting area does not exceed 600 sq. ft. and is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4. Each area shall be arranged to allow direct supervision by facility staff and shall not obstruct access to exits. (18.3.6.1) | Waiting areas and similar spaces located off corridors are permitted to be open to the corridor provided the waiting area does not exceed 600 sq. ft. and is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4. Each area shall be arranged to allow direct supervision by facility staff and shall not obstruct access to exits. (18.3.6.1) | Waiting areas and similar spaces located off corridors are permitted to be open to the corridor provided the waiting area does not exceed 600 sq. ft. and is protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4. Each area shall be arranged to allow direct supervision by facility staff and shall not obstruct access to exits. (18.3.6.1) |
| | Nurse stations located off the corridors | Nurse stations and similar spaces for charting, communications, and related clerical activities are permitted to be open to the corridor when constructed as required for corridors. (407.2.1) | Nurse stations do not need to be separated from the corridor. (18.3.6.1(3)) | Nurse stations do not need to be separated from the corridor. (18.3.6.1(3)) | Nurse stations do not need to be separated from the corridor. (18.3.6.1(3)) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|---|---|---|---|---|
| Specific Occupancy Requirements for Group I-2 (continued) | | | | | |
| | Mental health treatment (areas open to corridors) | <p>Mental health treatment areas are not required to be separated from corridors when they meet the following conditions:</p> <ol style="list-style-type: none"> 1. The area is no larger than 1,500 sq. ft. 2. Supervision is provided by facility staff. 3. There is no exit access obstruction. 4. The area is equipped with a fire detection system. 5. One mental health treatment area is served per smoke compartment. 6. Area walls and ceilings are constructed as required for corridors. (407.2.3) | N/A | N/A | N/A |
| | Smoke compartments | <p>Every story used by patients for sleeping or treatment, and other stories with an occupant load of 50 or more, must be divided into at least 2 smoke compartments that are constructed as smoke barriers. (407.4)</p> | <p>Every story used by patients for sleeping or treatment, and other stories with an occupant load of 50 or more, must be divided into at least 2 smoke compartments that are constructed as smoke barriers. (18.3.7.1)</p> | <p>Every story used by patients for sleeping or treatment, and other stories with an occupant load of 50 or more, must be divided into at least 2 smoke compartments that are constructed as smoke barriers. (18.3.7.1)</p> | <p>Every story used by patients for sleeping or treatment, and other stories with an occupant load of 50 or more, must be divided into at least 2 smoke compartments that are constructed as smoke barriers. (18.3.7.1)</p> |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|-------------------------------|--|--|--|--|
| Specific Occupancy Requirements for Group I-2 (continued) | | | | | |
| | | | Not required where: 1. Stories contain a health care occupancy, located totally above the health care floor. 2. There are separated, non-health care occupancies. 3. Occupancies are more than 1 story below the health care floor. 4. Open air parking structures are protected by a sprinkler system. (18.3.7.2) | Not required where: 1. Stories contain a health care occupancy, located totally above the health care floor. 2. There are separated, non-health care occupancies. 3. Occupancies are more than 1 story below the health-care floor. 4. Open air parking structures are protected by a sprinkler system. (18.3.7.2) | Not required where: 1. Stories contain a health care occupancy, located totally above the health care floor. 2. There are separated, non-health care occupancies. 3. Occupancies are more than 1 story below the health-care floor. 4. Open air parking structures are protected by a sprinkler system. (18.3.7.2) |
| | Smoke compartment size | Compartment size may not exceed 22,500 sq. ft. The travel distance from any point in a smoke compartment to a smoke barrier door may not exceed 200 ft. Smoke barriers must comply with Section 710. (407.4) | Compartment size may not exceed 22,500 sq. ft. The travel distance from any point in a smoke compartment to a smoke barrier door may not exceed 200 ft. Smoke barriers must comply with Section 8.3 and be no less than 1-hour rated. (18.3.7.1 and 18.3.7.3) | Compartment size may not exceed 22,500 sq. ft. The travel distance from any point in a smoke compartment to a smoke barrier door may not exceed 200 ft. Smoke barriers must comply with Section 8.5 and be no less than 1-hour rated. (18.3.7.1 and 18.3.7.3) | Compartment size may not exceed 22,500 sq. ft. The travel distance from any point in a smoke compartment to a smoke barrier door may not exceed 200 ft. Smoke barriers must comply with Section 8.5 and be no less than 1-hour rated. (18.3.7.1 and 18.3.7.3) |
| | Smoke compartment refuge area | Provide at least 30 net sq. ft. per patient within corridors, patient rooms, lounge or dining rooms, and other low hazard areas on each side of the smoke barrier. | Provide at least 30 net sq. ft. per patient within corridors, patient rooms, lounge or dining rooms, and other low hazard areas on each side of the smoke barrier. (18.3.7.4) | Provide at least 30 net sq. ft. per patient within corridors, patient rooms, lounge or dining rooms, and other low hazard areas on each side of the smoke barrier. (18.3.7.5.1) | Provide at least 30 net sq. ft. per patient within corridors, patient rooms, lounge or dining rooms, and other low hazard areas on each side of the smoke barrier. (18.3.7.5.1) |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|------------------------------------|---|---|---|---|
| Specific Occupancy Requirements for Group I-2 (continued) | | | | | |
| | | For floors not housing bed or litter patients, provide 6 net sq. ft. per occupant on each side of smoke barrier for the total number of occupants in adjoining smoke compartments. (407.4.1) | For floors not housing bed or litter patients, provide 6 net sq. ft. per occupant on each side of smoke barrier for the total number of occupants in adjoining smoke compartments. (18.3.7.4) | For floors not housing bed or litter patients, provide 6 net sq. ft. per occupant on each side of smoke barrier for the total number of occupants in adjoining smoke compartments. (18.3.7.5.2) | For floors not housing bed or litter patients, provide 6 net sq. ft. per occupant on each side of smoke barrier for the total number of occupants in adjoining smoke compartments. (18.3.7.5.2) |
| | | Smoke compartment independent egress An independent means of egress must be provided from each smoke compartment. Reentry to the smoke compartment through the means of egress is not permitted. (407.4.2) | No fewer than 2 exits of the types described in 18.2.2.2 through 18.2.2.10 shall be accessible from each smoke compartment(s) and shall not require return through the compartment of fire origin. (18.2.4.3) | No fewer than 2 exits of the types described in 18.2.2.2 through 18.2.2.10 shall be accessible from each smoke compartment(s) and shall not require return through the compartment of fire origin. (18.2.4.3) | No fewer than 2 exits of the types described in 18.2.2.2 through 18.2.2.10 shall be accessible from each smoke compartment(s) and shall not require return through the compartment of fire origin. (18.2.4.3) |
| | Smoke compartment sprinkler system | Patient sleeping units within smoke compartments are required to be equipped with an NFPA 13 sprinkler system. Smoke compartments must use approved quick-response or residential sprinklers per Section 903.3.2. (407.6) | Listed quick-response or residential sprinklers shall be used throughout smoke compartments containing patient sleeping areas. (18.3.5.2—See Appendix.) | Listed quick-response or residential sprinklers shall be used throughout smoke compartments containing patient sleeping areas. (18.3.5.6—See Appendix.) | Listed quick-response or residential sprinklers shall be used throughout smoke compartments containing patient sleeping areas. (18.3.5.6—See Appendix.) |
| Fire-Resistive Requirements | | | | | |
| | Corridors | Must be constructed as smoke partitions in Group I-2 occupancies. (407.3) | Must limit the transfer of smoke. (18.3.6.2) | Must limit the transfer of smoke. (18.3.6.2.1) | Must limit the transfer of smoke. (18.3.6.2.3) |
| | Smoke barriers | A 1-hour smoke barrier (710.3) | A 1-hour smoke barrier (18.3.7.3) | A 1-hour smoke barrier (18.3.7.3) | A 1-hour smoke barrier (18.3.7.3) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|---|---|---|---|---|
| Fire-Resistive Requirements (continued) | | | | | |
| | | Smoke barriers must be continuous from outside wall to outside wall and be constructed from 1 floor to the underside of the floor or roof above, or to the underside of a ceiling, and limit the transfer of smoke. (710.4) | Smoke barriers must be continuous from wall to wall, barrier to barrier, or from floor to floor and through concealed spaces. (8.3.2) | Smoke barriers must be continuous from wall to wall, barrier to barrier, or from floor to floor and through concealed spaces. (8.5.2) | Smoke barriers must be continuous from wall to wall, barrier to barrier, or from floor to floor and through concealed spaces. (8.5.2) |
| | Doors in smoke barriers shall be automatic or self-closing. Latching hardware is not required. Stops shall be provided at the head and sides of door frames. Rabbits, bevels, or astragals are to be provided at the meeting edges of pairs of doors. Center mullions are prohibited. | | Latching doors not required 18.3.7.8 | Latching doors not required 18.3.7.11 | Latching doors not required 18.3.7.8 (2) |
| | Shaft enclosures (connecting 4 or more stories) | 2-hour fire barrier (708.4) Shaft enclosures must be constructed in accordance with Section 708. | 2-hour fire barrier (8.2.5.4(1)) | 2-hour fire barrier (8.6.5(1)) | 2-hour fire barrier (8.6.5(1)) |
| | Shaft enclosures (connecting 3 or fewer stories) | 1-hour fire barrier connecting up to 3 stories (708.4) | 1-hour fire barrier connecting up to 3 stories (8.2.5.4(2)) | 1-hour fire barrier connecting up to 3 stories (8.6.5(2)) | 1-hour fire barrier connecting up to 3 stories (8.6.5(2)) |
| | Exit stair enclosures (connecting 4 or more stories) | 2-hour fire barrier (1022.1) | 2-hour fire barrier (7.1.3.2.1(b)) | 2-hour fire barrier (7.1.3.2.1(2)) | 2-hour fire barrier (7.1.3.2.1(2)) |
| | Exit stair enclosures (connecting 3 or fewer stories) | 1-hour fire barrier (1022.1) | 1-hour fire barrier (7.1.3.2.1(a)) | 1-hour fire barrier (7.1.3.2.1(1)) | 1-hour fire barrier (7.1.3.2.1(1)) |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|--|---|---|---|---|
| Fire-Resistive Requirements (continued) | | | | | |
| | Exit passageways | Fire barrier with no less than a 1-hour rating and/or with the same rating as that for the exit stair enclosure that it serves (1023.3) | Fire barrier with the same rating as that for the exit stair enclosure that it serves (7.2.6.2) | Fire barrier with the same rating as that for the exit stair enclosure that it serves (7.2.6.2) | Fire barrier with the same rating as that for the exit stair enclosure that it serves (7.2.6.2) |
| | Horizontal exit wall | 2-hour fire barrier. Barrier must extend through all levels of the building unless floor assemblies have a fire-resistance rating of no less than 2-hour with no unprotected openings. (1025.2) | 2-hour fire barrier. Barrier must continue to grade level unless all stairs discharge directly to outside and floor with horizontal exit does not have an unprotected vertical opening. (7.2.4.3.1) | 2-hour fire barrier. Barrier must continue to grade level unless all stairs discharge directly to outside and floor with horizontal exit does not have an unprotected vertical opening. (7.2.4.3.1 and 7.2.4.3.3) | 2-hour fire barrier. Barrier must continue to grade level unless all stairs discharge directly to outside and floor with horizontal exit does not have an unprotected vertical opening. (7.2.4.3.1 and 7.2.4.3.3) |
| | Horizontal exit opening protection (doors) | 1½-hour (Table 715.4) | 1½-hour (8.2.3.2.3) | 1½-hour (Table 8.3.4.2) | 1½-hour (Table 8.3.4.2) |
| | Permitted unprotected floor openings (Unless permitted by the code, all floor openings are to be protected as noted above for shaft enclosures.) (711) | Permitted provided the following: 1. The opening connects a mezzanine and the floor below. 2. Escalator or open stair cannot be a portion of the means of egress. (708.2) | Communicating space is permitted by 18.3.1.1. Unprotected floor openings are permitted provided the following: 1. Connects no more than 2 adjacent stories 2. Is separated from floor opening serving other floors 3. Is separated from corridors. 4. Shall not serve as a required means of egress (8.2.5.5) | Permitted provided the following: 1. The opening connects no more than 2 adjacent floors. 2. The opening is separated from floor openings serving other floors. 3. The opening is separated from corridors. 4. Convenience openings shall be separated from the corridor by a smoke partition. 5. The opening is not part of a required exit path. (8.6.8.2) | Permitted provided the following: 1. The opening connects no more than 2 adjacent floors. 2. The opening is separated from floor openings serving other floors. 3. The opening is separated from corridors. 4. Convenience openings shall be separated from the corridor by a smoke partition. 5. The opening is not part of a required exit path. (8.6.8.2) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|--|---|---|---|---|
| Fire-Resistive Requirements (continued) | | | | | |
| | Horizontal assemblies | Floor and roof assemblies are required to have a fire-resistance rating that must comply with this section. Otherwise, 713.4.2. (712) | Required by NFPA 220: <i>Standard on Types of Building Construction</i> | Required by NFPA 220: <i>Standard on Types of Building Construction</i> | Required by NFPA 220: <i>Standard on Types of Building Construction</i> |
| | Horizontal assemblies (fire-resistance rating) | Required to have a fire-resistance rating no less than that required for building construction type (712.3) | N/A | N/A | N/A |
| | Exterior walls | Fire-resistance rating per Tables 601 and 602. (705.5) Buildings on the same lot must have an imaginary line assumed between them for opening protection, fire rating, and roof covering requirements. (705.3) Structural stability. (705.6) Parapets. (705.11) Joints. (714.1) Voids at intersection of exterior curtain wall and floor/ceiling assembly must be properly sealed. (714.4) | N/A | N/A | N/A |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|---|--|--|--|--|
| Fire-Resistive Requirements (continued) | | | | | |
| | Elevator lobbies | Elevator lobbies required in accordance with Section 708 unless the elevator hoistway is pressurized. Construct as smoke partitions. (708.14.1) | Required if used for occupant evacuation. Shall meet the following: Every floor served by the elevator shall have an elevator lobby and form a 1-hour barrier in accordance with 8.5. (7.2.13.3) | Required if used for occupant evacuation. Shall meet the following: Every floor served by the elevator shall have an elevator lobby and form a 1-hour barrier in accordance with 8.5. (7.2.13.3) | Required if used for occupant evacuation. Shall meet the following: Every floor served by the elevator shall have an elevator lobby and form a 1-hour barrier in accordance with 8.5. (7.2.13.3) |
| | Fire-resistance ratings of structural members | Structural elements to comply with Section 704 (704) | Structural members supporting the 2-hour rated floor assembly shall have the same resistance rating required of the building. (18.1.6.2(b)) | Structural members supporting the 2-hour rated floor assembly shall have the same resistance rating required of the building. (18.1.6.2(3)) | Structural members supporting the 2-hour rated floor assembly shall have the same resistance rating required of the building. (18.1.6.2(3)) Roof covering shall meet ASTM E108: <i>Standard Test Methods for Fire Tests of Roof Coverings</i> or UL 790: <i>Standard Test Methods for Fire Tests of Roof Coverings</i> for 18.1.6.2 and 18.1.6.3. |
| | Ducts and air transfer openings | Include provisions for fire dampers, smoke dampers, and combination fire/smoke dampers. (716) Provide approved alternative protection where the installation of a fire damper will interfere with the operation of a required smoke control system. (716.2.1) | Smoke dampers shall not be required in duct penetrations of smoke barriers in fully ducted heating, ventilating, and air conditioning systems. (18.3.7.3(2)) | Smoke dampers shall not be required in duct penetrations of smoke barriers in fully ducted heating, ventilating, and air conditioning systems. (18.3.7.3(2)) | Smoke dampers shall not be required in duct penetrations of smoke barriers in fully ducted heating, ventilating, and air conditioning systems. (18.3.7.3(2)) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|----------------------------|---|--|---|---|---|
| Opening Protectives | | | | | |
| | Corridor doors— Group I-2 | Group I-2—Must limit the passage of smoke and have positive latching hardware. Roller latches are not permitted. (407.3.1) | New health care— Doors protecting corridor openings shall be constructed to resist the passage of smoke. Bottom clearance shall not exceed 1 inch. Doors shall have positive latching hardware and no roller latches. (18.3.6.3.1 and 18.3.6.3.2) | New health care— Doors protecting corridor openings shall be constructed to resist the passage of smoke. Bottom clearance shall not exceed 1 inch. Doors shall have positive latching hardware and no roller latches. (18.3.6.3.1 and 18.3.6.3.5) | New health care— Doors protecting corridor openings shall be constructed to resist the passage of smoke. Bottom clearance shall not exceed 1 inch. Doors shall have positive latching hardware. Roller latches are permitted in acute psychiatric care facilities. (18.3.6.3.1, 18.3.6.3.5, and 18.3.6.3.9.2) |
| | 2-hour elevator hoistways | 1½-hour (Table 715.4) | 1½-hour (8.2.3.2.3.1) | 1½-hour (Table 8.3.4.2) | 1½-hour (Table 8.3.4.2) |
| | 1-hour elevator hoistways | 1-hour (Table 715.4) | 1-hour (8.2.3.2.3.1) | 1-hour (Table 8.3.4.2) | 1-hour (Table 8.3.4.2) |
| | 2-hour vertical shafts (including stairways, exits, and chutes) | 1½-hour (Table 715.4) | 1½-hour (8.2.3.2.3.1) | 1½-hour (Table 8.3.4.2) | 1½-hour (Table 8.3.4.2) |
| | 1-hour vertical shafts (including stairways, exits, and chutes) | 1-hour (Table 715.4) | 1-hour (8.2.3.2.3.1) | 1-hour (Table 8.3.4.2) | 1-hour (Table 8.3.4.2) |
| | 2-hour fire barriers | 1½-hour (Table 715.4) | 1½-hour (8.2.3.2.3.1) | 1½-hour (Table 8.3.4.2) | 1½-hour (Table 8.3.4.2) |
| | 1-hour fire barriers | ¾-hour (Table 715.4) | ¾-hour (8.2.3.2.3.1) | ¾-hour (Table 8.3.4.2) | ¾-hour (Table 8.3.4.2) |
| | 2-hour horizontal exits | 1½-hour (T.715.4) | 1½-hour (7.2.4.3.2 and 8.2.3.2.3) | 1½-hour (Table 8.3.4.2) | 1½-hour (Table 8.3.4.2) |
| | Smoke barriers | ½-hour (Table 715.4) | ½-hour (8.2.3.2.3.1) | ½-hour (Table 8.3.4.2) | ½-hour (Table 8.3.4.2) |
| | Fire window assembly | (Table 715.5) | 8.2.3.2.2 | 8.3.3.1 | 8.3.3 |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------------------|---|---|--|--|--|
| Occupancy Separations | | | | | |
| | Nonseparated uses | Occupancy separation is not required when the entire building meets the most restrictive requirements of Section 403 and Chapter 9. (508.3.1) | Occupancy separation is not required when the entire building meets the most restrictive requirements of each individual occupancy. (A3.3.134.10 and 6.1.14.2) | Occupancy separation is not required when the entire building meets the most restrictive requirements of each individual occupancy. (6.1.14.3.2) | Occupancy separation is not required when the entire building meets the most restrictive requirements of each individual occupancy. (6.1.14.3.2) |
| | Boiler and fuel-fired heater rooms | 1-hour or provide automatic fire sprinkler system (Table 508.2.5) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) |
| | Central/bulk laundries (more than 100 sq. ft.) | 1-hour or provide automatic fire extinguishing system (Table 508.2.5) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) | 2-hour (Table 18.3.2.1) |
| | Laboratories using flammable or combustible materials in quantities that are less than would be considered severe | 1-hour or provide automatic fire sprinkler system (Table 508.2.5) | Smoke-tight and self-closing door (18.3.2.1) | Smoke-tight and self-closing door (18.3.2.1) | Smoke-tight and self-closing door (18.3.2.1) |
| | Laboratories that use hazardous materials that would cause classification as a severe hazard in accordance with NFPA 99 | 1-hour or provide automatic sprinkler system (applicable to any laboratory located in Group I-2 occupancies) (Table 508.2.5) | See 18.3.6.3.11 (Table 18.3.2.1) | See 18.3.6.3.11 (Table 18.3.2.1) | See 18.3.6.3.11 (Table 18.3.2.1) |
| | Paint shops (not classified as an "H" occupancy) | 2-hour or 1-hour and provide automatic fire-extinguishing system (Table 508.2.5) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) |
| | Physical plant maintenance shops | N/A | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) |
| | Soiled-linen room | Over 100 sq. ft. 1-hour (Table 508.2.5) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) |
| | Waste/trash collection | Over 100 sq. ft. 1-hour (Table 508.2.5) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|---|--|--|--|--|
| Occupancy Separations (continued) | | | | | |
| | Refuse (waste) and laundry chutes | Construct per Section 708.13. Must be enclosed with a shaft. Openings may not be located in corridors. Access openings for refuse and laundry chutes are to be located in rooms or compartments by a 1-hour fire barrier. Openings into access rooms must be protected by a ¾-hour automatic or self-opening door. | See Section 9.5. Chute charging or discharging room requires maximum 1-hour fire rating. Enclosed by walls or partitions in accordance with 8.2. Inlet openings in accordance with 8.2. Installed and maintained in accordance with NFPA 82: <i>Standard on Incinerators and Waste and Linen Handling Systems and Equipment</i> . (9.5 and 18.5.4) | See Section 9.5. Chute charging or discharging room requires maximum 1-hour fire rating. Enclosed by walls or partitions in accordance with 8.3. Inlet openings in accordance with 8.3. Installed and maintained in accordance with NFPA 82: <i>Standard on Incinerators and Waste and Linen Handling Systems and Equipment</i> . (9.5 and 18.5.4) | See Section 9.5. Chute charging or discharging room requires maximum 1-hour fire rating. Enclosed by walls or partitions in accordance with 8.3. Inlet openings in accordance with 8.3. Installed and maintained in accordance with NFPA 82: <i>Standard on Incinerators and Waste and Linen Handling Systems and Equipment</i> . (9.5 and 18.5.4) |
| | | Termination rooms must be separated from the remainder of the building by a 1-hour fire barrier. Openings into access rooms must be protected by a ¾-hour automatic or self-opening door. Provide automatic sprinkler system per Section 903.2.11.2. (708.13) | Any trash chute shall discharge into a trash collection room used for no other purpose and protected in accordance with Section 8.4. (18.5.4.3) | Any trash chute shall discharge into a trash collection room used for no other purpose and protected in accordance with Section 8.7. (18.5.4.4) | Any trash chute shall discharge into a trash collection room used for no other purpose and protected in accordance with Section 8.7. (18.5.4.4) |
| | Storage rooms (between 50 and 100 sq. ft. of combustible materials) | N/A | Smoke-tight and self-closing door (18.3.2.1) | Smoke-tight and self-closing door (18.3.2.1) | Smoke-tight and self-closing door (18.3.2.1) |
| | Storage rooms (more than 100 sq. ft. of combustible materials) | N/A | 1-hour (Table 18.3.2.1) | 1-hour (Table 18.3.2.1) | 2-hour (Table 18.3.2.1) |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|---|--|--|---|---|---|
| Occupancy Separations (continued) | | | | | |
| | Gift shops (fewer than 500 sq. ft. and not considered hazardous) | Not required to be separated from corridors when fully sprinklered and storage areas are protected in accordance with Section 508.2.5. (407.2) | No separation required (18.3.2.5) | No separation required (18.3.6.1(4)) | No separation required (18.3.6.1(4)) |
| | Gift shops (500 sq. ft. or more and not considered hazardous) | Separated from corridors with smoke partitions (407.2) | Separated from the corridor by non-fire rated walls (18.3.2.5) | Separated from the corridor by non-fire rated walls (18.3.6.1) | Separated from the corridor by non-fire rated walls (18.3.6.1) |
| | Gift shops (with combustible loading considered hazardous) | N/A | 1-hour (8.4.1.1) | 1-hour (8.7.1) | 1-hour (18.3.2.1) |
| | Nonflammable gas storage (including oxidizers) | Oxidizers and oxidizer gases may not exceed the exempt quantities per control area. See also mechanical code and plumbing code. | 1-hour (NFPA 99: 4-3.1.1.2(a)2) | 1-hour (NFPA 99: 4-5.1.3.3.2(4)) | 1-hour over 3000 cu. ft. (NFPA 99: 5.1.3.3.2(4)) |
| | Electrical rooms (with transformers more than 112.5 kVA) | 1-hour (NFPA 70-2005: 450.21(b)) | 1-hour (NFPA 70-2005: 450.21(b)) | 1-hour (NFPA 70-2005: 450.21(b)) | 1-hour (NFPA 70-2005: 450.21(b)) |
| | Generator rooms | N/A | Emergency power 7.2.3.12. 1-hour separation and 2-hour fuel supply. | Emergency power 7.2.3.12. 1-hour separation and 2-hour fuel supply. | Emergency power 7.2.3.12. 1-hour separation and 2-hour fuel supply (CMS and The Joint Commission require a plan for 96 hours of operation). |
| Interior Finish Maximum Flame Spread | | | | | |
| | Interior wall and finish systems | May comply with NFPA 286 (803.1.2) | May comply with NFPA 355 or 286 (10.2.3) | In accordance with ASTM E84 or ANSI/UL 723 (10.2.3) | In accordance with ASTM E84 or ANSI/UL 723 (10.2.3) |
| | Interior wall finish based on Group I-2 | Exit enclosure and exit passageway—Class B. Corridors—Class B. Rooms and enclosed spaces—Class B. (Table 803.9) | Permitted throughout, if Class A or B and compliant with 10.2. (18.3.3.2) | Permitted throughout, if Class A or B and compliant with 10.2. (18.3.3.2) | Permitted throughout, if Class A or B and compliant with 10.2. (18.3.3.2) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|---|--|---|---|---|---|
| Interior Finish Maximum Flame Spread (continued) | | | | | |
| | Maximum smoke developed | 0–450 (803.1.1) | 0–450 (Table A.10.2.2) | 0–450 (Table A.10.2.2) | 0–450 (Table A.10.2.2) |
| | Maximum flame spread (for vertical exits; access corridors; other exits, rooms, and enclosed spaces; and textile wall coverings) | Class A: 0–25 Class B: 26–75 Class C: 76–200 (803.1.1) | Class A: 0–25 Class B: 26–75 Class C: 76–200 (Table A.10.2.2) | Class A: 0–25 Class B: 26–75 Class C: 76–200 (Table A.10.2.2) | Class A: 0–25 Class B: 26–75 Class C: 76–200 (Table A.10.2.2) |
| | Textiles (wall and ceiling finish) | Class A flame spread index in accordance with ASTM E84 (803.6.1) | See 10.2.4.1 | See 10.2.4.1 | See 10.2.4.2 |
| | Suspended acoustical ceiling systems | ASTM C635 and ASTM C636. (803.9) | N/A | N/A | N/A |
| | Interior floor finish | Class II in exit enclosures, corridors, and rooms not separated from corridors by full height partitions—DOC FF-1 “pill test” (CPC 16 CFR, Part 1630) (804.4.1) | No requirement (18.3.3.3) | See 10.2.7.1 or 10.2.7.2 (18.3.3.3) | See 10.2.7.1 or 10.2.7.2 (18.3.3.3) |
| Helistops | | | | | |
| | Size | Less than 3,500 lb.: 20 ft. x 20 ft. minimum with average open space of 15 ft. at roof level and no less than 5 ft. (412.7.1) | N/A | N/A | N/A |
| | Design | Noncombustible and designed to contain any flammable liquid spillage. Spillage to flow away from egress. See also Section 1605.4. (412.7.2) | N/A | N/A | N/A |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--------------------------------|-------------------------------|--|--------------------------------------|--------------------------------------|--------------------------------------|
| Helistops (continued) | | | | | |
| | Means of egress | Must comply with Chapter 10. Less than 60 ft. in length or 2,000 sq. ft. may have fire escape or ladder leading to the floor below for second means of egress. (412.7.3) | N/A | N/A | N/A |
| | Rooftop | NFPA 418 (412.7.4) | NFPA 418 (18.3.2.7) | NFPA 418 (18.3.2.7) | NFPA 418 (18.3.2.7) |
| Exit Capacity | | | | | |
| | Stairways | 0.3 in./occupant (1005.1) | 0.3 in./occupant (Table 7.3.3.1) | 0.3 in./occupant (Table 7.3.3.1) | 0.3 in./occupant (Table 7.3.3.1) |
| | Other egress components | 0.2 in./occupant (1005.1) | 0.2 in./occupant (Table 7.3.3.1) | 0.2 in./occupant (Table 7.3.3.1) | 0.2 in./occupant (Table 7.3.3.1) |
| Occupant Load Factors | | | | | |
| | Offices | 100 sq. ft./occupant (Table 1004.1.1) | 100 sq. ft./occupant (Table 7.3.1.2) | 100 sq. ft./occupant (Table 7.3.1.2) | 100 sq. ft./occupant (Table 7.3.1.2) |
| | Conference and seminar rooms | 15 sq. ft./occupant (Table 1004.1.1) | 15 sq. ft./occupant (Table 7.3.1.2) | 15 sq. ft./occupant (Table 7.3.1.2) | 15 sq. ft./occupant (Table 7.3.1.2) |
| | Inpatient treatment areas | 240 sq. ft./occupant (Table 1004.1.1) | 240 sq. ft./occupant (Table 7.3.1.2) | 240 sq. ft./occupant (Table 7.3.1.2) | 240 sq. ft./occupant (Table 7.3.1.2) |
| | Outpatient areas | 100 sq. ft./occupant (Table 1004.1.1) | 100 sq. ft./occupant (Table 7.3.1.2) | 100 sq. ft./occupant (Table 7.3.1.2) | 100 sq. ft./occupant (Table 7.3.1.2) |
| | Storage and mechanical spaces | 300 sq. ft./occupant (Table 1004.1.1) | 300 sq. ft./occupant (Table 7.3.1.2) | Anticipated occupancy 42.1.7 | Anticipated occupancy 42.1.8 |
| | Sleeping areas | 120 sq. ft./occupant (Table 1004.1.1) | 120 sq. ft./occupant (Table 7.3.1.3) | 120 sq. ft./occupant (Table 7.3.1.3) | 120 sq. ft./occupant (Table 7.3.1.3) |
| | Locker rooms | 50 sq. ft./occupant (Table 1004.1.1) | 50 sq. ft./occupant (Table 7.3.1.4) | 50 sq. ft./occupant (Table 7.3.1.4) | 50 sq. ft./occupant (Table 7.3.1.4) |
| | Kitchen | 200 sq. ft./occupant (Table 1004.1.1) | 100 sq. ft./occupant (Table 7.3.1.5) | 100 sq. ft./occupant (Table 7.3.1.2) | 100 sq. ft./occupant (Table 7.3.1.2) |
| Minimum Number of Exits | | | | | |
| | 1–500 occupants | 2 exits (Table 1021.1) | 2 exits (7.4.1.1) | 2 exits (7.4.1.1) | 2 exits (7.4.1.1) |
| | 501–1,000 occupants | 3 exits (Table 1021.1) | 3 exits (7.4.1.2(1)) | 3 exits (7.4.1.2(1)) | 3 exits (7.4.1.2(1)) |
| | More than 1,000 occupants | 4 exits (Table 1021.1) | 4 exits (7.4.1.2(2)) | 4 exits (7.4.1.2(2)) | 4 exits (7.4.1.2(2)) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|--|--|------------------------------|------------------------------|------------------------------|
| Minimum Number of Exits (continued) | | | | | |
| | Patient sleeping rooms (or suites that include patient sleeping rooms larger than 1,000 sq. ft. in area) | 2 exits (1014.2.3.2) | 2 exits (18.2.5.2) | 2 exits (18.2.5.5.1) | 2 exits (18.2.5.5.1) |
| | Any room or suite of rooms, other than patient sleeping rooms, larger than 2,500 sq. ft. in area | 2 exits (1014.2.4.2) | 2 exits (18.2.5.3) | 2 exits (18.2.5.5.2) | 2 exits (18.2.5.5.2) |
| | Each smoke compartment | Based on occupant load and travel distance. Travel distance not to exceed 200 ft. from smoke barrier to barrier door. (407.4) Independent egress required without reentry into smoke compartment per 407.4.2. | Access to 2 exits (18.2.4.3) | Access to 2 exits (18.2.4.3) | Access to 2 exits (18.2.4.3) |
| | Every habitable room or suite must have an exit access door leading directly to an exit corridor, unless permitted by exceptions. | 1014.2.2 | 18.2.5.1 | 18.2.5.6.1 | 18.2.5.6.1 |
| | Exit access from a patient sleeping room with no more than 8 beds shall be permitted to pass through 1 intervening room to reach an exit access corridor, provided there is constant supervision by nursing personnel. | 1014.2.3 | 18.2.5.1(2) | 18.2.5.6.2 | 18.2.5.6.2 |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--------------------------|--|--|--|---|---|
| Location of Exits | | | | | |
| | Areas requiring 2 or more exits or exit access doors | At least 2 exits or access doors must be placed a distance apart equal to no less than $\frac{1}{3}$ the length of the maximum overall diagonal dimension of the building or area served, measured in a straight line between exits, for sprinklered buildings. (1015.2.1) | At least 2 exits or access doors must be placed a distance apart equal to no less than $\frac{1}{3}$ the length of the maximum overall diagonal dimension of the building or area served, measured in a straight line between exits, for sprinklered buildings. (See Exception 2.) (7.5.1.4) | At least 2 exits or access doors must be placed a distance apart equal to no less than $\frac{1}{3}$ the length of the maximum overall diagonal dimension of the building or area served, measured in a straight line between exits, for sprinklered buildings. (7.5.1.3.3) | At least 2 exits or access doors must be placed a distance apart equal to no less than $\frac{1}{3}$ the length of the maximum overall diagonal dimension of the building or area served, measured in a straight line between exits, for sprinklered buildings. (7.5.1.3.3) |
| | Dead ends | General—20 ft. (1018.4) | Maximum of 30 ft. (18.2.5.10) | Maximum of 30 ft. (18.2.5.2) | |
| Suites | | | | | |
| | Suites of sleeping rooms | Shall not exceed 5,000 sq. ft. (1014.2.3.1) | Shall not exceed 5,000 sq. ft. (18.2.5.6) | Shall not exceed 5,000 sq. ft. (18.2.5.7.2.3). Shall not exceed 7,500 sq. ft. if provided with direct visual supervision, total smoke coverage, and total sprinkler coverage. (18.2.5.7.2.3(B)) | Shall not exceed 7,500 sq. ft. (18.2.5.7.2.3). Suites larger than 7,500 sq. ft. but smaller than 10,000 are allowed when direct visual supervision and automatic smoke detection is provided throughout. |
| | Suites of rooms (other than patient sleeping rooms) | Shall not exceed 10,000 sq. ft. (1014.2.4.1) | Shall not exceed 10,000 sq. ft. (18.2.5.7) | Shall not exceed 10,000 sq. ft. (18.2.5.7.3.3) | Shall not exceed 10,000 sq. ft. (18.2.5.7.3.3) |
| | Hazardous areas within suites options | N/A | N/A | See 18.2.5.7.1.3. | See 18.2.5.7.1.4. |
| | Intervening rooms: non-patient care suites | One intervening room is allowed if the travel distance within the suite to the exit access door does not exceed 100 ft., and 2 intervening rooms are permitted where the travel distance to the exit access door does not exceed 50 ft. (1014.2.4.3 and 1014.2.4.4) | One intervening room is allowed if the travel distance within the suite to the exit access door does not exceed 100 ft., and 2 intervening rooms are permitted where the travel distance to the exit access door does not exceed 50 ft. (18.2.5.8) | One intervening room is allowed if the travel distance within the suite to the exit access door does not exceed 100 ft., and 2 intervening rooms are permitted where the travel distance to the exit access door does not exceed 50 ft. (18.2.5.7.3.4(A)) | Multiple intervening rooms are allowed if the travel distance within the suite to the exit access door does not exceed 100 ft. (18.2.5.7.3.4(A)) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|---------------------------|--|---|---|--|--|
| Suites (continued) | | | | | |
| | Intervening rooms: patient sleeping rooms | Patient sleeping rooms are permitted to have 1 intervening room when the intervening room is not used as an exit access for more than 8 patient beds. (1014.2.3) | Exit access from a patient sleeping room with no more than 8 patient beds shall be permitted to pass through 1 intervening room. (18.2.5.1(2)) | Exit access from a patient sleeping room with no more than 8 patient beds shall be permitted to pass through 1 intervening room. (18.2.5.6.2) | Exit access from a patient sleeping room with no more than 8 patient beds shall be permitted to pass through 1 intervening room. (18.2.5.6.2) |
| | Intervening rooms: patient sleeping suites | May have 1 intervening room where the arrangement allows for direct and constant visual supervision by nursing personnel. (1014.2.3) | May have more than 1 intervening room where the arrangement allows for direct and constant visual supervision by nursing personnel. (18.2.5.1(3)) | May have more than 1 intervening room where the arrangement allows for direct and constant visual supervision by nursing personnel. (18.2.5.7.2.1) | May have more than 1 intervening room where the arrangement allows for direct and constant visual supervision by nursing personnel. (18.2.5.7.2.1) |
| | Egress into another suite | See intervening rooms. Exit access from all other portions of a building not classified as a suite in a Group I-2 occupancy shall not pass through a suite. (1014.2.5) | N/A | A suite that requires 2 means of egress is permitted to have 1 means of egress into another suite, provided the separation between the suites complies with 18.3.6.2 through 18.3.6.5. (18.2.5.7.2.2(C)) | A suite that requires 2 means of egress is permitted to have 1 means of egress into another suite, provided the separation between the suites complies with 18.3.6.2 through 18.3.6.5. (18.2.5.7.2.2(C)) |
| | Exit access from a corridor | Corridors in Group I-2 occupancies shall be continuous to the exits and separated from other areas in accordance with 407.3, except spaces conforming to 407.2.1 through 407.2.4. (407.2) | Every corridor shall provide access to at least 2 exits without passing through any intervening rooms or spaces other than corridors or lobbies. (18.2.5.9) | Every corridor shall provide access to at least 2 exits without passing through any intervening rooms or spaces other than corridors or lobbies. (18.2.5.4) | Every corridor shall provide access to at least 2 exits without passing through any intervening rooms or spaces other than corridors or lobbies. (18.2.5.4) |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------------|---|---|---|---|---|
| Travel Distance | | | | | |
| | General egress travel distance | | | | |
| | Between any room door required as an exit access and an exit | N/A | Maximum 150 ft. (18.2.6.2.1) | Removed from code | N/A |
| | Between any point in a room and an exit | 200 ft. (Table 1016.1) | Maximum 200 ft. (18.2.6.2.2) | Maximum 200 ft. (18.2.6.2.1) | Maximum 200 ft. (18.2.6.2.1) |
| | Between any point in a health care sleeping room and an exit access door in that room | Maximum 50 ft. to exit access door in a room (1014.2.6) | Maximum 50 ft. (18.2.6.2.3) | Maximum 50 ft. (18.2.6.2.5) | Maximum 50 ft. (18.2.6.2.5) |
| | Between any point in a suite of sleeping rooms and an exit access door of that suite | Maximum 100 ft. (1014.2.3.3) | Maximum 100 ft. (18.2.6.2.4) | Maximum 100 ft. (18.2.5.7.2.4(A)) | Maximum 100 ft. (18.2.5.7.2.4(A)) |
| | Between any point in a sleeping suite and an exit | Maximum 200 ft. (Table 1016.1) | N/A | Maximum 200 ft. (18.2.5.7.2.4(B)) | Maximum 200 ft. (18.2.5.7.2.4(B)) |
| | Common path of travel | Group I-2—75 ft. (1014.3) | N/A | Maximum 100 ft. (18.2.5.3) | Maximum 100 ft. (18.2.5.3) |
| Doors | | | | | |
| | Minimum clear width serving sleeping, diagnostic, and treatment rooms | 41.5 in. (1008.1.1) | 41.5 in. (18.2.3.5(1)) | 41.5 in. (18.2.3.6(1)) | 41.5 in. (18.2.3.6(1)) |
| | Minimum clear width, all other areas | 32 in. net clear width (1008.1.1) | 32 in. clear width (18.2.3.5 and 7.2.1.2.3) | 32 in. clear width (18.2.3.7 and 7.2.1.2.3.2) | 32 in. clear width (18.2.3.7 and 7.2.1.2.3.2) |
| | Minimum height | 80 in. (1008.1.1) | 90 in. (7.1.5) | 90 in. (7.1.5.1) | 90 in. (7.1.5.1) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--------------------------|---|---|---|---|---|
| Doors (continued) | | | | | |
| | Door type should be side-hinged and swinging. | Required door type is side-hinged and swinging. Exceptions: 1. Critical or intensive care patient rooms within suites 2. Horizontal sliding doors complying with 1008.1.4.3 3. Manually-operated horizontal sliding doors permitted in a means of egress from spaces with an occupant load of less than 10 (1008.1.2) | Doors swing in the direction of egress. (7.2.1.4.1) | Doors swing in the direction of egress. (7.2.1.4.1) | Doors swing in the direction of egress. (7.2.1.4.1) |
| | Door should swing in the direction of exit travel when serving highly hazardous areas or an area with an occupant load of more than 50. | 1008.1.2 | 7.2.1.4.2 and 7.2.1.4.3 | 7.2.1.4.2 | 7.2.1.4.2 |
| | Exit door shall open from the egress side without the use of key locking device. | 1008.1.9 | 7.2.1.5.1 and 18.2.2.2.4 | 7.2.1.5.1, 7.2.1.5.2, and 18.2.2.2.4 | 7.2.1.5.1, 7.2.1.5.2, and 18.2.2.2.4 |
| | Bolt locks are generally prohibited except for storage or equipment rooms or where doors serve patient care rooms. | 1008.1.9.4 | N/A | N/A | N/A |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--------------------------|--|------------|-------------------------|---------------|---------------|
| Doors (continued) | | | | | |
| | <p>Horizontal sliding doors are permitted to be a component of a means of egress when they meet the following requirements:</p> <ol style="list-style-type: none"> 1. Power operated and capable of being operated manually in the event of power failure 2. Operable by a simple method from both sides without special knowledge or effort 3. Force required to operate is a maximum of 30 lb. to set door in motion and 15 lb. to close or open to the required width 4. Operable with a force not to exceed 15 lb. when a force of 250 lb. is applied perpendicular to the door adjacent to the operating device 5. If the door is required to be rated, it must be self-closing or automatically operated by smoke detection | 1008.1.4.3 | 7.2.1.14 and 18.2.2.2.9 | 7.2.1.14 | 7.2.1.14 |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--------------------------|---|-------------------------------|---------------------------|-------------------------------|---|
| Doors (continued) | | | | | |
| | <p>6. The door assembly has an integrated standby power supply</p> <p>7. The door assembly power supply is electronically supervised</p> <p>8. The door opens to the minimum required width within 10 seconds of activation of the operating device</p> | | | | |
| | Horizontal sliding doors serving a room or area with an occupant load of fewer than 10 in health care occupancies shall be exempt from the requirements of 7.2.1.4.1. | 1008.1.2(9) | N/A | 7.2.1.4.1.6 and 18.2.2.2.10.2 | 7.2.1.4.1.6 and 18.2.2.2.10.2 |
| | Vision panels of approved assemblies of fire-rated glazing or wired glass shall be provided at each cross-corridor door and each cross-corridor horizontal sliding door in a smoke barrier. | | | 18.3.7.9 | Vision panels shall not be wired glass panels (new construction). |
| Corridors | | | | | |
| | Minimum width where inpatients are moved on beds | 96 in. (1018.2) (Exception 6) | 8 ft. (96 in.) (18.2.3.3) | 8 ft. (96 in.) (18.2.3.4) | 8 ft. (96 in.) (18.2.3.4) New allowable projections into the corridor allowed. Listed in 18.2.3.4(7). |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------------------|---|---|--|--|---|
| Corridors (continued) | | | | | |
| | Projections in corridor with minimum width of 6 ft. | The required width of corridors shall be unobstructed. (1018.3) | Tentative Interim Amendment (2006 LSC): 6 in. from the corridor wall, above the handrail height, shall be permitted for hand-rub dispensing units. Projections in the corridors on both sides are permitted if they do not exceed a depth of 6 in., have a length of less than 36 in., are positioned no lower than 40 in. above the floor, and have no less than 48 in. of horizontal separation from other projections. | Projection not exceeding 6 in. from the corridor wall, above the handrail height, shall be permitted for hand-rub dispensing units. Projections in the corridors on both sides are permitted if the projection does not exceed a depth of 6 in., has a length of less than 36 in., is positioned no lower than 40 in. above the floor, and has no less than 48 in. of horizontal separation from other projections. (18.2.3.4) | Projection not exceeding 6 in. from the corridor wall, above the handrail height, shall be permitted for hand-rub dispensing units. Projections in the corridors on both sides are permitted if the projection does not exceed a depth of 6 in., has a length of less than 36 in., is positioned no lower than 40 in. above the floor, and has no less than 48 in. of horizontal separation from other projections. (18.2.3.4) CMS March 2012 memo allows for waivers. |
| | Wheeled equipment in the corridors | N/A | N/A | N/A | In-use wheeled equipment and not-in-use emergency equipment must be arranged to allow 5 ft. of clearance at all times. Equipment must be moved in an emergency. (18.2.3.4(4)) |
| | Fixed furniture in the corridor | N/A | N/A | N/A | Fixed furniture is allowed to extend 24 in. into the corridor. Direct supervision or a smoke detection device is needed. (18.2.3.4(5)) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------------------|--|---|------------------|------------------|---|
| Corridors (continued) | | | | | |
| | Minimum width for limited care facility or hospital for psychiatric care | Width required is 72 in. for Group I health care for ambulatory patients not capable of self-preservation who are receiving outpatient medical care. (1018.2) (Exception 5) | 6 ft. (18.2.3.4) | 6 ft. (18.2.3.5) | 6 ft. (18.2.3.5) |
| | Minimum height to ceiling | 90 in. (1003.2) | 90 in. (7.1.5.1) | 90 in. (7.1.5.1) | 90 in. (7.1.5.1) |
| | Minimum height to ceiling projections | 80 in. (1003.3.1) | 80 in. (7.1.5.1) | 80 in. (7.1.5.1) | 80 in. (7.1.5.1) |
| | The required corridor width shall be unobstructed with the following exceptions: 1. Doors (when fully open) and handrails shall not reduce the required width by more than 7 in. 2. Doors in any position shall not reduce the required corridor width by more than ½. | 1005.2 | 7.2.1.4.4 | 7.2.1.4.3.1 | 7.2.1.4.3.1 |
| | 3. Storage not exceeding 50 sq. ft. shall be permitted in corridors provided it does not affect the required egress width or any protection features. | | | | One area per smoke zone allowed provided storage does not exceed 32-gallon container size (18.7.5.8 and 18.7.5.7) |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------|--|---|---|---|---|
| Stairways | | | | | |
| | Risers | Minimum 4 in., maximum 7 in. (1009.4.2) | Minimum 4 in., maximum 7 in. (Table 7.2.2.2.1(a)) | Minimum 4 in., maximum 7 in. (Table 7.2.2.2.1.1(a)) | Minimum 4 in., maximum 7 in. (Table 7.2.2.2.1.1(a)) |
| | Treads | Minimum 11 in. (1009.4.2) | Minimum 11 in. (Table 7.2.2.2.1(a)) | Minimum 11 in. (Table 7.2.2.2.1.1(a)) | Minimum 11 in. (Table 7.2.2.2.1.1(a)) |
| | Width | O.L. < 50–36" O.L. ≥ 50–44" See occupant egress width Section 1005.1 for further requirements of width (1009.1) | Minimum 44 in. (Table 7.2.2.2.1(a)) | Minimum 44 in. for fewer than 2,000 persons. Minimum 56 in. for more than 2,000 persons. (Table 7.2.2.2.1.2(B)) | Minimum 44 in. for fewer than 2,000 persons. Minimum 56 in. for more than 2,000 persons. (Table 7.2.2.2.1.2(B)) |
| | Landings width | No less than the width of the stair, but need not exceed 48 in. when the stair has a straight run. (1009.5) | No less than the width of the stair, but need not exceed 48 in. when the stair has a straight run. (7.2.2.3.2) | No less than the width of the stair, but need not exceed 48 in. when the stair has a straight run. (7.2.2.3.2.4) | No less than the width of the stair, but need not exceed 48 in. when the stair has a straight run. (7.2.2.3.2.4) |
| | Vertical rise | Vertical distance between floor levels and landings: 12 ft. (1009.7) | Vertical distance between floor levels and landings: 12 ft. (Table 7.2.2.2.1(a)) | Vertical distance between floor levels and landings: 12 ft. (Table 7.2.2.2.1.1(a)) | Vertical distance between floor levels and landings: 12 ft. (Table 7.2.2.2.1.1(a)) |
| | Headroom | 80 in. (1009.2) | 80 in. (Table 7.2.2.2.1(a)) | 80 in. (Table 7.2.2.2.1(a)) | 80 in. (Table 7.2.2.2.1(a)) |
| | Handrails (Note: Shall also coordinate with TAS requirements—minimum 1¼ in., maximum 1½ in.) (4.26.2) | Circular diameter: minimum 1¼ in., maximum 2 in. (1012.3.1) | Circular diameter: minimum 1¼ in., maximum 2 in. (7.2.2.4.5) | Circular diameter: minimum 1¼ in., maximum 2 in. (7.2.2.4.4.6) | Circular diameter: minimum 1¼ in., maximum 2 in. (7.2.2.4.4.6) |
| | | Height: minimum 34 in., maximum 38 in. (1012.2) | Height: minimum 34 in., maximum 38 in. (7.2.2.4.5) | Height: minimum 34 in., maximum 38 in. (7.2.2.4.4.1) | Height: minimum 34 in., maximum 38 in. (7.2.2.4.4.1) |
| | | Clear space to wall: 1½ in. (1012.7) | Clear space to wall: 1½ in. (7.2.2.4.5) | Clear space to wall: 2¼ in. (7.2.2.4.4.5) | Clear space to wall: 2¼ in. (7.2.2.4.4.5) |
| | | Intermediate handrails are required so that all portions of the stairway are within 30 in. of the handrail. (1012.9) | Intermediate handrails are required so that all portions of the stairway are within 30 in. of the handrail. (7.2.2.4.1) | Intermediate handrails are required so that all portions of the stairway are within 30 in. of the handrail. (7.2.2.4.1.2) | Intermediate handrails are required so that all portions of the stairway are within 30 in. of the handrail. (7.2.2.4.1.2) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------------------|--|--|--|--|--|
| Stairways (continued) | | | | | |
| | Guardrails required along open-sided walking surfaces, mezzanines, stairways, ramps, and landings. | Height: 42 in. (1013.2) | Height: 42 in. (7.2.2.4.6(2)) | Height: 42 in. (7.2.2.4.5.2) | Height: 42 in. (7.2.2.4.5.2) |
| | | Open guardrails shall have intermediate rails or an ornamental pattern such that a sphere 4 in. in diameter cannot pass through at any point up to 34 in. in height, and a sphere 4 ³ / ₈ in. in diameter cannot pass through at any point 36–42 in. in height. (1013.3) | Open guardrails shall have intermediate rails or an ornamental pattern such that a sphere 4 in. in diameter cannot pass through up to 34 in. in height. (7.2.2.4.6) | Open guardrails shall have intermediate rails or an ornamental pattern such that a sphere 4 in. in diameter cannot pass through up to 34 in. in height. (7.2.2.4.5.3) | Open guardrails shall have intermediate rails or an ornamental pattern such that a sphere 4 in. in diameter cannot pass through up to 34 in. in height (7.2.2.4.5.3) |
| | Stairway signage | Signs must be located at each floor level in all enclosed stairways serving 3 or more stories. The signs must identify the story and direction to exit discharge, floor level, and the upper and lower terminus of the stairway. Sign shall be located 5 ft. above the floor landing in a position readily visible when the door is in the open and closed positions. See Section 1022.8.1 for specific signage requirements. (1022.8) | Signs must be located at each floor level in all enclosed stairways serving 5 or more stories. The signs must identify the stairway access, floor level, and the upper and lower terminus of the stairway. (7.2.2.5.4) | Signs must be located at each floor level in all enclosed stairways serving 3 or more stories. The signs must identify the stairway access, floor level, and the upper and lower terminus of the stairway. (7.2.2.5.4.1 A–M) | Signs must be located at each floor level in all enclosed stairways serving 3 or more stories. The signs must identify the stairway access, floor level, and the upper and lower terminus of the stairway. (7.2.2.5.4.1 A–M) |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------------------|---|---|---|---|---|
| Stairways (continued) | | | | | |
| | Stairway to roof (DA1015.2.1.1) | In buildings 4 or more stories in height, 1 stairway shall extend to the roof unless the roof slope is greater than 33 percent. (1009.13) | N/A | N/A | N/A |
| Exit Ramps | | | | | |
| | Width | No less than that required for a corridor. (1010.5.1) | 96 in. (18.2.3.3) | 96 in. (18.2.3.4) | 96 in. (18.2.3.4) |
| | Maximum slope in direction of travel | 1:12 (1010.2) | 1:12 (Table 7.2.5.2 (a)) | 1:12 (Table 7.2.5.2 (a)) | 1:12 (Table 7.2.5.2 (a)) |
| | Maximum rise for a single ramp run | 1:12 (1010.2) | 30 in. (Table 7.2.5.2 (a)) | 30 in. (Table 7.2.5.2 (a)) | 30 in. (Table 7.2.5.2 (a)) |
| | Handrails | Ramps with a rise greater than 6 in. shall have handrails complying with Section 1012. (1010.8) | Required for ramps with a rise greater than 6 in. (7.2.5.4) | Required for ramps with a rise greater than 6 in. (7.2.5.4.2) | Required for ramps with a rise greater than 6 in. (7.2.5.4.2) |
| Horizontal Exits | | | | | |
| | Minimum area per patient provided on each side of the horizontal exit | 30 net sq. ft. for non-ambulatory, 15 sq. ft. for ambulatory (1025.4) | 30 net sq. ft. (18.2.2.5.1) | 30 net sq. ft. (18.2.2.5.1.1) | 30 net sq. ft. (18.2.2.5.1.1) |
| | Minimum area per occupant in non-patient areas provided on each side of the horizontal exit | 3 net sq. ft. (1025.4) | 6 net sq. ft. (18.2.2.5.1) | 6 net sq. ft. (18.2.2.5.1.2) | 6 net sq. ft. (18.2.2.5.1.2) |
| | Horizontal exits are permitted to compromise $\frac{1}{3}$ of the required exits from any building or floor area. | 1025.1. | 18.2.2.5.2 | 18.2.2.5.2 | 18.2.2.5.2 |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|-------------------------------------|---|-----------------------------|---------------------------------|---------------------------------|---------------------------------|
| Horizontal Exits (continued) | | | | | |
| | Horizontal exits in a corridor 8 ft. or longer and serving as an exit from both sides must have a pair of opposite swinging doors with a clear width of no less than 41.5 in. | N/A | 18.2.2.5.4 | 18.2.2.5.4 | 18.2.2.5.4 |
| | Horizontal exits in a corridor 6 ft. or longer and serving as an exit from both sides must have a pair of opposite swinging doors with a clear width of no less than 32 in. | N/A | 18.2.2.5.5 | 18.2.2.5.5 | 18.2.2.5.5 |
| | An approved vision panel is required in each horizontal exit. | N/A | 18.2.2.5.6 | 18.2.2.5.6 | 18.2.2.5.6 |
| Smoke Compartments | | | | | |
| | Every story used by inpatients for sleeping or treatment and having an occupant load of 50 or more must be divided into 2 smoke compartments. | 407.4 | 18.3.7.1(2) | 18.3.7.1(2) | 18.3.7.1(2) |
| | Maximum area per compartment | 22,500 sq. ft. 407.4 | 22,500 sq. ft. (18.3.7.1(3)) | 22,500 sq. ft. (18.3.7.1(3)) | 22,500 sq. ft. (18.3.7.1(3)) |
| | Maximum travel distance from any point to reach a door in the required smoke barrier | 200 ft. (407.4) | 200 ft. (18.3.7.1(4)) | 200 ft. (18.3.7.1(4)) | 200 ft. (18.3.7.1(4)) |
| | Health care floors: minimum area provided per patient on each side of a smoke compartment | 30 net sq. ft. (407.4.1) | 30 net sq. ft. (18.3.7.4) | 30 net sq. ft. (18.3.7.5.1) | 30 net sq. ft. (18.3.7.5.1) |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|---------------------------------------|---|---|--------------------------|----------------------------|----------------------------|
| Smoke Compartments (continued) | | | | | |
| | Non-patient floors: minimum area provided per occupant on each side of smoke compartment | 6 net sq. ft. (407.4.1) | 6 net sq. ft. (18.3.7.4) | 6 net sq. ft. (18.3.7.5.2) | 6 net sq. ft. (18.3.7.5.2) |
| | Smoke barriers must be provided on stories that are useable, even if unoccupied. | Other stories with an occupant load of 50 or more must be divided into at least 2 smoke compartments. (407.4) | 18.3.7.2 | N/A See 18.3.7.2 | N/A See 18.3.7.2 |
| | Cross-corridor doors in smoke barriers must be opposite-swinging type. | N/A | 18.3.7.5 | 18.3.7.6(2) | 18.3.7.6(2) |
| | Minimum clear width for individual smoke barrier doors | N/A | 41.5 in. (18.3.7.5) | 41.5 in. (18.3.7.6) | 41.5 in. (18.3.7.6) |
| | Doors must be self-closing or automatic. | N/A | 18.3.7.6 | 18.3.7.8 | 18.3.7.8 |
| | Vision panels with fire-rated glazing or wired glass at each cross corridor door | N/A | 18.3.7.7 | 18.3.7.9 | 18.3.7.9 |
| | Rabbets, bevels, or astragals are required at the meeting edges, and stops are required at the head and sides of the door frames. | N/A | 18.3.7.8 | 18.3.7.11 | 18.3.7.11 |
| | Positive latching door hardware is not required for doors installed across corridors. | N/A | 18.3.7.8 | 18.3.7.10 | 18.3.7.10 |
| | Duct penetrations of smoke compartment walls must be protected by smoke dampers. | 716.5.5 | 8.3.5.1 | 8.5.5.2 | 8.5.5.2 |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|---------------------------------------|--|--|--|--|--|
| Smoke Compartments (continued) | | | | | |
| | Smoke dampers are not required in smoke barriers where steel duct openings are limited to 1 compartment. | 716.5.5 | 8.3.5.1, Exception 3 | 8.5.5.3 | 8.5.5.3 |
| | Smoke dampers are not required in smoke barriers with fully ducted HVAC systems. | N/A | 18.3.7.3, Exception 3 | 18.3.7.3(2) | 18.3.7.3(2) |
| Means of Egress Lighting | | | | | |
| | Minimum illumination at the walking surface level | 1 foot-candle (1006.2) | 1 foot-candle (7.8.1.3) | 1 foot-candle (7.8.1.3(2)) | 1 foot-candle. 10 foot-candles in new stairs. (7.8.1.3(2)) |
| Emergency Lighting | | | | | |
| | Separate source of emergency power is required. Must be automatically actuated if normal power is interrupted. | 1006.3. | 7.9.2.1, 7.9.2.3, and 18.2.9.2 | 7.9.2.1, 7.9.2.3, and 18.2.9.2 | 7.9.2.1, 7.9.2.3, and 18.2.9.2 |
| | Duration | 90 minutes (1006.3) | 90 minutes (7.9.2.1) | 90 minutes (7.9.2.1) | 90 minutes (7.9.2.1) |
| | Minimum illumination | 1 foot-candle with point minimum of 0.1 foot-candle (1006.3) At end of duration may drop to 0.6 foot-candle with a point minimum of 0.06 foot-candle (1006.4) | 1 foot-candle with point minimum of 0.1 foot-candle (7.9.2.1) At end of duration may drop to 0.6 foot-candle with a point minimum of 0.06 foot-candle (7.9.2.1) | 1 foot-candle with point minimum of 0.1 foot-candle (7.9.2.1) At end of duration may drop to 0.6 foot-candle with a point minimum of 0.06 foot-candle (7.9.2.1) | 1 foot-candle with point minimum of 0.1 foot-candle (7.9.2.1) At end of duration may drop to 0.6 foot-candle with a point minimum of 0.06 foot-candle (7.9.2.1) |
| Exit Signs | | | | | |
| | Required for every exit | 1011.1 | 7.10.1.2 | 7.10.1.2.1 | 7.10.1.2.1 |
| | Location | Must be placed so that no point is more than 100 ft. from the nearest visible sign (1011.1) | Must be placed so that no point is more than 100 ft. from the nearest visible sign (7.10.1.4) | Must be placed so that no point is more than 100 ft. from the nearest visible sign (7.10.1.5.2) | Must be placed so that no point is more than 100 ft. from the nearest visible sign (7.10.1.5.2) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------------------------|--|---|--|--|--|
| Exit Signs (continued) | | | | | |
| | Illumination | Minimum of 5 foot-candles (1011.5.2) | Externally illuminated by no less than 5 foot-candles (7.10.6.3) | Externally illuminated by no less than 5 foot-candles or internally illuminated in accordance with UL 924: <i>Standard for Emergency Lighting and Power Equipment</i> (7.10.6.3) | Externally illuminated by no less than 5 foot-candles or internally illuminated in accordance with UL 924: <i>Standard for Emergency Lighting and Power Equipment</i> (7.10.6.3) |
| | Listing | Shall be installed in accordance with its listing (1011.4) | The face of a photoluminescent sign shall be continually illuminated while the building is occupied. Illumination level shall be in accordance with its listing (7.10.7.2) | The face of a photoluminescent sign shall be continually illuminated while the building is occupied. Illumination level shall be in accordance with its listing (7.10.7.2) | The face of a photoluminescent sign shall be continually illuminated while the building is occupied. Illumination level shall be in accordance with its listing (7.10.7.2) |
| | Emergency power | Shall be connected to an emergency power system (1011.5.3) | Must be connected to an emergency electrical system in accordance with NFPA 70: <i>National Electrical Code</i> ® (7.10.4) | Must be connected to an emergency electrical system in accordance with the <i>National Electrical Code</i> (7.10.4) | Must be connected to an emergency electrical system in accordance with the <i>National Electrical Code</i> (7.10.4) |
| | Emergency power duration | 90 minutes in case of primary power loss (1011.5.3) | 90 minutes in case of primary power loss (7.9.2.1) | 90 minutes in case of primary power loss (7.9.2.1) | 90 minutes in case of primary power loss (7.9.2.1) |
| | Tactile exit signs | Required at each door to an egress stairway, exit passageway, and exit discharge (1011.3) | Shall be provided at each exit door requiring an exit sign and comply with ICC/ANSI A117.1 (7.10.1.3) | Shall be provided at each exit door requiring an exit sign and comply with ICC/ANSI A117.1 (7.10.1.3) | Shall be provided at each exit door requiring an exit sign and comply with ICC/ANSI A117.1 (7.10.1.3) |
| Automatic Sprinkler Systems | | | | | |
| | An automatic sprinkler system is required to be designed and installed in accordance with NFPA 13. | 903.3.1.1 | 18.3.5.1 | 18.3.5.1 | 18.3.5.1 |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|---|--------------------------------------|-----------------------|-------------------------|---|
| Automatic Sprinkler Systems (continued) | | | | | |
| | Smoke compartments containing sleeping rooms must use listed quick-response sprinklers. | 903.3.2 | 18.3.5.2 | 18.3.5.6 | Stated in Appendix 18.3.5.6 that residential sprinklers are considered acceptable in patient sleeping rooms even though not specifically listed for this purpose. |
| | Sprinklers are not required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 sq. ft., provided the distance from the sprinkler in the patient sleeping room to the back wall of the closet does not exceed the maximum distance permitted by NFPA 13. | | | | 18.3.5.10 |
| Fire Extinguisher | | | | | |
| | Required in all health care occupancies | In accordance with fire code (906.1) | 18.3.5.6 | 18.3.5.11 | 18.3.5.11 |
| | Shall be selected, installed, and maintained in accordance with NFPA 10 | 906.2 | 9.7.4.1 | 9.7.4.1 | 9.7.4.1 |
| Fire Alarm | | | | | |
| | A manual fire alarm system is required and is required to be initiated by sprinkler system water flow alarms, detection devices, or detection systems. | 907.2.6 | 18.3.4.1 and 18.3.4.2 | 18.3.4.1 and 18.3.4.2.1 | 18.3.4.1 and 18.3.4.2.1 |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|---------------------------------|--|---|---|---|---|
| Automatic Fire Detection | | | | | |
| | As required for open spaces to corridors | Provide smoke detectors per Section 407.2. (907.2.6.2) | 18.3.6.1 | 18.3.6.1 | 18.3.6.1 |
| | At smoke-barrier doors and other fire-rated door openings where doors are on hold-open devices | N/A | 18.2.2.2.6 | 18.2.2.2.7 | 18.2.2.2.7 |
| Special Features | | | | | |
| | Outside window or door | N/A | Every patient sleeping room shall have an outside window or door. The allowable sill height shall not exceed 36 in. above the floor. (18.3.8) | Outside window is not required. | Outside window is not required. |
| | Direct-vent gas fireplaces | N/A | N/A | N/A | Allowed with limitations listed in 18.5.2.3(2) |
| | Emergency power system requirements | | An on-site power generator system is required. (18.5.1.2 NFPA 99) | An on-site power generator system is required. (18.5.1.2 NFPA 99) | An on-site power generator system is required. (18.5.1.2 NFPA 99) |
| | | | The emergency system is limited to circuits essential to life safety and critical patient care and that are designated the life safety branch and critical branch. (NFPA 99: 3-4.2.2.2) | The emergency system is limited to circuits essential to life safety and critical patient care and that are designated the life safety branch and critical branch. (NFPA 99: 3-4.4.2.2.1) | The emergency system is limited to circuits essential to life safety and critical patient care and that are designated the life safety branch and critical branch. (NFPA 99: 3-4.4.2.2.1) |
| | Laboratories in health care occupancies | Must be below exempt amount per Table 307.1(1) and (2) (307.1, Exception 1) | Total volume of Class I, II, and IIIA liquids outside of approved storage cabinets and safety cans shall not exceed 1 gal. / 100 sq. ft. (NFPA 99: 10-7.2.2) | Total volume of Class I, II and IIIA liquids outside of approved storage cabinets and safety cans shall not exceed 1 gal. / 100 sq. ft. (NFPA 99: 11-7.2.3.1) | Total volume of Class I, II and IIIA liquids outside of approved storage cabinets and safety cans shall not exceed 1 gal. / 100 sq. ft. (NFPA 99: 11-7.2.3.1) |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|-------------------------------------|-----------------------|----------|---|---|---|
| Special Features (continued) | | | | | |
| | | N/A | At least 1 approved flammable or combustible liquid storage room shall be available within any health care facility regularly maintaining a reserve storage capacity of in excess of 300 gal. (NFPA 99: 10-7.2.2) | At least 1 approved flammable or combustible liquid storage room shall be available within any health care facility regularly maintaining a reserve storage capacity of in excess of 300 gal. (NFPA 99: 11-7.2.3.4) | At least 1 approved flammable or combustible liquid storage room shall be available within any health care facility regularly maintaining a reserve storage capacity of in excess of 300 gal. (NFPA 99: 11-7.2.3.4) |
| | | N/A | Flammable gas cylinder storage for a laboratory shall be separated from the health care facility. 2-hour. (NFPA 99: 10-10.2.2) | Flammable gas cylinder storage for a laboratory shall be separated from the health care facility. 2-hour. (NFPA 99: 11-10.2.2) | Flammable gas cylinder storage for a laboratory shall be separated from the health care facility. 2-hour. (NFPA 99: 11-10.2.2) |
| | | N/A | Rooms or enclosures for storage of gas cylinders shall be well ventilated. (NFPA 99: 10-10.2.3) | Rooms or enclosures for storage of gas cylinders shall be well ventilated. (NFPA 99: 11-10.3.2) | Rooms or enclosures for storage of gas cylinders shall be well ventilated. (NFPA 99: 11-10.3.2) |
| | | | Total quantity and size of cylinders shall comply with Table 8-1 of NFPA 45. (NFPA 99: 10-10.3) | Total quantity and size of cylinders shall comply with Table 8-1 of NFPA 45. (NFPA 99: 11-10.3) | Total quantity and size of cylinders shall comply with Table 8-1 of NFPA 45. (NFPA 99: 11-10.3) |
| | Medical gas storage | N/A | Oxidizing gases such as oxygen and nitrous oxide shall not be stored with any flammable gas, liquid, or vapor. (NFPA 99: 8-3.1.11.2) | Oxidizing gases such as oxygen and nitrous oxide shall not be stored with any flammable gas, liquid, or vapor. (NFPA 99: 9.4.1) | Oxidizing gases such as oxygen and nitrous oxide shall not be stored with any flammable gas, liquid, or vapor. (NFPA 99: 9.4.1) |
| | | N/A | Oxidizing gases shall be separated from combustible or incompatible materials by a minimum of 20 ft. or by 5 ft. if the storage area is provided with automatic sprinklers. (NFPA 99: 8-3.1.11.2) | Oxidizing gases shall be separated from combustible or incompatible materials by a minimum of 20 ft. or by 5 ft. if the storage area is provided with automatic sprinklers. (NFPA 99: 9.4.1) | Oxidizing gases shall be separated from combustible or incompatible materials by a minimum of 20 ft. or by 5 ft. if the storage area is provided with automatic sprinklers. (NFPA 99: 9.4.1) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|-------------------------------------|--|----------|---|--|---|
| Special Features (continued) | | | | | |
| | Alcohol-based hand rub (ABHR) dispensers | N/A | The corridor width is 6 ft. or greater, and dispensers are at least 4 ft. apart. (Joint Commission) | The corridor width is 6 ft. or greater, and dispensers are at least 4 ft. apart. (18.3.2.6(1)) | The corridor width is 6 ft. or greater, and dispensers are at least 4 ft. apart. (18.3.2.6(1)) |
| | | N/A | The dispensers shall not be installed over or directly adjacent to electrical outlets and switches. "Adjacent" is defined as being no closer than 6 in. from the center of the dispenser on either side. (Joint Commission) | The dispensers shall not be installed over or directly adjacent to electrical outlets and switches. "Adjacent" is defined as being no closer than 1 in. to either side of the dispenser. (18.3.2.6(7)) | The dispensers shall not be installed over or directly adjacent to electrical outlets and switches. "Adjacent" is defined as being no closer than 1 in. to either side of the dispenser. (18.3.2.6(8)) |
| | | N/A | In locations with carpeted floor coverings, dispensers installed directly over carpeted surfaces are permitted only in sprinklered smoke compartments. (Joint Commission) | In locations with carpeted floor coverings, dispensers installed directly over carpeted surfaces are permitted only in sprinklered smoke compartments. (18.3.2.6(8)) | In locations with carpeted floor coverings, dispensers installed directly over carpeted surfaces are permitted only in sprinklered smoke compartments. (18.3.2.6(9)) |
| | | N/A | Each smoke compartment may contain a maximum aggregate of 10 gal. (37.8L) of ABHR product in dispensers and a maximum of 5 gallons (18.9 liters) in storage. (Joint Commission) | Each smoke compartment may contain a maximum aggregate of 10 gal. (37.8 L) of ABHR product in dispensers and a maximum of 5 gallons (18.9 liters) in storage. (18.3.2.6(5&6)) | Each smoke compartment may contain a maximum aggregate of 10 gal. (37.8 L) of ABHR product in dispensers and a maximum of 5 gal. (18.9 L) in storage. (18.3.2.6(6&7)) One dispenser complying with #2 or #3 per room shall not be included in the aggregated quantity addressed in #5. |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|---|---|--|--|--|
| Special Features (continued) | | | | | |
| | | N/A | The maximum individual dispenser fluid capacity is 1.2 L for dispensers in rooms, corridors, and areas open to corridors. (Joint Commission) | The maximum individual dispenser fluid capacity is 1.2 L for dispensers in rooms, corridors, and areas open to corridors. (18.3.2.6(2a)) | The maximum individual dispenser fluid capacity is 1.2 L for dispensers in rooms, corridors, and areas open to corridors. (18.3.2.6(2a)) |
| | | N/A | The maximum individual dispensers in suites of rooms is 2.0 L. (Joint Commission) | The maximum individual dispensers in suites of rooms is 2.0 L. (18.3.2.6(2b)) | The maximum individual dispensers in suites of rooms is 2.0 L. (18.3.2.6(2b)) |
| Fire Service Features | | | | | |
| | Access to roof | Stairway access shall be provided unless roof slope is greater than 4:12 (33.3 percent slope). (1009.11) | N/A | N/A | N/A |
| Pedestrian Walkways and Tunnels | | | | | |
| | Construction must be noncombustible. | 3104.3 | N/A | N/A | N/A |
| | Fire barriers between pedestrian walkways | 2-hour rating (3104.5) | N/A | N/A | N/A |
| | | Note: There are 4 exceptions that may exempt a walkway from the 2-hour fire barrier requirement. (3104.5) | N/A | N/A | N/A |
| | Public way | The exit discharge shall provide a direct and unobstructed access to a public way. (1027.6) | Every smoke-proof enclosure shall discharge into a public way. (7.2.3.5) | Every smoke-proof enclosure shall discharge into a public way. (7.2.3.5) | Every smoke-proof enclosure shall discharge into a public way. (7.2.3.5) |
| | Egress | Access must be available at all times for pedestrian walkways used as egress. (3104.7) | N/A | N/A | N/A |
| | Width | Minimum 36 in., maximum 30 ft. (3104.8) | N/A | N/A | N/A |

| Code Category | Component/Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|--|----------------------------------|---|---|---|--------------------------|
| Pedestrian Walkways and Tunnels (continued) | | | | | |
| | Exit access travel distance | 200 ft. Exceptions: 1. With NFPA 13 sprinkler—250 ft. 2. Open both sides at least 50 percent—300 ft. 3. Open on both sides 50 percent and NFPA 13 sprinkler system—400 ft. (3104.9) | N/A | N/A | N/A |
| Tunneled Walkways | | | | | |
| | Separation | Separation between tunneled walkways and the attached buildings must be at least 2-hour fire resistant construction with openings protected per Table 715.4. (3104.10) | N/A | N/A | N/A |
| Elevators | | | | | |
| | Hoistway enclosure | Enclosure protection per Section 708 (3002.1) | 8.5.2 | 8.3.4 | Table 8.3.4.2 |
| | Number of elevators per hoistway | 4 (3002.2) | 3 or 4 | 3 or 4 | 3 or 4 (8.6.9.4) |
| | Emergency signs | Required (3002.3) | CABO/ANSI A17.1-1992: <i>Safety Code for Elevators and Escalators</i> | ASME A17.1: <i>Safety Code for Elevators and Escalators</i> | ASME A17.1 (18.5.3, 9.4) |
| | Prohibited doors | Additional doors at point of access must be readily operable from the car side. (3002.6) | N/A | N/A | N/A |
| | Common enclosure with stair | Prohibited (3002.7) | Prohibited (7.1.3.1) | Prohibited (7.1.3.1) | Prohibited (7.1.3.1 (9)) |
| | Emergency operations | 3003 | CABO/ANSI A17.1 | ASME A17.1 | ASME A17.1 (18.5.3, 9.4) |
| | Hoistway venting | 3004 | CABO/ANSI A17.1 | ASME A17.1 | ASME A17.1 (18.5.3, 9.4) |
| | Machine rooms | 3306 | | | |
| | Machine room access | 3006.1 | CABO/ANSI 17.1 | ASME A17.1 | ASME A17.1 (18.5.3, 9.4) |

| Code Category | Component/ Requirement | 2009 IBC | NFPA 101-2000 | NFPA 101-2009 | NFPA 101-2012 |
|------------------------------|-----------------------------|--|-----------------|---------------|--------------------------|
| Elevators (continued) | | | | | |
| | Machine room venting | Independent venting is required for solid-state equipment. (3006.2) | N/A | N/A | N/A |
| | Machine room pressurization | Required if hoistway is pressurized via activation of a heat or smoke detector in the machine (3006.3) | N/A | N/A | N/A |
| | Shunt trip | Required where protected by fire sprinkler system per NFPA 72 Section 6.16.4 (3006.5) | CABO/ANSI A17.1 | ASME A17.1 | ASME A17.1 (18.5.3, 9.4) |

**Appendix 1: Sample Letter Requesting an
Equivalency (New Health Care Facilities)**

DATE:

E-MAIL: gmills@jointcommission.org

Mr. George Mills
Standards Interpretation Group
The Joint Commission
One Renaissance Boulevard
Oakbrook Terrace, IL 60181

USE OF THE [2009 or 2012] EDITION OF NFPA 101 IN LIEU OF
THE 2000 EDITION OF NFPA 101 AT _____
_____.

Dear George:

We are requesting the use of NFPA 101-[2009 or 2012] in its entirety as an
equivalency to compliance with NFPA 101-2000 for the _____
_____ facility. Attachment 1 is a summary compari-
son of the 2000 and [2009 or 2012] editions of NFPA 101.

The new facility at _____
_____ will comply with all
aspects of the [2009 or 2012] edition of NFPA 101. Please conduct your
initial certification survey using NFPA 101-[2009 or 2012].

If you have any questions regarding this request for equivalency, please
contact

_____.

Sincerely,

cc:

Attachment A: Comparison of Requirements for Health Care Occupancies
in NFPA 101-2000 to Those in the [2009 or 2012] Edition

**Appendix 2: Sample Letter Requesting an
Equivalency (Existing Health Care Facilities)**

DATE:

E-MAIL: gmills@jointcommission.org

Mr. George Mills
Standards Interpretation Group
The Joint Commission
One Renaissance Boulevard
Oakbrook Terrace, IL 60181

USE OF THE [2009 OR 2012] EDITION OF NFPA 101 IN LIEU OF
NFPA 101-2000 AT _____.

Dear George:

We are requesting an equivalency to allow compliance of _____

_____ (*complete description of the area
being addressed*) with the [2009 or 2012] edition of NFPA 101 in lieu of
the 2000 edition of NFPA 101. The proposed design will follow all of the
requirements of NFPA 101-[2009 or 2012] in the [smoke compartment or
floor (select one)]. Attachment 1 of this letter is a comparison of the code
requirements in NFPA 101-2000 with those in NFPA 101-[2009 or 2012].

We are requesting this equivalency based on NFPA 101-[2009 or 2012]
being equivalent to the requirements outlined in the 2000 edition.

If you have any questions regarding this request for equivalency, please con-
tact _____.

Sincerely,

cc:

Attachment A: Comparison of Requirements for Health Care Occupancies
in NFPA 101-2000 to Those in the [2009 or 2012] Edition

Appendix 3: CMS Waiver Request

Note: K84 waiver requests must address each specific item of the 2009 or 2012 edition of NFPA 101 that is less stringent than NFPA 101-2000.

K84 Waiver Request

The NFPA 101 deficiency identified in K_____ is intended to remain. Item K_____ is allowed under the [2009 or 2012] edition of NFPA 101. Modifying this item to comply with the 2000 edition would cause this facility to expend funds and effort that will not increase the level of life safety in the building or the life safety of the building occupants.

Based on NFPA 101-[2009 or 2012], the level of life safety provided in the building meets or exceeds the criteria required in NFPA 101-2000. Attachment A (Comparison of Requirements for HealthCare Occupancies in NFPA 101-2000 to Those in the [2009 or 2012] Edition) is a side-by-side analysis comparing the requirements of NFPA 101-2000 to NFPA 101-[2009 or 2012].

As shown in Attachment A, Item K_____ is allowed in the [2009 or 2012] edition. We are requesting a waiver to allow K_____ to remain based on provision of an acceptable level of safety in the facility.



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