

Validation of the Fire Safety Evaluation System (FSES) in the 2013 Edition of NFPA 101A

Final Report

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FOREWORD

NFPA 101A, *Guide on Alternative Approaches to Life Safety*, Section 4.1.2 describes the fire safety evaluation system as follows. “The fire safety evaluation system (FSES) is a measuring system. It compares the level of safety provided by an arrangement of safeguards that differ from those specified in NFPA 101, *Life Safety Code*, to the level of safety provided in a building that conforms exactly with the details of the *Code*.”

There have been many and significant changes in the *Life Safety Code* since 1981. A validation is needed to ensure the values stated in the FSES still provide a valid correlation to the requirements contained in the *Life Safety Code*. The FSES for healthcare (Chapter 4 in NFPA 101A) is the oldest and most widely used FSES and will be validated first.

The risk/hazard indexing system presented in the FSES was developed utilizing a version of the Delphi method, recognizing that decisions from a structured group of experts are more accurate than those from individuals acting alone or in loosely structured groups. The health care occupancies FSES was developed in the late 1970s at what was then the Fire Safety Engineering Division of the Center for Fire Research at the National Bureau of Standards - NBS (today a part of the National Institute of Standards and Technology – NIST)¹. A team of expert fire scientists, fire protection engineers and related researchers met in face-to-face sessions. Factors affecting equivalency, relative to requirements of NFPA 101 for health care occupancies, and the weighting of those factors were identified, quantified and refined through rounds of meetings in response to the input of the team members.

At the time the NBS team developed the FSES, sprinklers were not required in new health care occupancies – today they are. The NBS team was able to let the non-mandatory presence of sprinklers trade off for numerous other *Life Safety Code* deficiencies. Over the years, new editions of NFPA 101A were prepared. For each edition, the technical committee re-calibrated the Mandatory Safety Requirements values to reflect the requirements of the, then, current edition of NFPA 101. The mandatory value re-calibrations were made to reflect the requirement for automatic sprinklers in new health care occupancies, but no real thought was given to the effect that might have on the original premises on which NFPA 101A was built.

The NFPA 101A technical committee never had the resources to re-employ the Delphi method or something equivalent to test whether the original premises still hold. The committee would like to know whether today’s NFPA 101A accurately measures equivalency. The Foundation initiated a project with an overall goal to determine if the healthcare FSES in the 2013 Edition of NFPA 101A accurately measures equivalency with the 2012 Edition of NFPA 101.

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¹ Nelson, H. E., and A. J. Shibe, *System for Fire Safety Evaluation of Health Care Facilities*, NBSIR 78-1555-1, National Bureau of Standards, Gaithersburg, MD, May 1980. [U.S./ Japan Government Cooperative Program on Natural Resources (UJNR), Fire Research and Safety, Fourth Joint Panel Meeting of UJNR Panel, February 5–9, 1979, Tokyo, Japan.] NTIS PB80-195795.

The content, opinions and conclusions contained in this report are solely those of the authors.

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Keywords: healthcare, fire safety evaluation system, FSES, NFPA 101A

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**REPORT FOR
VALIDATION OF THE
FIRE SAFETY EVALUATION SYSTEM (FSES)
IN THE 2013 EDITION OF NFPA 101A**

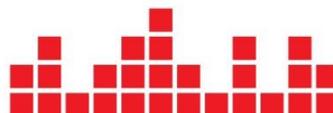
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EXECUTIVE SUMMARY

This project requested a review of the Life Safety Code NFPA 101 changes in health care occupancy requirements from the 1985 edition to the 2012 edition and a subsequent evaluation of the related updates to the Guide On Alternate Approaches to Life Safety NFPA 101 A - Fire Safety Evaluation System (FSES) for health care occupancies. The team reviewed the changes, evaluated trends in the health care setting, reviewed the FSES mandatory values and had subject matter experts review, meet and discuss the findings.

The conclusions:

- The 2013 FSES remains a valid tool.
- Minor clarifications or adjustments in the FSES should be considered to address textile wall coverings, oversize suites, zone dimensions and dead ends in a single safety parameter, and in a single zone evaluation for a building.
- The Alternative Approaches to Life Safety Technical Committee should consider addressing inspection testing and maintenance.
- The Alternative Approaches to Life Safety Technical Committee should consider a new Delphi Group to verify the acceptable levels of risk have not changed due to recent trends in health care.

I. INTRODUCTION

- A. This project is a review of the Fire Safety Evaluation System (FSES) from NFPA 101A as it applies to health care occupancies. The Fire Protection Research Foundation project description covers the history of the FSES and questions if the system is still valid after numerous code edition revisions.
- B. Rolf Jensen & Associates (RJA) proposed the following scope of work to address the Fire Protection Research Foundation.
 1. Gather the relevant changes to NFPA 101 and NFPA FSES (NFPA Appendix, NFPA 101M and NFPA 101A) between the 1985 and the 2013 of NFPA 101A.
 2. Compile these changes into a single document.
 3. Analyze the changes and evaluate the 2013 FSES for health care occupancies.
 4. The original work plan had FSES evaluations proposed for three scenarios per edition. In our May 15, 2014 review conference call, these FSES calculations were deleted from the work plan at the direction of the Technical Panel. The NFPA 101A Technical

Committee had already run the code-compliant version of the FSES zones. RJA was told these FSES evaluations confirm compliance with the recent version of NFPA 101.

5. The analysis will focus on items of interest identified during the gathering of the code changes and in a May 15, 2014 conference call with the Project Technical Panel. These items included:
 - a. Interior finish
 - b. Suites
 - c. Travel distance, zone length, and dead ends
 - d. Automatic sprinklers
 - e. Emergency exit routes
 - f. Single assessment for entire building (one worst case zone)
- C. The fire and life safety environment in health care facilities has changed remarkably from the introduction of the FSES in 1981. In the December 1987 report "Cause of Fires in Facilities that Care for the Sick," John Hall of NFPA with data from 1981 to 1985 showed, the major causes of fires to be smoking (30%), incendiary/suspicious (13.7%), and cooking (10.3%). The total number of fires in the 1981 to 1985 study was 7,300. With the November 2012 report "Fires in Healthcare Facilities," with data from 2006 to 2010 Marty Aherns of NFPA showed the major causes of fires to be cooking (61%) clothes dryers or washers(7%), and intentional smoking and heating (each at 6%). The total number of fires in the 2006 to 2010 study was 6,240.
- D. The December 1987 study recorded seven deaths over the five-year period. The November 2012 study recorded six deaths over the five-year period.
- E. Trends show a major change in the cause of fire, negligible change in the fire deaths, and a minor change in the number of reported fires between the two studies. Cooking as the current major cause of fire usually does not involve the patients. Patients are not intimate with the major cause of fire in health care.
- F. These trends reflect a number of changes in the field of health care in North America including:
 1. Smoke regulations and restrictions in all health care facilities.
 2. Increased use of automatic sprinklers.

3. Increased prevalence of semi-private and private rooms.
- G. The level of risk defined by the 1981 FSES was developed at a time of differing levels of fire protection technology. In the 1970s, an automatic sprinkler system was primarily used for property protection. The use of automatic sprinkler protection throughout a health care facility would be unusual. Non-sprinkler protected solutions to building risks were normal. The FSES was used to show both a sprinkler protected and non-sprinkler protected solution to a challenge. Automatic sprinklers have become a life safety tool in health care facilities. Quick Response Sprinkler (QRS) technology, while reflected in the FSES, does reduce the level of patient risk due to fire in a patient sleeping zone. It is unclear if this level of risk is a "new normal" for the industry. Looking at this over 30 years later, the risk acceptable in 2014 may not be the same as what was found acceptable in the 1970s Delphi Group assessment.

II. REVIEW OF THE CHANGES

- A. RJA reviewed the changes to the core Chapters and the Health Care Occupancy Chapters of NFPA 101, NFPA 101 FSES Appendix - NFPA 101M, and NFPA 101A related to health care occupancies. Attachment A is a spreadsheet of the relevant changes by edition to NFPA 101. Attachment B is a spreadsheet of changes to the FSES by edition. The changes considered relevant to NFPA 101 were related to the safety parameters, hazards, scope, objectives, suites, interior finish, automatic sprinklers, and limited exiting (single exits).
- B. Information gathered in Attachments A and B includes the following:
1. General category
 2. Code section
 3. Brief description of the change
 4. New code text
 5. Previous text
 6. Date and number
 7. Submitter
 8. Committee action and comments

- C. A review of the changes identified in Appendix A and Appendix B resulted in the identification of items of interest. The interest in these items is based on how they are reflected in the FSES.

III. ITEMS OF INTEREST ANALYSIS

A. Interior finish

1. Interior finish in non-sprinkler protected fires has contributed to loss of life. However, the fire record in health care fires where interior finish has been a major contributor is limited. The Hartford Hospital fire in 1961 had fire progress through the interior finish on the 9th floor. The potential for a large loss of life fire does exist in non-sprinkler protected fire scenarios.
2. "NFPA 101A - Guide on Alternate Approaches to Life Safety, 2013 Edition," has an example (one of two solutions) that shows that FSES equivalency can be obtained in a zone with a single deficiency hazardous area. One solution repairs the hazardous area deficiency. The other solution upgrades the interior finish in lieu of repairing the hazardous area deficiency. The interior finish upgrade allowed a fully-sprinkler protected solution within a deficient, hazardous area. This reflects a major impact of interior finish in a sprinkler protected facility.
3. Textile wall coverings and expanded vinyl wall coverings had restrictions in their use introduced to NFPA 101 in 1994 and 1997. These materials use different testing methods which are found in NFPA 265 or NFPA 286. The FSES currently evaluates these materials based on ASTM E84 criteria. The FSES does not appear to reflect the non-sprinkler protected issues with these textile and vinyl wall coverings. Section 10.2.4 does not allow for new wall coverings with a Class A rating in non-sprinkler protected solutions.
4. Floor finish requirements for health care have been included in NFPA 101 since the original FSES in 1981. New non-sprinkler protected construction has a requirement for interior floor finish. There are small design areas that allow new construction to be non-sprinkler protected. In our review of the NFPA 101, changes in floor finish were identified as not addressed in the FSES (1981 or 1985 editions). Floor finish is not a safety parameter evaluated by the FSES and has no impact on the FSES.

B. Suites

1. The arrangement of means of egress specific to suites in health care facilities has been clarified from the 1981 to the 2012 editions of NFPA 101. Deficient arrangements would be evaluated by emergency movement routes.
2. Suite size has changed considerably in the past two editions of NFPA 101, increasing from 5,000 sq. ft. to 7,500 sq. ft., and later to 10,000 sq. ft. The method for evaluating an oversized suite in NFPA 101A requires the suite to be treated as a separate smoke zone. It is not clear in the documentation if the egress path within the suite should be evaluated as a corridor or not. Suites were not in use during the 1981 edition of the FSES. The method to address oversized suites was developed by the Technical Committee. The current evaluation method for oversized suites should be clarified.

C. Travel Distance, Zone Length and Dead End

1. Zone length and dead ends are evaluated in the same safety parameter. Zone dimensions have not been a code requirement in new editions since 1991. The 150 ft. dimension was directly related to the smoke zone sizing requirements in the code at the time of the original FSES. The zone dimension of the FSES is more restrictive than the requirements of NFPA 101 Section 18.3.7.1, 2012 edition. The risk associated with the smoke zone size and dimensions has changed with the dimensions allowed in the 2012 edition. The FSES risk does not appear to have been adjusted.
2. Travel distance to a smoke barrier was a design requirement added to new construction in 1991. Travel distance to an exit is evaluated in the emergency movement routes parameter. The travel distance evaluation should be considered for the smoke zone dimension. In reference to NFPA 101 Section 18.3.7.1, it is not clear that the travel distance to the smoke barrier is an FSES criterion to evaluate.
3. In Safety Parameter 6, there are many items being evaluated in a single factor, including dead end, zone length, zone size, and travel distance to the smoke zone. Due to the changes in smoke zone sizing, this safety parameter is too complicated for a single parameter.

D. Automatic Sprinklers - Mandatory vs. Non-Sprinkler Protected Option

1. New construction and most rehabilitation work will require automatic sprinklers. Existing non-sprinkler protected health care facilities can remain with the exception of high-rise buildings. Depending on the

adoption date of the 2009 or 2012 editions of the Life Safety Code, existing high-rise sprinkler protected facilities have nine to twelve years for mandatory installation of automatic sprinklers. The FSES increases the mandatory values in Worksheet 4.7.8A for existing high-rise buildings to reflect the mandatory sprinkler requirement in these buildings. Should the FSES reflect a cultural shift to reflect the use of Quick Response Sprinklers (QRS) and sprinklers as life safety tools? One example would be a dead end corridor in a high-rise hospital. Prior to 2009, an FSES would allow a dead end to remain if the building was a sprinkler protected existing high-rise.

2. The use of FSES for non-sprinkler protected health care is needed for international applications. Automatic sprinkler protection in NFPA 101 is required in all new construction, most rehabilitation projects and all existing high-rise health care facilities. The options for non-sprinkler protected solutions are limited, but do have a purpose. In areas of the world with limited water supplies or support for automatic sprinklers, the use of FSES to develop a non sprinkler protected solution is still needed. The non-sprinkler protected option should be retained.
3. The 2012 edition of NFPA 101 allows the omission of automatic sprinklers in hospital closets under specific circumstances. This new allowance does not affect the FSES scoring. These areas are limited to 6 square feet or less and are expected to have minor fuel loading. Omissions in closets are not an issue that affects the FSES.

E. Emergency Movement Routes

1. There are no changes that affect the less than two exit routes safety parameter. However, there are single exit conditions that can be scored as providing an equivalent level of life safety as NFPA 101 in existing buildings.
2. There are no changes that affect compound exit deficiencies. This has been an issue with some Authorities Having Jurisdiction (AHJ). When a smoke zone has more than one exit deficiency, it is scored the same as a single deficiency. This is a defend-in-place occupancy and movement to the exit stairs is not desirable. A review and reinstatement of the exit deficiency approach for the FSES should be provided.

F. Single Zone Assessment

In the May 15, 2014 teleconference, the Technical Panel requested single zone assessment be added to the items of interest list. This concept would involve the evaluation of a facility with a single zone using the most stringent

parameters from any zone. This assessment should produce a worst case scenario. It may cause excessive requirements for non-patient sleeping zones. If the excess requirements are not a concern, this concept should provide a building equivalency based on the most stringent criteria.

IV. PEER REVIEW MEETING

On June 10, 2014, an internal review using non-RJA Subject Matter Experts (SME) met in Las Vegas to review a preliminary draft of this report. The SMEs were Josh Elvove, Dan O'Conner, and Fred Mowrer, who all have extensive experience in the application of the FSES.

The discussion reviewed the items of interest from above and identified other issues. Inspection, testing, and maintenance as required by NFPA 25, NFPA 72, and NFPA 96 can be addressed in the 4.7.10 Table at the end of the FSES. Fire and smoke wall inspection, and fire door inspection are also addressed by reference, but not clearly addressed in the FSES. Trade-offs for automatic sprinkler installation (34 items in the current code), reliance on staff response, and the new cooking allowance in corridors are reason to increase the emphasis on the inspection, testing, and maintenance of these systems.

The group requested that the addition of a summary of significant changes be highlighted in the report. This summary is being prepared and will be circulated before adding to the final report.

There was a discussion on the need for an FSES for new construction. The new requirements include mandatory automatic sprinkler protection. Solutions for new construction are very limited using the FSES. The Technical Committee should consider a sunset provision for new construction use of the FSES. The stakeholders should address the future need for FSES on new health care facilities. Variations from NFPA 101 on new construction can be handled via the alternative methods/ equivalency process permitted by Section 1.4.3 instead of the FSES.

Expanding parameters to address emergency movement routes, zone size, and dead ends were discussed but no recommendation was developed. The Technical Committee should review with stakeholders to determine if a new Safety Parameter is needed.

The fire record data reviewed for this report and used by the NFPA Technical Committees are on significant fires with large loss of life or property. A review of near-miss fire incidents should be considered. Data on surgical room fires would be data of interest. Are surgical room fires an issue to address in NFPA 101 and NFPA 101A?

The SME review comments have been incorporated into the main report. Their input helped the team look at the RFP question from new directions. We thank Josh, Dan, and Fred for their time and effort on the peer review.

V. CONCLUSIONS

- A. Reviews of the changes to both NFPA 101 and the FSES have tracked the technical changes closely. The scoring appears to be accurate based on the risk assessment of the original Delphi Group.
- B. There has been a shift away from patients being intimate with the fire ignition in health care fire events.
- C. Sprinklers have been recognized as a valuable life safety tool. Sprinklers were credited in solving many issues in non-sprinkler protected facilities using the FSES. Since automatic sprinklers are mandated in all new and most rehabilitation projects, there is a sprinkler protected level of risk for an FSES solution. Non-sprinkler protected solutions will provide a different level of risk with a compliant FSES health care facility. This is not an explicit statement in the Code, but should be identified to the users and AHJs.
- D. The items of interest above identified issues and questions that need to be addressed, including.
 - 1. Interior finish should address Class A textile and expanded vinyl wall covering in non-sprinkler protected zones.
 - 2. Clarify the method to address oversize suites. Specifically, the scoring of corridors inside a suite should be clarified.
 - 3. Safety Parameter 6 evaluates zone dimensions and dead ends. The NFPA Technical Committee on Alternative Approaches to Life Safety should consider revising and expanding Safety Parameter 6 to address zone length and dead end in separate parameters.
 - 4. Automatic sprinklers are mandated in many building configurations. Evaluate the usefulness of FSES for new construction.
 - 5. Emergency movement route Safety Parameter allows multiple deficiencies to exist in a single -2 score. This concept has been in the FSES since the beginning. Evaluate with the stakeholders whether this issue should be addressed or not.
 - 6. Worst case evaluation (Single Smoke zone) should be considered if the whole building is surveyed for the FSES.



- E. Clarify if the inspection, testing, and maintenance requirements are clearly part of the FSES.
- F. The NFPA Technical Committee on Alternative Approaches to Life Safety should consider whether a new Delphi Group assessment should be performed to verify that the acceptable risk levels have not changed due to recent trends in health care.



REPORT FOR VALIDATION OF THE
FIRE SAFETY EVALUATION SYSTEM (FSES)

ROLF JENSEN & ASSOCIATES, INC.

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ATTACHMENT A

SPREADSHEET OF THE RELEVANT CHANGES BY EDITION TO NFPA 101

Changes to NFPA 101 - Life Safety Code - Changes affecting FSES for Health Care Facilities

1985 - NFPA 101

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Building Construction Type	12-1.6.2	Table change - no technical change other than sprinkler requirement - 12-3.5.1.	Section 12-1.6.2	12-1.6.2, 12-1.6.3, and A12-1.6.2.	Annual 1984	101 - 1039		Subcommittee on Health Care Occupancies	Editorially moving the table from the appendix into the code to simplify use of the code. For change on automatic sprinkler requirement over 75 ft, see 12-3.5.1.	Accept	
2	Suite Second Exit	12-2.5.2 and 13-2.5.2	Rearrange section; specify suites requiring two exits	Any patient sleeping room, or any suite which includes patient sleeping rooms of more than 1,000 sq ft (92.9 sq m) shall have at least two exit access doors remote from each other. Any room or any suite of rooms, other than patient sleeping rooms, or more than 2,500 sq ft (232.3 m2) shall have at least two exit doors remote from each other.	Any room, and any suite of rooms as permitted in 12-2.5.1, of more than 1,000 sq ft (92.9 sq m) shall have at least two exit access doors remote from each other.	Annual 1984	101 - 823		Subcommittee on Health Care Occupancies	The provisions for suite in the existing Code are unclear for nonsleeping areas. This revision adequately provides for nonsleeping suites without changing the requirements for sleeping suites. The reorganization puts all the suite requirements together.	Accept	
3	Suites	12-2.5.4 and 13-2.5.4	Added limitations to suites	Any suite of rooms other than patient sleeping rooms shall be limited as follows: 1. The maximum travel distance from any point in the suite to a corridor door is limited to 50 ft, OR 2. The maximum gross area of the suite is limited to 10,000 sq. ft, OR 3. There is unrestricted access from patient treatment area to a corridor with a maximum of one intervening room.	New section	Annual 1984	101 - 823		Subcommittee on Health Care Occupancies	The provisions for suite in the existing Code are unclear for nonsleeping areas. This revision adequately provides for nonsleeping suites without changing the requirements for sleeping suites. The reorganization puts all the suite requirements together.	Accept	
4	Gift Shops - Hazard Separation	12-3.2.3 and 13-3.2.3	Added section for gift shops	Gift shops shall be protected as hazardous areas when used for the storage or display of combustibles in quantities considered hazardous. Gift shops not considered hazardous and having separately protected storage, maybe: 1. Open to a lobby if the Gift Shop is not greater than 500 sq ft and is protected throughout by an automatic sprinkler system, OR 2. separated from a lobby with non-fire rated walls if the gift shop is protected throughout by an automatic sprinkler system, OR 3. separated from corridors by non-fire rated walls if the gift shop is protected throughout by an automatic sprinkler system. Add new exception to 12-3.6.1 and 13-3.6.1 Gift shops protected in accordance with 12-3.2.3 (13-3.2.3).	Gift shops included in Section 12-3.2.1 and 13-3.2.1, required 1 hour fire barrier or automatic sprinkler system as a hazardous area.	Annual 1984	101 - 1042		Subcommittee on Health Care Occupancies	The Committee feels this will resolve many of the problems facilities are experiencing with gift shops while at the same time provide adequate life safety.	Accept in Principle	The Committee agrees with the Subcommittee; however, it feels that to permit this special provision for gift shops that the storage must be protected adequately.
5	Interior Finish	12-3.3.1	Added Exception for interior finish	Interior finish of walls and ceiling throughout shall be Class A in accordance with Section 6-5. Exception 1: Walls and ceilings may have Class A or B interior finish in individual rooms of not over four persons in capacity. Exception 2: Corridor wall finish up to 4 ft (122 cm) in height, that is restricted to the lower half of the wall, may be Class A or B.	Only Exception 1	Annual 1984	101 - 826		Subcommittee on Health Care Occupancies	A recent report entitled "Wall Materials for Hospital Corridors" by Peter Hearst, PhD indicated that this would be a desirable exception from a hospital function viewpoint. Simulation studies by the NBS showed that it would not present a fire hazard under the restrictions provided.	Accept	
6	High Rise Automatic Sprinklers	12-3.5.1	Revise Exception	All health care facilities shall be protected throughout by an approved automatic sprinkler system. Exception: Buildings of Type I (443), I (332), or II (222) construction less than 75 ft (23 m) in height measured from the lowest level of fire department vehicle access to the floor of the highest occupiable story and buildings of Type II (111) construction not over one story in height.	All health care facilities shall be protected throughout by an approved automatic sprinkler system. Exception: Buildings of Type I (443), I (332), or II (222) construction of any height or Type II (111) construction not over one story in height.	Annual 1984	101 - 1044		Subcommittee on Health Care Occupancies	The result of this change is that all new high rise health care occupancies will be protected by automatic sprinklers. The Committee feels that in a defend in place type occupancy such as a health care fire control is of utmost importance. It is very difficult for the public fire department to control fires in buildings over 75 ft in height which are not sprinklered and therefore the Committee feels that this is a reasonable requirement. The trade offs in the code for having sprinkler protection are still allowed and the Committee feels, while research has shown, that no increase in cost will result; in fact many architects say that it is definitely cheaper using the sprinkler option. A location where a high rise facility is being built should not be experiencing water supply problems such as may be encountered in very rural areas.	Accept in Principle	Editorial change made for clarification of intent.

Changes to NFPA 101 - Life Safety Code - Changes affecting FSES for Health Care Facilities

1988 - NFPA 101

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Maintenance	1-7; 31-1.3.8	New maintenance requirement	1-7 Maintenance; 1-7.1 Whenever or where any device, equipment, system, condition, arrangement, level of protection or any other feature is required for compliance with the provisions of this Code; such device, equipment, system, condition, arrangement, level of protection or other feature shall thereafter be permanently maintained unless the Code exempts such maintenance.		Fall 1987	101 - 6	Log # 213	John F. Behrens, Huntington Beach, CA	Whatever is sufficiently important for original compliance with the Code is equally important for continuing compliance.	Accept in Principle	The Committee agrees with the Submitter but feels that the same provision should be added to Chapter 31 since this is primarily an operating feature.
2	Special Structures	4-1.11	Add section for special structures.	Special Structures. Special structures which house occupancies include the occupancies from the preceding groups which are in special structures or buildings including among others the following: Windowless buildings Underground structures Vessels Vehicles fixed to a foundation Water surrounded structures Open structures Towers Such special buildings and structures shall conform to the requirements of the specific Occupancy Chapters 8 through 20 except as modified by Chapter 30.		Fall 1987	101 - 24	Log # 568	Subcommittee on Industrial, Storage, and Miscellaneous Occupancies	Clarification of committee intent with respect to the use of Chapter 30 unusual structure provisions in conjunction with or in lieu of Chapter 8 through 29 provisions. Additionally, see the associated Subcommittee Proposals 101-906 on Chapter 30 (Log #567) and 101 866 on 28-1.4 (Log #569).	Accept in Principle.	The terms "special structures" better describes the buildings addressed by Chapter 30. The requirement that such structures conform to the fundamental principles stated in Chapter 2 was deleted because if a structure c'omplies with the specific requirement of the Code, then it meets the principles of Chapter 2.
3	Openings into Stairs	5-1.3.1 (c)	Revise section	(c) Any opening therein shall be protected by a fire door assembly equipped with a door closer complying with 5-2.1.8.	(c) Any opening therein shall be protected by an approved self-closing fire door (also see 5-2.1.8)	Fall 1987	101 - 32	Log # 437	Subcommittee on Means of Egress	To remove the implication that only self-closing fire doors may be used.	Accept	
4	Openings into Stairs	5-1.3.1 (d)	Revise section	(d) Openings in exit enclosures shall be limited to those necessary for access to the enclosure from normally occupied spaces and from corridors and for egress from the enclosure.	(d) Openings in exit enclosures shall be limited to those necessary for access to the enclosure from normally occupied spaces and for egress from the enclosure.	Fall 1987	101 - 33	Log # 416	Subcommittee on Means of Egress	It had been pointed out to the Subcommittee that not all corridors may be considered normally occupied especially very small corridors (vestibules) provided to connect nonoccupied spaces to exit enclosures.	Accept	
5	Horizontal Sliding Doors	5-2.1.14	New section to include horizontal sliding doors	5-2.1.14 Horizontal Sliding Doors. 5-2.1.14.1 Horizontal sliding doors shall comply with the following: (a) The door shall be operable by a simple method from either side without special knowledge or effort, and (b) The force required to operate the door shall not exceed 30 lbf to set the door in motion, and a 15 lbf to close the door or open it to the minimum required width, and (c) The door shall be operable with a force not to exceed 50 lbf when a force of 250 lbf is applied perpendicular to the door adjacent to the operating device, and (d) The door assembly shall comply with the applicable fire protection rating and, when rated, shall be self-closing or automatic-closing by smoke detection in accordance with 5-2.1.8 and shall be installed in accordance with NFPA 80, Standard for Fire Doors and Windows.		Fall 1987	101 - 71	Log # 196	Philip C. Favro/Patrick A. McLaughlin, Favro-McLaughlin & Assoc.	The Code does not presently permit use of Horizontal sliding doors in a means of egress except under certain conditions and in specified occupancies. This proposal would expand that usage. New technology has made some horizontal sliding doors a safe and attractive alternate to dual, or opposite, swinging doors in horizontal exits. The Code changes we propose would allow the use of approved and listed horizontal power-operated sliding doors in the occupancy chapters that currently permit them. Furthermore, the proposed changes would place specific conditions on these doors in order to make them acceptable for use. The allowance of horizontal sliders will provide larger, obstruction-free passageways and permit better use of existing space without sacrificing safety.	Accept in Principle	The Committee agrees with the basic intent of the Submitter and has made revisions to make the provisions more generic. The revisions also exclude "where permitted" and only include "how to" provisions. The Committee feels that the revisions are consistent with the intent of the Submitter.
6	Horizontal Exit Wall Continuity	5-2.4.3.1	Revise exceptions for horizontal exits	Exception: Where a fire barrier is used to provide a horizontal exit in any story of a building, such fire barrier may be omitted on other stories under the following conditions: (a) The stories on which the fire barrier is omitted shall be separated from the story with the horizontal exit by 2-hour construction. (b) Vertical openings between the story with the horizontal exit and the open fire area story shall be enclosed with 2-hour construction. (c) All required exits, other than horizontal exits, shall discharge directly outside.	Bulky language, no technical change	Fall 1987	101 - 106	Log # 179	James R. Quiter, Rolf Jensen & Assoc., Inc.	The basic purpose of the Exceptions is to require a 2-hour separation between a story with a horizontal exit and any other story. The existing language is bulky and redundant. The proposed change will greatly simplify the section.	Accept in Principle	The Committee agrees with the simplified version as proposed by the Submitter but noted that an important safety factor had been omitted in the submittal.

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment																																																												
7	Egress Capacity	5-3.3	Revise section for egress capacity factors	<p>Egress Capacity. Egress capacity for approved components of means of egress shall be based on the following:</p> <table border="1"> <thead> <tr> <th>Use</th> <th>Stairways (inch per person)</th> <th>Level Components and Ramps (inch per person)</th> </tr> </thead> <tbody> <tr> <td>Board and Care</td> <td>0.4</td> <td>0.2</td> </tr> <tr> <td>Detention & Correctional</td> <td>0.3</td> <td>0.2</td> </tr> <tr> <td>Health Care Sprinklered</td> <td>0.6</td> <td>0.5</td> </tr> <tr> <td>Health Care Nonsprinklered</td> <td>1.0</td> <td>0.7</td> </tr> <tr> <td>High Hazard</td> <td>0.7</td> <td>0.4</td> </tr> <tr> <td>All Others</td> <td>0.3</td> <td>0.2</td> </tr> </tbody> </table>	Use	Stairways (inch per person)	Level Components and Ramps (inch per person)	Board and Care	0.4	0.2	Detention & Correctional	0.3	0.2	Health Care Sprinklered	0.6	0.5	Health Care Nonsprinklered	1.0	0.7	High Hazard	0.7	0.4	All Others	0.3	0.2	<p>5-3.2.1 Means of egress shall be measured in units of exit width of 22 in. (55.9 cm). Fractions of a unit less than 12 inch (30.5 cm) shall not be counted. Fractions of a unit comprising 12 in. (30.5 cm) or more, added to one or more full units, shall be counted as 1/2 unit of exit width.</p> <p>5-3.3 Capacity per Unit of Width. The capacity in number of persons per unit of width for approved components of means of egress shall not be greater than as follows: (a) Level egress components, and Class A ramps - 100. (b) Class B ramps - 75 for travel in the up direction, 100 for travel in the down direction. (c) Stairways - 75</p>	Fall 1987	101 - 122	Log # 389	Subcommittee on Means of Egress and Board for Coordination of Modal Codes (BCMC)	The research on egress from the National Research Council (Canada) and similar work has demonstrated that a linear rather than step function is more accurate with regard to egress capacity. Review of the 1938 NBS Report indicates that it actually supported the straight line function. For additional information on recent research in this area see Fire Journal Vol. 20, No. 1 (Feb. 1984) pp.27-47; Fire Journal Vol. 20, No. 2 (May 1984) pp. 28-40; Life Safety Code 1985 edition Appendix D. The numbers provided by the proposal are based on a linear approach, but use traditional exit capacities. (A 44 in. stair by the 1985 code provides capacity for 150 people, and by this proposal 44/0.3 = 147 people.) Egress widths between former intervals (34, 44, 56) now will receive incremental credit (example, a 38 in. door under 1985 Code would be 1 1/2 units = 150 people; under 1988 Code 38/0.2 = 190 people). In addition, this provides potential coordination between the four model codes.	Accept																																								
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8	Textile Wall Coverings	6-5.2.3	New section to require textile wall coverings to be Class A interior finish	6-5.2.3 Textile materials having a napped, tufted, looped, woven, nonwoven or similar surface, when applied to walls or ceilings shall meet the requirements of Class A interior wall and ceiling finish. Use of the sprinkler option, described in 6-5.7.1, shall be prohibited.	New section	Fall 1987	101 - 183	Log # 282	Subcommittee on Fire Protection Features	Section 6-5 has been reformatted to distinguish between "interior wall and ceiling finish" and "interior floor finish." The overall term "interior finish" encompasses both.	Accept in Part.	The change in proposed 6-5.2.3 introduces the term: "textile materials" which-encompasses more than just "carpeting" used on walls and ceilings.																																																												
9	Construction Table	Table 12-1.6.2	Revise table for nonsprinklered nursing homes	<p>Table 12-1.6.2</p> <table border="1"> <thead> <tr> <th>Construction</th> <th>1 Story</th> <th>2 Stories</th> <th>3 Stories and <45 ft</th> <th>4 or 5 Stories and <75 ft</th> <th>6 or More Stories or >75 ft</th> </tr> </thead> <tbody> <tr> <td>I (443)</td> <td>X</td> <td>Xp</td> <td>Xp</td> <td>Xp</td> <td>Xpp</td> </tr> <tr> <td>I (222)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>II (111)</td> <td>X</td> <td>Xp</td> <td>Xp</td> <td>N.P.</td> <td>N.P.</td> </tr> <tr> <td>II (000)</td> <td>Xpp</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> </tr> <tr> <td>III (211)</td> <td>Xpp</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> </tr> <tr> <td>III (200)</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> </tr> <tr> <td>IV (200)</td> <td>Xpp</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> </tr> <tr> <td>V (111)</td> <td>Xpp</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> </tr> <tr> <td>V (000)</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> <td>N.P.</td> </tr> </tbody> </table> <p>X = Permitted type of construction Xp = Building, other than Hospital's, requires automatic sprinkler protection (see 12-3.5.3) Xpp = Building requires automatic sprinkler protection (see 12-3.5.3) N.P. = Not Permitted</p>	Construction	1 Story	2 Stories	3 Stories and <45 ft	4 or 5 Stories and <75 ft	6 or More Stories or >75 ft	I (443)	X	Xp	Xp	Xp	Xpp	I (222)						II (111)	X	Xp	Xp	N.P.	N.P.	II (000)	Xpp	N.P.	N.P.	N.P.	N.P.	III (211)	Xpp	N.P.	N.P.	N.P.	N.P.	III (200)	N.P.	N.P.	N.P.	N.P.	N.P.	IV (200)	Xpp	N.P.	N.P.	N.P.	N.P.	V (111)	Xpp	N.P.	N.P.	N.P.	N.P.	V (000)	N.P.	N.P.	N.P.	N.P.	N.P.		Fall 1987	101 - 413	Log # 982	Subcommittee on Health Care Occupancies	The Board feels that nonsprinklered nursing homes should be limited to a single story due to the limited number of staff available to evacuate patients down stairs.	Accept in Principle	The Committee agrees in general with the Board, but has made one significant revision. The Life Safety Code has traditionally treated Type II(222) the same as Type I construction. The Committee feels this is justified considering the fuel load in health care and the sprinkler requirements. The Committee agrees that a two story nursing home, even of the best construction type, should be sprinklered because it is anticipated that patients will have to be moved vertically and staffing is generally less in nursing homes than in hospitals.
Construction	1 Story	2 Stories	3 Stories and <45 ft	4 or 5 Stories and <75 ft	6 or More Stories or >75 ft																																																																			
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10	Exit Width Factors	12-2.3.2 and 13-2.3.2				Fall 1987																																																																		
11	Suite	12-2.5.3 and 13-2.5.3		Delete the Exceptions to 12-2.5.3 and 13-2.5.3 in their entirety.					Subcommittee on Health Care Occupancies	See Proposal 101-410 on 12-1.3(c) and (d) and 13-1.3(c) and (d) (Log#888).	Accept																																																													
12	Suite Travel Distance - Exception	12-2.6.2																																																																						
13	Fire Resistance Rating	12-3.1	Revise exception 3 to allow reduction to 1-hour fire resistance rating of enclosures connecting not more than 3 stories - AS required	Exception No. 3: The fire resistance rating of enclosures connecting not more than three stories in health care occupancies protected throughout by an approved supervised automatic sprinkler system may be reduced to one hour.	Exception 3: The fire resistance rating of enclosures in health care occupancies protected throughout by an approved automatic sprinkler system may be reduced to 1 hour in buildings up to, and including, three stories in height.	Fall 1987	101 - 437	Log # 899	Subcommittee on Health Care Occupancies																																																															

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment																										
14	Hazardous Areas	12-3.2.1 & Table 12-3.2.1 & 13-3.2.1	Revise hazardous area separation	<p>12-3.2.1 Any hazardous area shall be protected in accordance with Section 6-4. The following areas listed shall be protected as indicated. Where sprinkler protection without fire rated separation is used, the areas shall be separated from other spaces by partitions complying with 6-3.2 with doors complying with 6-3.3.</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Separation/Protection</th> </tr> </thead> <tbody> <tr> <td>Boiler and heater rooms</td> <td>2 hrs or 1 hr and sprinklers</td> </tr> <tr> <td>Employee locker rooms</td> <td>1 hr or sprinklers</td> </tr> <tr> <td>Gift/retail shops</td> <td>See 12-3.2.3</td> </tr> <tr> <td>Handicraft shops</td> <td>1 hr or sprinklers</td> </tr> <tr> <td>Laboratories which employ hazardous materials but such materials are in quantities less than that which would cause classification as severe hazard</td> <td>1 hr or sprinklers</td> </tr> <tr> <td>Laundries greater than 100 sq ft</td> <td>1 hr and sprinklers</td> </tr> <tr> <td>Paint shops employing hazardous substances and materials in quantities less than that which would cause classification as severe hazard</td> <td>2 hrs or 1 hr and sprinklers</td> </tr> <tr> <td>Physical Plant Maintenance Shop</td> <td>2 hrs or 1 hr and sprinklers</td> </tr> <tr> <td>Soiled linen room</td> <td>1 hr and sprinklers</td> </tr> <tr> <td>Storage rooms more than 50 sq ft in area but not more than 100 sq ft in area storing combustible material</td> <td>1 hr or sprinklers</td> </tr> <tr> <td>Storage rooms more than 100 sq ft storing combustible materials</td> <td>1 hr and sprinklers</td> </tr> <tr> <td>Trash collection rooms</td> <td>1 hr and sprinklers</td> </tr> </tbody> </table>	Description	Separation/Protection	Boiler and heater rooms	2 hrs or 1 hr and sprinklers	Employee locker rooms	1 hr or sprinklers	Gift/retail shops	See 12-3.2.3	Handicraft shops	1 hr or sprinklers	Laboratories which employ hazardous materials but such materials are in quantities less than that which would cause classification as severe hazard	1 hr or sprinklers	Laundries greater than 100 sq ft	1 hr and sprinklers	Paint shops employing hazardous substances and materials in quantities less than that which would cause classification as severe hazard	2 hrs or 1 hr and sprinklers	Physical Plant Maintenance Shop	2 hrs or 1 hr and sprinklers	Soiled linen room	1 hr and sprinklers	Storage rooms more than 50 sq ft in area but not more than 100 sq ft in area storing combustible material	1 hr or sprinklers	Storage rooms more than 100 sq ft storing combustible materials	1 hr and sprinklers	Trash collection rooms	1 hr and sprinklers	Simplified table, including only 1 hour fire resistance rating and some areas required to have aprinklers.	Fall 1987	101 - 440	Log # 929	Board for the Coordination of Model Codes (BCMC) of C.A.B.O.	The Board has carefully evaluated the hazard presented by each area and proposed modifications based on this analysis, for example see the modification for boiler rooms,. In addition, the Board feels that in new construction, the hazard of storage areas and laundries is difficult to assess other than using square footage.	Accept in Principle	The Committee feels that the material proposed by the Submitter is appropriate but does believe that when 'kitchens are protected as' required by 12-3.2.4 the "hazard" of the kitchen is protected. Any kitchen storage would be protected under the storage provisions. This concept is widely accepted by the various occupancy chapters in the Code.
Description	Separation/Protection																																					
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15	References to NFPA Docs	12-3.2.3 & 12-3.2.4 13-3.2.3 & 13-3.2.4	New sections to include references to NFPA 99 and 56F	"Anesthetizing locations shall be protected in accordance with NFPA 99." "Medical gas storage and administration areas shall be protected in accordance with NFPA 56F."	New sections	Fall 1987	101 - 441 and 101 - 443	Log # 503 and Log # 504	Subcommittee on Health Care Occupancies	To assure that anesthetizing locations are properly protected. To assure that medical gas storage and administration areas are properly protected.	Accept																											
16	AS - Alternative Protection	12-3.5.1 13-3.5.1	Add exception for Type I and II construction for alternative protection	Exception: In Types I and II construction, when approved by the authority having jurisdiction, alternative protection measures may be substituted for sprinkler protection in specified areas, where the authority having jurisdiction has prohibited sprinklers, without causing a building to be classified as nonsprinklered.	New exception	Fall 1987	101 - 458	Log # 506	Subcommittee on Health Care Occupancies	Specifically recognize alternative measures of protection allowed by Section 1-5.	Accept in Principle	Clarification of intent.																										
17	AS - Alternative Protection	12-3.5.2 13-3.5.2	Add exception for Type I and II construction for alternative protection	Exception: In Types I and II construction, when approved by the authority having jurisdiction, alternative protection measures may be substituted for sprinkler protection in specified areas, where the authority having jurisdiction has prohibited sprinklers, without causing a building to be classified as nonsprinklered.	New exception	Fall 1987	101 - 459	Log # 507	Subcommittee on Health Care Occupancies	Specifically recognize alternative measures of protection allowed by Section 1-5.	Accept in Principle	Clarification of intent.																										

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18	Openings to Corridor	12-3.6.1 Exception 4	Add exception for nurse's station open onto corridor	Exception No. 4: Spaces for nurses' stations. Also add A-12-3.6.1 Exception No. 4 to read: A-12-3.6.1 Exception No. 4 A typical nurses station would normally contain one or more of the following with associated furniture and furnishings. (a) Charting area (b) Clerical area. (c) Nourishment station. (d) Storage of small amounts of medications, medical equipment and supplies, clerical supplies and linens. (e) Patient monitoring and communication equipment.	New exception	Fall 1987	101 - 462	Log # 933	Board for the Coordination of Model Codes (BCMC) of C.A.B.O.	This is the first of two proposals addressing health care corridors. These involve a reorganization of the requirements along with a coordination with the model building codes. Old 12-3.6.1 Exception No. 2 has been deleted as this would allow a one hour wall to terminate at a membrane with unknown fire rating. Most other changes are for clarification.	Accept in Principle	The Committee concurs with the reorganization proposed by the Submitter (also see Proposals 101-465 on 12-3.6 (Log #934) and 101-504 on 13-3.6 (Log #902)) and with the proposed 12-3.6.1. However, in reviewing the change to Exception No. 4, the Committee disagreed in deleting "and related clerical areas". The Committee agreed that clerical areas not directly part of the nursing station should not be allowed to be open to the corridor but there is directly related clerical activity in a typical nursing station. The Committee feels that in general people are sufficiently familiar with a "nursing station" to provide a "generic" exception with an explanatory note. The Committee also feels that the term "visual" would only confuse the intent rather than clarify it,
19	Corridor Smoke Barrier	12-3.6.2.2	Corridor walls to limit passage of smoke	12-3.6.2.2 Corridor walls shall form a barrier to limit the transfer of smoke.	New exception	Fall 1987	101 - 462	Log # 933	Board for the Coordination of Model Codes (BCMC) of C.A.B.O.	This is the first of two proposals addressing health care corridors. These involve a reorganization of the requirements along with a coordination with the model building codes. Old 12-3.6.1 Exception No. 2 has been deleted as this would allow a one hour wall to terminate at a membrane with unknown fire rating. Most other changes are for clarification.	Accept in Principle	
20	Corridor Smoke Barrier	13-3.6.1 Exception 2	Nurse stations open to the corridor	Exception No. 2: Spaces other than patient sleeping rooms, treatment rooms and hazardous areas may be open to the corridor and may be unlimited in area provided: (a) Each space is located to permit direct supervision by the facility staff, and (b) The space and corridors which the space opens onto in the same smoke compartment are protected by an electrically supervised automatic smoke detection system installed in accordance with 13-3.4, and (c) Each space is protected by automatic sprinklers or the furnishings and furniture in combination with all other combustibles within the area are of such a minimum quantity and are so arranged that a fully developed fire is unlikely to occur, and (d) The space is arranged not to obstruct access to required exits.	Rewritten section - no technical change	Fall 1987	101 - 504	Log # 902	Subcommittee on Health Care Occupancies	This is an editorial rewrite to be consistent with Chapter 12. Any technical changes are from other proposals.	Accept	
21	Smoke Zone Separation	13-3.7.1	Smoke zone separation	13-3.7.1 Smoke barriers shall be provided, regardless of building-construction type, to divide every story used for sleeping rooms for more than 30 patients into at least two smoke compartments. The maximum area of any such smoke compartment shall not exceed 22,500 sq ft (2,100 sq m) of which both length and width shall be no more than 150 ft (45 m). Exception No. 1: No change. Exception No.-2: No change.	Smoke barriers shall be provided, regardless of building construction type, as follows: (a) To divide every story, used for sleeping rooms for more than 30 health care occupants, into at least two compartments, and (b) To limit on any story the maximum area of each smoke compartment to no more than 22,500 sq ft (2100 sq m), of which both length and width shall be no more than 150 ft (45 m). Exception 1: ... Exception 2: ...	Fall 1987	101 - 506	Log # 906	Subcommittee on Health Care Occupancies	To clarify that the requirement for smoke barriers in existing health care is based on patient count not on floor size.	Accept	

Changes to NFPA 101 - Life Safety Code - Changes affecting FSES for Health Care Facilities

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Objective	1-4.1	Updated objective	<p>1-4.1" The objective of this Code is provide a reasonable level of safety by reducing the probability of injury and loss of life from the effects of fire and other emergencies having the potential for similar consequences with due consideration for functional requirements. This objective is accomplished within the context of the physical facilities, type of activities undertaken, the provisions for the capabilities of the staff, and the needs of all occupants. The level of safety is defined by the combination of prevention, protection, egress and other features enumerated in the individual occupancy chapters.</p> <p>A-1-4.1 The level of life safety is defined through requirements directed at the:</p> <p>(a) prevention of ignition. (b) detection of fire. (c) control of fire development (d) confinement of the effects of fire (e) extinguishment of fire (f) provision of refuge and/or evacuation facilities (g) staff reaction</p>	Revised section	Annual 1990 TCR	101 - 6	Log # 567	Committee on Safety to Life	It is appropriate to provide an objective statement right up front in Chapter 1 of the Code. It stresses that the individual occupancy chapters will use varying degrees of various features in order to achieve a specific intended level of safety.	Accept	
2	Means of Egress	5-1.2.1 5-1.2.3 5-1.2.4	New accessible means of egress	"Accessible Means of Egress. Accessible means of egress is a path of travel usable by a mobility impaired person that leads to an exit, an exit enclosure or an area of refuge."	New definition	Annual 1990 TCR	101 - 35	Log # 322	Richard Hudnut, New York, NY	Accessible means of egress is a term used in documents describing access for disabled people. It is an undefined term and left up to the interpretation of the authority having Jurisdiction who has, as yet, no basis upon which to decide what it should be.	Accept in Principle	The Committee feels that the revised definition should satisfy the intent of the submitter without limiting the definition to wheelchair access.

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
3	Areas of Refuge	5-2.12	New area of refuge concept	New code text	New concept	Annual 1990 TCR	101 - 99	Log # 355	3ake Pauls & Edwina 3uillet, BUSI Team	The package of proposals addresses a number of concerns. For example: (1) the need to clear up misconceptions about what an area of refuge is; hence a proposed new definition in 5-1.2; (2) the desirability of clarifying "area of refuge" and "horizontal exit" in subsection 5-2.4; (3) the benefit of enlarging the range of possible areas of refuge (to include exit stair landings and elevator lobbies); (4) to provide the Code occupancy chapters with a basic standard which they can reference if areas of refuge are considered necessary in certain situations; and (5) to provide a national (ANSI-approved) standard which can be referenced by other standards (such as ANSI A117.1 and Federal. Government standards for accessibility) in relation to means of egress that are usable by people with mobility disabilities and which provide life safety options equivalent to those enjoyed by able-bodied people. The proposal is based on major studies conducted in 1987 and 1988 for Canadian and U.S. Government agencies. These studies included analysis of refuge and elevator-use provisions in standards and codes (proposed and adopted) in several countries. The most relevant of several reports on this work has been distributed to and discussed with the Subcommittee on Means of Egress.* Moreover, a survey of various people across the U.S.A. further underlined the need for U.S. standards and codes to address directly and completely the matter of life safety and egress for people with disabilities while utilizing more rationally the expensive systems being installed in buildings. The Life Safety Code is better suited to lead the way than are the model building codes; the Code can deal in a more integrated fashion with design and Use of facilities (e.g. as it does in Chapter 21). *3ake Pauls, principal investigator. Review of Standards & Codes Plus Recommendations for Accessible Means of Egress. One of a series of reports prepared as part of the study, "Egress Procedures and Technologies for People with Disabilities," by Hughes Associates, Inc. for the United States Architectural and Transportation Barriers Compliance Board, Washington, D.C., November 1988, 57 pp.	Accept in Principle	The Committee concurs with the concept of areas of refuge but does not feel that these should be confused with horizontal exits. In revising 5-2.12.2.2 the Committee does not agree with the submitter that these areas be allowed to impinge on required egress width, especially on stairs, as fire fighters need these stairs for access as well. Some of the occupancy chapters which address existing buildings may wish to require an area of refuge. Without the half hour fire resistance rated barrier allowance for existing buildings, the concept of area of refuge will not be as readily imposed on existing buildings. There is much existing construction which has the equivalent of one half hour fire resistance rating and thus would require no modification if used as a barrier for an area of refuge. Remaining changes are primarily editorial.
4	Egress - Mechanical and Boiler Rooms	5-12	Add requirements for means of egress from mechanical and boiler rooms.	Section 5-12 Mechanical Equipment Rooms, Boiler Rooms, and Furnace Rooms. 5-12.1 Mechanical equipment rooms, boiler rooms, furnace rooms and similar spaces shall be arranged to limit common path of travel to a maximum of 50 ft (15 m). 5-12.2 Boiler and furnace rooms having equipment exceed 400,000 BTU per hour input per unit, or exceeding 15 PSI boiler pressure shall be arranged to limit common path of travel to a maximum of 25 ft (6 m). 5-12.3 Stories used exclusively for mechanical equipment, furnaces or boilers, shall be permitted to have a single exit when the travel distance on that story does not exceed the common path of travel limitations.	New section	Annual 1990 TCR	101 - 164	Log # 550	Life Safety Subcommittee on Means of Egress	The requirements for mechanical equipment rooms, boiler rooms, furnace rooms and similar spaces have not been clear in the past. Guidance has often been given by suggesting the requirements for industrial occupancies be used in	Accept	

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5	Hazardous Area Protection	6-4.1	Require enclosures to resist passage of smoke.	(b) Protection with automatic extinguishing systems in accordance with Section 7-7 as required by Chapters 8 through 30. In new construction, the space so protected shall be enclosed to resist the passage of smoke and doors shall be self-closing or automatic-closing, or. Exception No. 1 to (b): Mercantile occupancy general storage areas and stock rooms protected by automatic sprinklers in accordance with Section 7-7 are exempt from the smoke resisting enclosure requirement. Exception No. 2 to (b): Hazardous areas in industrial occupancies protected by automatic extinguishing systems in accordance with 28-3.2 are exempt from the smoke, resisting enclosure requirement.	(b) Protection with automatic extinguishing systems in accordance with Section 7-7 as required by Chapters 8 through 30.	Annual 1990 TCR	101 - 187	Log # 266	Wayne G. Carson, Warrenton, VA	Code does not specify intent. It could be inferred that a chain link fence enclosure with sprinklers within the enclosure meets this requirement.	Accept in Part	The requirement for a smoke-resistant enclosure, when the sprinkler option is used, should be not retroactively imposed on existing hazardous areas. The Exception for mercantile occupancy general storage areas and stock rooms that are protected by automatic sprinklers was added at the request of the Subcommittee on Mercantile and Business Occupancies. For substantiation see the proposal documenting the change to 24-3.2.1 Exception. The Exception for hazardous areas in industrial occupancies that are protected by automatic extinguishing systems was added at the request of the Subcommittee on Industrial and Storage Occupancies. For substantiation see the proposal documenting the change to 28-3.2.
6	Hazardous Area Protection	6-4.1 through 6-4.1.3	Revised sub part	6-4.1.1 Protection shall be provided from any area having a degree of hazard greater than that normal to the general occupancy of the building or structure as follows: (a) Enclose the area with a fire barrier having a one-hour fire resistance rating in accordance with Section 6-2 without windows, or (b) Protect the area with automatic extinguishing systems in accordance with Section 7-7, or (c) Both (a) and (b) above where the hazard is severe or where otherwise specified by Chapters 8 through 30. 6-4.1.2 In new construction where protection is provided with automatic extinguishing systems without fire resistive separation, the space so protected shall be enclosed to resist the passage of smoke and doors shall be self-closing or automatic-closing and resist the passage of smoke. Exception No. 1: Mercantile occupancy general storage areas and stock rooms protected by automatic sprinklers in accordance with Section 7-7. Exception No. 2: Hazardous areas in industrial occupancies protected by automatic extinguishing systems in accordance with 28-3.2 "A-6-4.1.1 Areas requiring special hazard protection may include but are not limited to areas such as those used for storage of combustibles or flammables, areas housing heat producing appliances, or areas used for maintenance purposes."	Revised sub part	Annual 1990 TCD	101 - 106	Log # 181	Wayne G. Carson, Warrenton, VA	A review of the proposed part (b) revealed a need to reorganize this section. Although this may appear to have some technical change incorporated within it, a review of the occupancy chapters will note that where the occupancy chapters are silent it is the intent to provide it as specified here and, if not, the occupancy chapters very specifically delineate other provisions. This should go a long way in significantly cleaning up Section 6-4.1.	Accept in Principle	The above Committee Action adopts most of that which the commenter proposed and represents an improvement in formatting and wording. The Committee Action also clarifies that the verbiage of existing 6-4.2 through 6-4.4 needs to be retained. Lastly, the Committee agrees with the commenter that the examples of areas requiring special hazard protection belong in the appendix, but has chosen to move the complete list to the appendix without editorial rewriting and change. The above action should meet the commenter's intent.
7		7-2.4	Include reference to NFPA 45 and 99	7-2.4 Ventilating systems in laboratories using chemicals shall be installed in accordance with NFPA 45, Standard on Fire Protection for Laboratories Using Chemicals, or NFPA 99, Standard for Health Care Facilities, as appropriate.	New section	Annual 1990 TCR	101 - 191	Log # 450	Life Safety Subcommittee on Building Service and Fire Protection Equipment	Given that NFPA 45 and NFPA 99 provide guidelines on ventilating systems used in laboratories, use of those references should be mandated. Such a requirement would correctly reside in Section 7-2 dealing with heating, ventilating and air conditioning equipment	Accept	

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8	Annunciation	7-6.7	New section on annunciation	<p>7-6.7.1 Annunciation, as required by another section of this Code, shall comply with 7-6.7.2 through 7-6.7.7.</p> <p>7-6.7.2 Alarm annunciation at the control center shall be by means of audible and visible indicators.</p> <p>7-6.7.3 For the purposes of alarm annunciation, each floor of the building shall be considered as a minimum as one zone.</p> <p>7-6.7.4 If a floor area exceeds 20,000 square feet, additional zoning shall be provided. The length of any zone shall not exceed 300 feet in any direction. Exception: Where otherwise permitted by another section of this Code.</p> <p>7-6.7.5 A system trouble signal, shall be annunciated at the control center by means of an audible and visible indicator.</p> <p>7-6.7.6 A system supervisory signal shall be annunciated at the control center by means of audible and visible indicators.</p> <p>7-6.7.7 When the system serves more than one building, each building shall be considered separately.</p>	New section	Annual 1990 TCR	101 - 208	Log # 26	Martin H. Reiss, Gamewell Corporation	Minimum requirements for annunciation and zoning need to be defined.	Accept in Principle	The Committee Action does everything that the Submitter proposed and additionally clarifies that annunciation per the details provided in the proposed wording needs to be provided when required by another section of the Code. Its 7.6.7.2 stresses that, at a minimum, each floor of a building needs to be considered as a separate zone, thus implying that it will often be desirable to create more than one zone per floor. Additionally, the Committee Action clarifies that both audible and visible indication of the system supervisory signal be annunciated at the control center.
9	Staffing	12-1.1.1.11 13-1.1.1.11	New staffing assumptions	<p>12-1.1.1.11 (13-1.1.1.11) The requirements of this chapter are based on the assumption that staff is available in all patient occupied areas to perform certain fire safety functions as required in other paragraphs of this chapter.</p> <p>A-12-1.1.1.II (A-13-1.1.II) The Code recognizes that certain functions necessary for the life safety of building occupants, such as the closing of corridor doors, operation of manual fire alarm devices, and the removal of patients from the room of fire origin require the intervention of facility staff. It is not the intent of this paragraph to specify the levels or locations of staff necessary to meet this requirement.</p>	New Section	Annual 1990 TCR	101 - 378	Log # 360	William N. Brooks, Columbia, MD	The presence of staffing in patient care areas has always been an underlying code assumption. However, it is possible to receive an equivalency using the FSES without staff. In addition, the use of more sophisticated monitoring equipment may make it possible to have "staffless" zones. It is important for the health care subcommittee to address this issue in advance rather than try to catch up later.	Accept in Principle	The intent of the submitter has been made in a format more consistent with the Code
10	Renovations	12-1.1.4.5 13-1.1.4.5	New section on renovation	<p>12-1.1.4.5 (13-1.1.4.5) Renovations, Alterations and Modernizations. Renovations, alterations and modernizations shall comply, to the extent practical, with requirements for new construction in accordance with 1-4.6. When such renovations, alterations, or modernizations are done in a nonsprinklered facility the automatic sprinkler requirements of Chapter 12 shall apply to the smoke compartment undergoing the renovation, alteration, or modernization. However in such case, when the building is not protected throughout by an approved automatic sprinkler system, the requirements of 13-1.6 and 13-2.3.2, shall also apply. 12-3.7.3 Exception No. 2 shall be permitted only where adjacent smoke compartments are protected throughout by an approved supervised automatic sprinkler system in accordance with 12-3.5.2. When minor renovations, alterations, modernizations, or repairs are done in a nonsprinklered facility, the requirements of 12-3.5.1 shall not apply but in such cases the renovations, alterations, modernizations, or repairs shall not reduce life safety below that which was there before, nor below the requirements of Chapter 13 for a nonsprinklered building.</p> <p>A-12-1.1.4.5 (A-13-1.1.4.5) The Code does not attempt to establish specific monetary limits or percentage values to determine "minor" as this requires judgment. It is not the intent of this paragraph to exempt significant renovations and modernization projects for which the Code does intend to apply the automatic sprinkler mandate. For the purpose of this requirement a floor which is not divided by a smoke barrier is considered one smoke compartment.</p>	New Section	Annual 1990 TCD	101 - 234 Comment on Proposal 101 - 385	Log # 233	John F. Behrens, Huntington Beach, CA	Since the provisions of Chapter 12 are now based on the assumption that all new buildings will be sprinklered, there are many items that are not appropriate in a building which may be partially sprinklered or nonsprinklered. Since it is impractical to require that all health care facilities undergoing renovations, alterations, modernizations or repairs to be fully sprinklered, this provision will allow a reasonable approach to the problem while at the same time, highlighting that certain provision for nonsprinklered buildings will have to be incorporated into this renovation.	Accept in Principle	The Committee agrees with the intent of the submitter and has made several changes to try to clarify intent. In addition, a new 13-3.5.4 has been added to clarify that sprinkler exceptions can be permitted on a compartment by compartment basis in a renovation program.

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11	Construction	Table 12-1.6.2	Construction	In 12-1.6.2 remove single and double daggers and associated notes from Table 12-1.6.2. In the Exception to 12-1.6.2 delete the last sentence which currently reads: "To qualify for this Exception, the attic or other space so developed shall either be unoccupied or protected throughout by an approved automatic sprinkler system."		Annual 1990 TCR	101 - 385	Log # 833	Technical Committee on Safety to Life	All new buildings will require supervised automatic sprinkler protection so the Exceptions will no longer apply. All new buildings will require supervised automatic sprinkler protection so the sentence will no longer apply.	Accept																																																			
12	Exit Capacity	12-2.3.2	Exit capacity - no AS option	12-2.3.2 The capacity of means of egress providing travel by means of stairs shall be 0.3 in. (0.8 cm) per person, and the capacity of means of egress providing horizontal travel (without stairs) such as doors, ramps or horizontal exits, shall be 0.2 in. (0.5 cm) per person.	12-2.3.2 The capacity of means of egress providing travel by means of stairs shall be 1.0 in. (2.5 cm) per person, and the capacity of means of egress providing horizontal travel (without stairs) such as doors, ramps or horizontal exits, shall be 0.7 in. (1.8 cm) per person.	Annual 1990 TCR	101 - 397	Log # 691	Committee on Safety to Life - Subcommittee on Health Care Occupancies	Review of the origin of the stair capacity requirements shows that the original intent was to make the stair enclosures the primary area of refuge in all occupancies (lg14 NFPA Proceedings) and for all sleeping occupancies (into at least the 1930's-NBS, Design and Construction of Building Exits, 1935). The current concepts of area of refuge, horizontal movement and protect in place make the original concept out of date. Capacities for level components have been adjusted accordingly.	Accept in Principle	Per the actions of Proposal 101-385 (Log #883) on 12-1.6.2, et. al., all new facilities will be sprinklered and thus the capacities for nonsprinklered buildings can be deleted from Chapter 12.																																																		
13	Hazardous Area Table	12-3.2.1	Changes in hazardous area separation	<table border="0"> <tr> <td>Description</td> <td>Separation/Protection</td> </tr> <tr> <td>Boiler and fuel-fired heater rooms</td> <td>1-hr</td> </tr> <tr> <td>Employee locker rooms</td> <td>See 12-3.6.3.4</td> </tr> <tr> <td>Gift/retail shops</td> <td>See 12-3.6.3.4</td> </tr> <tr> <td>Handicraft shops</td> <td>1-hr</td> </tr> <tr> <td>Laboratories that use hazardous materials which would cause classification as severe hazard in accordance with NFPA 99 Central/bulk laundries more than 100 sq ft (9.3 sq m) in area</td> <td>1-hr</td> </tr> <tr> <td>Paint shops employing hazardous substances and materials in quantities less than which would cause classification as severe hazard.</td> <td>1-hr</td> </tr> <tr> <td>Physical Plant Maintenance Shop</td> <td>1-hr</td> </tr> <tr> <td>Soiled linen room</td> <td>1-hr</td> </tr> <tr> <td>Storage rooms more than 50 sq ft (4.6 sq m) in area but not more than 100 sq ft (9.3 sq m) in area storing combustible material.</td> <td>See 12-3.6.3.4</td> </tr> <tr> <td>Storage rooms more than 100 sq ft (9.3 sq m) storing combustible material</td> <td>1-hr</td> </tr> <tr> <td>Trash collection rooms</td> <td>1-hr</td> </tr> </table>	Description	Separation/Protection	Boiler and fuel-fired heater rooms	1-hr	Employee locker rooms	See 12-3.6.3.4	Gift/retail shops	See 12-3.6.3.4	Handicraft shops	1-hr	Laboratories that use hazardous materials which would cause classification as severe hazard in accordance with NFPA 99 Central/bulk laundries more than 100 sq ft (9.3 sq m) in area	1-hr	Paint shops employing hazardous substances and materials in quantities less than which would cause classification as severe hazard.	1-hr	Physical Plant Maintenance Shop	1-hr	Soiled linen room	1-hr	Storage rooms more than 50 sq ft (4.6 sq m) in area but not more than 100 sq ft (9.3 sq m) in area storing combustible material.	See 12-3.6.3.4	Storage rooms more than 100 sq ft (9.3 sq m) storing combustible material	1-hr	Trash collection rooms	1-hr	<table border="0"> <tr> <td>Description</td> <td>Separation/Protection</td> </tr> <tr> <td>Boiler and heater rooms</td> <td>2 hrs or 1 hr and sprinklers</td> </tr> <tr> <td>Employee locker rooms</td> <td>1 hr or sprinklers</td> </tr> <tr> <td>Gift/retail shops</td> <td>See 12-3.2.3</td> </tr> <tr> <td>Handicraft shops</td> <td>1 hr or sprinklers</td> </tr> <tr> <td>Laboratories which employ hazardous materials but such materials are in quantities less than that which would cause classification as severe hazard</td> <td>1 hr or sprinklers</td> </tr> <tr> <td>Laundries greater than 100 sq ft</td> <td>1 hr and sprinklers</td> </tr> <tr> <td>Paint shops employing hazardous substances and materials in quantities less than that which would cause classification as severe hazard</td> <td>2 hrs or 1 hr and sprinklers</td> </tr> <tr> <td>Physical Plant Maintenance Shop</td> <td>2 hrs or 1 hr and sprinklers</td> </tr> <tr> <td>Soiled linen room</td> <td>1 hr and sprinklers</td> </tr> <tr> <td>Storage rooms more than 50 sq ft in area but not more than 100 sq ft in area storing combustible material</td> <td>1 hr or sprinklers</td> </tr> <tr> <td>Storage rooms more than 100 sq ft storing combustible materials</td> <td>1 hr and sprinklers</td> </tr> <tr> <td>Trash collection rooms</td> <td>1 hr and sprinklers</td> </tr> </table>	Description	Separation/Protection	Boiler and heater rooms	2 hrs or 1 hr and sprinklers	Employee locker rooms	1 hr or sprinklers	Gift/retail shops	See 12-3.2.3	Handicraft shops	1 hr or sprinklers	Laboratories which employ hazardous materials but such materials are in quantities less than that which would cause classification as severe hazard	1 hr or sprinklers	Laundries greater than 100 sq ft	1 hr and sprinklers	Paint shops employing hazardous substances and materials in quantities less than that which would cause classification as severe hazard	2 hrs or 1 hr and sprinklers	Physical Plant Maintenance Shop	2 hrs or 1 hr and sprinklers	Soiled linen room	1 hr and sprinklers	Storage rooms more than 50 sq ft in area but not more than 100 sq ft in area storing combustible material	1 hr or sprinklers	Storage rooms more than 100 sq ft storing combustible materials	1 hr and sprinklers	Trash collection rooms	1 hr and sprinklers	Annual 1990 TCR	101 - 385	Log # 833	Technical Committee on Safety to Life	In view of the mandatory requirement for sprinkler protection, the criteria for sprinkler protected buildings will now become the base requirement.	Accept	
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14	Interior Finish	12-3.3.1	Address AS for interior finish	"Interior finish of walls and ceilings throughout shall be Class A or B in accordance with Section 6-5. The provisions of 6-5.7.1 shall not apply."	Interior finish of walls and ceilings throughout shall be Class A in accordance with Section 6-5.	Annual 1990 TCR	101 - 385	Log # 833	Technical Committee on Safety to Life	All new buildings will require supervised automatic sprinkler protection so the Exceptions will no longer apply.	Accept																																																			

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15	Automatic Sprinklers	12-3.5.1	Address AS for new buildings - no exceptions	12-3.5.1" Buildings containing health care facilities shall be protected throughout by an approved supervised automatic sprinkler system installed in accordance with Sectpn 7-7. Quick response sprinklers shall be installed throughout all smoke compartments containing patient sleeping rooms.	Where required by 12-1.6, health care facilities shall be protected throughout by an approved supervised automatic sprinkler system installed in accordance with Section 7-7. Exception: In Types I and II construction, where approved by the authority having jurisdiction, alternative protection measures may be substituted for sprinkler protection in specified areas where the authority having jurisdiction has prohibited sprinklers, without causing a building to be classified as nonsprinklered.	Annual 1990 TCR	101 - 385	Log # 833	Technical Committee on Safety to Life	The Committee on Safety to Life has determined that with the new technology of quick response sprinklers, a greater probability of protecting the patient in the room of fire origin now exists. Recognizing that the new technology increases the level of life safety without an increase of construction costs, yet with a major decrease in the maintenance and operation of the building construction life safety features, the Committee has revised Chapter 12 accordingly. With automatic sprinkler protection required throughout new health care facilities, and quick response sprinklers required in smoke compartments containing patient sleeping rooms, the Committee is of the opinion that a fire and its life-threatening by-products will be reduced to acceptable levels thereby allowing the defend in place concept to continue. The Committee in its deliberations considered the potential weaknesses of maintaining the proper integrity of the essential life safety elements and is of the opinion that the probability of a sprinkler system operating as designed is equal to or greater than other life safety features. Longstanding construction alternatives consistent with complete automatic sprinkler protection and other modifications installed to inhibit the fire and its by-products from spreading beyond the room of origin or to adjacent smoke compartments have been included as a part of this proposal.	Accept	
16	Quick Response Sprinklers	12-3.5.1 12-3.5.2	Quick response sprinklers	12-3.5.1 Building containing health care facilities shall be protected throughout by an approved supervised automatic sprinkler system installed in accordance with Section 7-7. 12-3.5.2 Listed quick response or listed residential sprinklers shall be used throughout smoke compartments containing patient sleeping rooms. Exceptions: 1) Standard response sprinklers shall be permitted for use in areas where quick response and residential sprinklers are prohibited to be installed by their listing. 2) Standard response sprinklers shall be permitted for use in hazardous areas protected in accordance with Section 12-3.2.1.	Where required by 12-1.6, health care facilities shall be protected throughout by an approved supervised automatic sprinkler system installed in accordance with Section 7-7. Exception: In Types I and II construction, where approved by the authority having jurisdiction, alternative protection measures may be substituted for sprinkler protection in specified areas where the authority having jurisdiction has prohibited sprinklers, without causing a building to be classified as nonsprinklered.	Annual 1990 TCD	101 - 283 (Comment on Proposal 101 - 385)	Log # 83	Kenneth E. Isman/NFSA E & S Committee	Use of the term "quick response sprinkler" refer to a specific kind of sprinkler which is appropriate for use in these occupancies; however, it excludes the use of other (residential) sprinklers which are also appropriate. Both of these types of sprinklers have limitations attached to them and irection is required when a situation is encountered when neither quick response or residential sprinklers can be installed.	Accept	

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17	Automatic Sprinklers	12-3.6.1	Modified exceptions to address mandatory sprinklers	<p>12-3.6.1 Corridors shall be separated from all other areas by partitions complying with 12-3.6.2 through 12-3.6.4 (also see 12-2.5.5). Exception No. 1: Smoke compartments normally subject to patient occupancy may have spaces that are unlimited in size open to the corridor, provided: (a) The spaces are not used for patient sleeping rooms, treatment rooms, or hazardous areas, and (b) The space and corridors are protected by an electrically supervised, automatic smoke detection system installed in accordance with 12-3.4 or the smoke compartment in which the space is located is protected by quick response sprinklers, and (c) The space does not obstruct access to required exits. Exception No. 2: Smoke compartments or floors not normally subject to patient occupancy may have spaces that are unlimited in size open to the corridor provided: (a) The space is not used as a hazardous area, and (b) The space does not obstruct access to required exits. Exception No. 3 :... Exception No. 4: Gift shops may be open to the corridor where protected in accordance with 12-3.2.5.</p>	Editorial changes to address sprinklers.	Annual 1990 TCR	101 - 385	Log # 833	Technical Committee on Safety to Life	The installation of complete automatic sprinkler protection provides an adequate alternative to the protection of life-threatening fires by staff in attendance at the location of the open space. The activation of quick response sprinklers installed throughout the smoke compartment or smoke detection installed in the open space and corridors is intended to provide an acceptable level of early warning to the occupants of that compartment.	Accept	
18	Openings	12-3.6.5 13-3.6.5	Allowance for pass through openings	In areas other than patient sleeping compartments, miscellaneous openings such as mail slots, pharmacy pass through windows, laboratory pass through windows, and cashiers pass through windows may be installed in vision panels or doors without special protection provided the aggregate area of openings per room does not exceed 20 sq in. and the openings are installed at or below half the distance from the floor to the room ceiling.	New section	Annual 1990 TCR	101 - 442	Log # 369	William N. Brooks, Columbia, MD	Closure of these miscellaneous openings has resulted in some novel arrangements of smoke/heat operated shutters and doors. These solutions were expensive, were maintenance problems, and didn't appreciably increase the fire safety or integrity of the wall. This new paragraph will permit limited wall openings for specialized purposes.	Accept in Principle	The Committee agrees with the intent of the submitter, however, feels that this should not be done in patient sleeping areas and it should also be allowed in ambulatory health care centers.
19	Atrium Smoke Zone	12-3.7.1 (c) and 13-3.7.1	Atrium smoke zone size	The area of an atrium separated in accordance with Section 12-3.7.1(c) and 13-3.7.1 shall not be limited in size.	New section	Annual 1990 TCD	101 - 305 Comment on Proposal 101 - 450	Log # 39	Michael A. Crowley, Rolf Jensen & Associates, Inc.	The Code does not specifically address the size of an atrium. Atriums are not used as patient sleeping or treatment areas, have low fuel loading and are sprinklered. The low hazard of a Code compliance atrium does not justify limiting the size.	Accept in Principle	The Committee agrees with the intent of the submitter but feels it would be more appropriately placed as recommended by the Committee.
20	Smoke Dampers	12-3.7.3 Exception 2	Smoke damper omission allowance	Exception No. 2: Smoke dampers may be omitted from duct penetrations of required smoke barriers.	New exception	Annual 1990 TCR	101 - 385	Log # 833	Technical Committee on Safety to Life	The sprinkler requirements proposed for 12-3.5.1 will limit the potential impact (smoke and fire) to a level which allows the omission of these dampers.	Accept	
21	Smoke Dampers	13-3.7.3 Exception 2	Smoke damper omission allowance	Exception: In buildings protected throughout by an approved supervised automatic sprinkler system utilizing quick response sprinklers in accordance with 12-3.5.3 (13-3.5.3) smoke dampers shall be permitted to be omitted from duct penetrations of required barriers separating smoke compartments	New exception	Annual 1990 TCR	101 - 384	Log # 686	Technical Committee on Safety to Life	Quick response sprinkler provisions in 12-3.5.3 limit the potential impact of smoke and fire to a level allowing the omission of these dampers	Accept in Part	See Proposal 101-385 (Log #883) on 12-1.6.2, et. al. which will mandate sprinklering of new facilities.

Changes to NFPA 101 - Life Safety Code - Changes affecting FSES for Health Care Facilities

1994 - NFPA 101

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Purpose	1-2.1, 1-2.2, 1-2.3 & 1-2.4	Changes to purpose	<p>1-2.1 The purpose of this Code is to provide minimum requirements, with due regard to function, for the design, operation and maintenance of buildings and structures for safety to life and for the emergency and nonemergency movement of people. Note: See the above Technical Correlating Committee Note which revises 1-2.1.</p> <p>1-2.2 As related to fire safety, the objective is to protect the occupants not intimate with the initial fire development from loss of life. The protection methods assume a single fire source.</p> <p>1-2.3 The level of safety is achieved by the combination of prevention, protection, egress and other features enumerated in the individual occupancy chapters with due regard to the capabilities and reliability of the features involved.</p> <p>1-2.4 The Code endeavors to avoid requirements that might involve unreasonable hardships or unnecessary inconvenience or interference with the normal use and occupancy of the building, but insists upon compliance with a minimum standard for firesafety consistent with the public interest.</p>	<p>1-2.1 The purpose of this Code is to establish minimum requirements that will provide a reasonable degree of safety from fire in buildings and structures.</p> <p>1-2.2 The Code endeavors to avoid requirements that might involve unreasonable hardships or unnecessary inconvenience or interference with the normal use and occupancy of the building, but insists upon compliance with a minimum standard for firesafety consistent with the public interest.</p>	Fall 1993 - TCRF	101-3	CP194	Life Safety Technical Committee on Fundamentals	The committee agrees that the existing objective statement is not truly an objective statement as it is neither quantifiable nor measurable. The committee found little or no difference between what should appear in a section dealing with purpose versus what should appear in a section dealing with objective. As such, the code objective has been folded into Section 1-2 Purpose. The above committee action should meet the intent of the submitters of the referenced proposals.	Accept in Principle	
2	FP and LS	1-7.2	Existing FP LS maintain or remove	<p>Exception to 1-7.1 as follows: Exception: Existing buildings provided: (a) A plan of correction has been approved, and (b) The occupancy classification remains the same, and (c) No serious life safety hazard exists.</p>	<p>1-7.2 Existing buildings that are occupied at the time of adoption of the Code may remain in use provided: (a) The occupancy classification remains the same (b) No serious life safety hazard exists that would constitute an imminent threat.</p>	Fall 1993 - TCRF	101-11	385	James K Lathrop, Koffel Assoc.	This proposal is provided for several reasons. 1-7.2 is really an Exception to 1-7.1 and should be so written. As currently written it is permissive due to the term "may". The rewording clarifies the intent that the paragraph does not exempt the facility from the Code but only from the mandate that the building cannot be occupied. It has always been the intent of the Code that existing buildings comply but that they did not require evacuation unless there was a serious life safety threat. The last portion is suggested for deletion since it does not seem to add anything, either it is serious or it is not, both require significant judgment. This could be retained without affecting the overall proposal.	Accept in Principle	
3	Mixed Occupancies	4-1.11	Mixed occupancies	<p>Revise 4-1.1 by adding a sentence so that 4-1.1 reads in entirety. 4-1.1 A building or structure shall be classified as follows, subject to the ruling of the authority having jurisdiction in case of question as to proper classification in any individual case. Occupancies in special structures shall conform to the requirements of the specific occupancy Chapters 8 through 29 except as modified by Chapter 30.</p>	<p>1-5.7 Mixed Occupancies. Where two or more classes of occupancy occur in the same building or structure and are so intermingled that separate safeguards are impracticable, means of egress facilities, construction, protection, and other safeguards shall comply with the most restrictive life safety requirements of the occupancies involved.</p>	Fall 1993 - TCRF	101-30	CP301	Life Safety Technical Committee on Industrial and Storage Occupancies	Subsection 4-1.1 serves as the introductory paragraph to the various classes of occupancy that follow in subsections 4-1.2 through 4-1.12. Only 4-1.11, which deals with special structures, does not represent a class of occupancy. Special structures house one or more of the "legitimate" occupancy classes described in 4-1.2 through 4-1.10. There is no occupancy that is not adequately addressed by classifying it as one of the classes described by 4-1.2 through 4-1.10, or the mix of classes as described by 4-1.12. There is no occupancy class called special structures. Subsection 4-1.11 thus causes confusion and should be deleted.	Accept	

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4	Access Control	5-2.1.6.2	Access control	Combine the provisions of 5-2.1.6.1, 5-2.1.6.2, and 5-2.1.6.3 so that all of the provisions applicable to delay release devices appear under the number 5-2.1.6. This would be done by making the provisions of current 5-2.1.6.2 a new subpart (d); and by making the provisions of current 5-2.1.6.3 as a new subpart (e). Thus, 5-2.1.6 Special Locking Arrangements would have a lead in paragraph followed by five subparts (a) through (e).	Rearranging provisions	Fal 1993 - TCRF	101-69	CP117	Life Safety Technical Committee on Means of Egress	The requirements of current 5-2.1.6.2 and 5-2.1.6.3 are conditional subparts of the overall set of requirements applicable to delay release devices. AS such, they should be combined with subparts (a) through (c) of what is currently 5-2.1.6.1. Then, all five sets of conditions can be seen as applying at once.	Accept																														
5	Ramps	5-2.5.2	Ramps	<p>Revise subsection 5-2.5 Ramps to read as follows:</p> <p>to the special requirements of this subsection.</p> <p>5-2.5.2 Dimensional Criteria. Ramps shall be in accordance with the following table:</p> <table border="1"> <thead> <tr> <th colspan="2">New Ramps</th> </tr> </thead> <tbody> <tr> <td>Minimum width clear of all obstructions, except projections not exceeding 3 1/2 in. (8.9 cm) at or below handrail height on each side</td> <td>44 in. (112 cm)</td> </tr> <tr> <td>Maximum slope</td> <td>1 in 12 for > 6 in. (>15.2 cm) rise</td> </tr> <tr> <td></td> <td>1 in 10 for a > 3 in. (>7.6 cm) and ≤ 6 in. (≤15.2 cm) rise</td> </tr> <tr> <td></td> <td>1 in 8 for a ≤ 3 in. (≤7.6 cm) rise</td> </tr> <tr> <td>Maximum cross slope</td> <td>1 in 48</td> </tr> <tr> <td>Maximum rise for a single ramp run</td> <td>30 in. (76 cm)</td> </tr> </tbody> </table> <p><i>Exception:</i> Existing ramps shall be permitted to remain in use or be rebuilt if they meet the requirements shown in the table for existing ramps.</p> <table border="1"> <thead> <tr> <th colspan="3">Existing Ramps</th> </tr> <tr> <th></th> <th>Class A</th> <th>Class B</th> </tr> </thead> <tbody> <tr> <td>Minimum width</td> <td>44 in. (122 cm)</td> <td>30 in. (76 cm)</td> </tr> <tr> <td>Maximum slope</td> <td>1 in 10</td> <td>1 in 8</td> </tr> <tr> <td>Maximum height between landings</td> <td>12 ft (3.7 m)</td> <td>12 ft (3.7 m)</td> </tr> </tbody> </table> <p><i>Exception No. 1:</i> Existing Class B ramps with slopes no steeper than 1 in 6 are permitted to remain in use subject to the approval of the authority having jurisdiction.</p> <p><i>Exception No. 2:</i> Existing ramps with a slope no steeper than 1 in 10 need not be provided with landings.</p> <p>5-2.5.3 Ramp Details.</p> <p>5-2.5.3.1 Landings. Ramps shall have landings at the top, bottom and at doors opening onto the ramp. Slope of landing shall not be steeper than 1 in 48. Every landing shall have a dimension measured in the direction of travel not less than the width of the ramp. Such dimension need not exceed 4 ft (122 cm) where the ramp has a straight run.</p>	New Ramps		Minimum width clear of all obstructions, except projections not exceeding 3 1/2 in. (8.9 cm) at or below handrail height on each side	44 in. (112 cm)	Maximum slope	1 in 12 for > 6 in. (>15.2 cm) rise		1 in 10 for a > 3 in. (>7.6 cm) and ≤ 6 in. (≤15.2 cm) rise		1 in 8 for a ≤ 3 in. (≤7.6 cm) rise	Maximum cross slope	1 in 48	Maximum rise for a single ramp run	30 in. (76 cm)	Existing Ramps				Class A	Class B	Minimum width	44 in. (122 cm)	30 in. (76 cm)	Maximum slope	1 in 10	1 in 8	Maximum height between landings	12 ft (3.7 m)	12 ft (3.7 m)		Fall 1993 - TCRF	101-119	CP5	Means of Egress Task Group on BCMC Report and ADA Guidelines	The proposed changes track very closely with the BCMC report and additionally draw from the ADAAG. The requirements are necessary to make ramps usable by persons with mobility impairments.	Accept	
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8	Accessible Means of Egress	5-5.4	Accessibility requirements	5-5.4 Accessible Means of Egress. NEW CODE TEXT	New code text	Fall 1993 - TCRF	101-32	CP217	Life Safety Technical Committee on Means of Egress	The Life Safety Technical Committee on Means of Egress has reviewed the various proposals on accessibility, particularly proposal 101-33 Log #CP1 as submitted by the Means of Egress Task Group on BCMC Report and ADA Guidelines. The committee has also reviewed the most current BCMC Report, NISTIR 4770 Staging Areas for Persons with Mobility Limitations, and NIST-GCR-92-606 Human Behavior Aspects for Staging Areas for Fire Safety in GSA Buildings. The references studied have justified retaining the concept proposed by the Means of Egress Task Group that in a fully sprinklered building a complete floor can be considered as an area of refuge. However, the committee will require that the floor provide at least two areas separated by partitions that are smoke resisting. This proposal follows the recommendation of task group proposal 101-33 Log #CP1. See the substantiation for that proposal.	Accept																														
9	High Hazard Exit Capacity	5-11	High hazard exit capacity	In the first and second lines of the exception to 5-11.3, replace the word "greater" with the word "more".	Capacity of means of egress provided in accordance with 5-11.1 shall be as specified in the applicable sections of Chapters 8 through 30 but not less than such as to provide 0.7 in./person (1.8 cm/person) where exit is inside or outside stairs or 0.4 in. (1.0 cm) per person where exit is by doors at grade level, by horizontal exits, or by Class A ramps.	Fall 1993 - TCRF	101-184	CP179	Life Safety Technical Committee on Means of Egress	Editorial clarification so as to use correct grammar.	Accept																														

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
10	Exit Allowance for Mech Rooms	5-12.1	Single exit allowance for mechanical rooms	<p>5-12.1 Mechanical equipment rooms, boiler rooms, furnace rooms, and similar spaces shall be arranged to limit common path of travel to a maximum of 50 ft (15 m).</p> <p>Exception No. 1: In buildings protected throughout by an approved supervised automatic sprinkler system common path of travel shall not exceed 100 ft (30 m).</p> <p>Exception No. 2: In residential mechanical rooms with no fuel-fired equipment common path of travel shall not exceed 100 ft (30 m).</p> <p>Exception No. 3: In existing buildings common path of travel shall not exceed 100 ft (30 m).</p> <p>5-12.2 Stories used exclusively for mechanical equipment, furnaces, or boilers, such as a penthouse, shall be permitted to have a single exit where the travel distance on that story does not exceed the common path of travel limitations of 5-12.1.</p>	<p>5-12.1 Mechanical equipment rooms, boiler rooms, furnace rooms, and similar spaces shall be arranged to limit common path of travel to a maximum of 50 ft (15 m).</p> <p>5-12.2 Stories used exclusively for mechanical equipment, furnaces, or boilers shall be permitted to have a single exit where the travel distance on that story does not exceed the common path of travel limitations.</p>	Fall 1993 - TCRF	101-186	394	James K Larhrop, Koffel Assoc.	When this section was developed, the limitations from industrial were used. Field experience is showing these numbers to be overly restrictive, especially in existing buildings and in true mechanical spaces, such as penthouse fan rooms. The numbers being proposed are from both industrial and storage, but primarily from storage, since occupant loads in these spaces are very low and familiarity is high. New numbers are also being proposed for industrial and storage occupancies.	Accept	
11	Vertical Openings	6-2.4.7	Vertical opening protected on one floor	<p>In 6-2.4.2 renumber the current Exception No. 3 as Exception No. 7 and insert a new Exception No. 3 to read:</p> <p>Exception No. 3: As permitted in 6-2.4.7. Add a new 6-2.4.7 to read as follows and renumber current paragraphs:</p> <p>6-2.4.7 A vertical opening, not serving as an exit enclosure, connecting only two adjacent stories, piercing only one floor, shall be permitted to be open to one story.</p>		Fall 1993 - TCRF	101-190	395	James K Larhrop, Koffel Assoc.	It has been interpreted for years that one can protect a two story vertical opening by separating it on only one floor. A strict reading of the Code does not clearly indicate this, "This does protect the vertical opening but does not provide a total shaft. A similar provision has been in Board and Care and in Lodging and Rooming Houses for awhile. A similar proposal has been submitted to Chapter 5 for exit enclosures but has several additional requirements.	Accept	
12	Textile Wall Coverings	6-5.2.3.2, 6-5.2.3.3, 6-5.2.3.5	More requirements on textile wall coverings	<p>6-5.2.3.2 Textile materials having a Class A rating (see 6-5.2.3) shall be permitted on partitions which are not more than 3/4 of the floor-to-ceiling height nor more than 8 ft in height, whichever is less.</p> <p>6-5.2.3.3 Textile materials having a Class A rating (see 6-5.2.3) shall be permitted to extend up to 4 ft above finished floor on ceiling-height walls and ceiling-height partitions.</p> <p>6-5.2.3.5 Textile materials shall be permitted on walls and partitions when tested in accordance with NFPA 265, Standard Fire Test for Evaluating Room Fire Growth Contribution of Textile Wall Coverings, using a product mounting system, including adhesive representative of actual use, provided the textile material complies with the criteria of 6-5.2.3.5.1 or 6-5.2.3.5.2.</p>	<p>6-5.2.3 Textile materials having a napped, tufted, looped, woven, nonwoven, or similar surface shall not be applied to walls or ceilings.</p> <p>Exception No. 1: Such materials may be permitted on the basis of room/corner fire tests acceptable to the authority having jurisdiction that demonstrate that the product, using a product mounting system including adhesive, representative of actual use, will not spread fire to the edges of the test sample or cause flashover in the test room.</p> <p>Exception No. 2: Such materials having a Class A rating shall be permitted in rooms or areas protected by an approved automatic sprinkler system.</p> <p>Exception No. 3: Previously approved, existing, Class A installations.</p>	Fall 1993 - TCDF	101-173	273	John G Degenkolb, Carson City, NV	Further revise Exception No. 1 to 6-5.2.3 (which will be renumbered to become Exception No. 2 to 6-5.2.3 via the action on committee proposal 101-207) to address necessary criteria which need to be in NFPA 101 to modify the NFPA 265 fire test procedures so less-than-ceiling-height partitions can be effectively tested by NFPA 265.	Accept in Principle	
13	Healthcare Notification	7-6.3.4	Healthcare notification	<p>Delete Exceptions 1 through 3 and add new sentence "Location of visible signals shall be in accordance with the Americans with Disabilities Act.</p>	<p>7-6.3.4 Notification signals for occupants to evacuate shall be by audible and visible signals.</p> <p>Exception No. 1: Buildings not subject to occupancy by persons who are hearing impaired need not comply with the provisions for audible signals.</p> <p>Exception No. 2: Existing buildings need not comply with the provisions for visible signals.</p> <p>Exception No. 3: Visible signals need not be installed in each unit of a hotel or apartment building provided that those units designed for the hearing impaired are equipped with visible signals.</p> <p>Exception No. 4: Other means of notification acceptable to the authority having jurisdiction may serve in lieu of visible signals.</p>	Fall 1993 - TCRF	101-242	47	Martin H Reiss, Cerberus Technologies, Inc.	The new Americans with Disabilities Act defines the location for visible signals, also. Exceptions 1 through 3 are not necessary or incorrect according to this new law.	Accept in Principle in Part	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
14	Application of new requirements	12-1.1.1.1 & 13-1.1.1.1	Application of new requirements	<p>12-1.1.1.1.1: 1. Revise the proposed 12-1.1.1.1 to read: 12-1.1.1.1 Application. The requirements of this chapter apply to: (a) New buildings or portions thereof used as a health care occupancy (see Section 1-5); and (b) Additions to, or used for, a health care F90 occupancy (see 1-5.5 and 12-1.1.4); and (c) Alterations, modernizations or renovations of existing health care occupancies (see 1-5.6 and 12-1.1.4); and (d) Existing buildings or portions thereof upon change of occupancy to a health care occupancy (see 1-6.3). 2. The Technical Correlating Committee should approve this change to the beginning of all occupancy chapters for new construction. It is editorial to improve the user friendliness of the code.</p> <p>13-1.1.1.1 1. Revise 13-1.1.1.1 to read: 13-1.1.1.1 The requirements of this chapter apply to existing buildings or portions thereof currently occupied as a health care occupancy. (Also see 12-1.1.1.1.) Retain the current exception. 2. The Technical Correlating Committee should approve this change to the beginning of all occupancy chapters for existing buildings. It is editorial to improve the user friendliness of the code.</p>	Revised section	Fall 1993 - TCRF	12-1.1.1.1: 101-379 13-1.1.1.1 101-415	12-1.1.1.1: 350 13-1.1.1.1: 361	James K. Lathrop, Koffel Associates, Inc.	<p>12-1.1.1.1: A similar change was approved for Chapters 8 and 10 in the TCR chapters (see Proposal 101-264 and 101-379). This is recommended for all new occupancy chapters, since it is editorial for user friendliness and also there is precedent in law that if the document says something differently it means something different. I do not believe it is the intent of the Code to apply the occupancy chapters differently.</p> <p>13-1.1.1.1: A similar change was approved for Chapters 9 and 11; see Proposals 101-343 and 101-414 in the TCR. This is recommended for all existing occupancy chapters, since it is editorial for user friendliness and also there is precedent in law that if the document says something differently it means something different. I do not believe it is the intent of the Code to apply the occupancy chapters differently.</p>	Accept in Part	
15	Construction	Table 12-1.6.2	Construction	<p>In the last sentence of 12-1.6.1, delete the words "in determining the height of a building" so that the sentence reads: Building levels below the primary level shall not be counted as a story. In Table 12-1.6.2 delete reference to 45 ft height in the headings of the last two columns so that they read: Three Stories Four or More Stories</p>		Fall 1993 - TCRF	101-443	CP79	Technical Committee on Health Care Occupancies	The method of measuring building height is not explained within the Code. By deleting reference to height and the 45 ft criterion, the Code will adequately address the subject by referring to the number of stories. If there are additional interstitial spaces above the highest occupied story or if there are roof structures, such areas are not as much of concern with respect to limiting building construction type unless they become stories that are occupied by patients.	Accept	
16	Hazardous Areas	12-3-2-1	Hazardous Areas	Delete the last sentence of 12-3.2.1.	12-3.2.1 Hazardous Areas. Any hazardous area shall be protected in accordance with Section 6-4. The following areas listed shall be protected as indicated. Where sprinkler protection without fire rated separation is used, the area shall be separated from other spaces by partitions complying with 6-3.2, with doors complying with 6-3.4.	Fall 1993 - TCRF	101-455	CP427	Technical Committee on Health Care Occupancies	The concept of the enclosure of a sprinklered hazardous area by partitions and doors which serve to resist the passage of smoke is already stated in 6-4.1.2. The first sentence of 12-3.2.1 currently references Section 6-4 thus making the additional reference unnecessary. Given that it need not be restated in Chapter 12 it is proposed that it be deleted.	Accept	
17	Outside Window	12-3.8.1 13-3.8.1	Outside windows	<p>Revise 13-3.8.1 to read as follows: 13-3.8.1 Every patient sleeping room shall have an outside window or outside door. The maximum allowable sill height shall not exceed 44 in. (112 cm) above the floor.</p> <p>Retain Exception No. 1. Retain Exception No. 2. Revise Exception No. 3 to read as follows: Exception No. 3: Windows in atrium walls for the purposes of this requirement shall be considered as outside windows.</p>	Revised section	Fall 1993 - TCRF	101-515	CP417	Technical Committee on Health Care Occupancies	The proposed changes are being made as a companion to proposal 101469 Log #CP416 on 12-3.8.1. See that proposal for a detailed substantiation.	12-3.8.1: Reject 13-3.8.1: Accept	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Application	1-3.7	Modernization and renovation	1-3.7 Modernization or Renovation. Any alteration or any installation of new equipment shall be accomplished as nearly as practicable with the requirements for new construction. Only the altered, renovated or modernized portion of an existing building, system or individual component shall be required to meet the provisions of this Code applicable to new construction provided other life safety features are not diminished. Existing life safety features that do not meet the requirements for new buildings but exceed the requirements for existing buildings shall not be diminished further. In no case shall the resulting life safety features be less than those required for existing buildings.	1-4.6 Modernization or Renovation. Any alteration or any installation of new equipment shall be accomplished as nearly as practicable with the requirements for new construction. Existing life safety features that do not meet the requirements for new buildings but exceed the requirements for existing buildings shall not be diminished further. In no case shall the resulting life safety features be less than those required for existing buildings.	Fall 1996 - ROP	101 - 3	Log # CP100	Technical Committee on Fundamentals	The rewrite of Chapter 1 is mainly editorial. It is being done to format the Code in anticipation for including performance-based design options for the next edition of the Code. Material has been grouped into sections addressing scope, application, purpose, assumptions, etc. as suggested by the draft model developed by the NFPA in-house task group on performance-based documents. When the next edition is prepared the format will permit for a section on design options to be added without necessitating much additional reformatting.	Accept	
2	Incidental Occupancies	4-1.11	Incidental occupancies	Exception: An occupancy incidental to operations in another occupancy shall be permitted to be considered as part of the predominant occupancy and shall be subject to the provisions of this Code that apply to the predominant occupancy. A-4-1.11 Exception Examples of uses that might be incidental to another occupancy include: (a) a newsstand (mercantile) in an office building, (b) a giftshop (mercantile) in a hotel, (c) a small storage area (storage) in any occupancy, (d) minor office space (business) in any occupancy, and (e) a maintenance area (industrial) in any occupancy	New section	Fall 1996 - ROP	101 - 26	Log # 176	James K. Lathrop, Koffel Associates, Inc.	Similar to minor storage, 4-1.10, minor mercantile, 4-1.7, and minor business, 4-1.8, minor industrial should be recognized.	Accept in Principle	The submitter's wording was accepted except for the word "minor" because the concept centers on the "incidental" use of such spaces. The qualifier "minor" does not help in understanding the concept. The appendix note will provide examples of the situation recognized by the new exception. Rather than have a similar sentence appear in four locations, the wording was moved to become an exception to 4-1.11, and associated wording was deleted from 4-1.7, 4-1.8 and 4-1.10. This should meet the submitter's intent.
3	Means of Egress	5-5.4.2	Accessible Means of Egress	5-5.4.2 Each required accessible means of egress shall be continuous from each accessible occupied area to a public way or area of refuge, in accordance with 5-2.12.2.2	5-5.4.2 Each required accessible means of egress shall be continuous from each accessible occupied area to a public way or area of refuge, in accordance with 5-2.12.2.2, shall have access to a public way.	Fall 1996 - ROP	101 - 30	Log # CP200	Technical Committee on Means of Egress	The changes recommended by this proposal are meant to be only editorial in nature. The changes are intended to clarify meaning and facilitate use of the chapter. The draft does not implement the technical changes being made by the committee actions on other proposals. The technical changes made by those proposals are not intended to be superseded by these editorial changes. However, the editorial changes are to be applied, to the degree feasible, to text that has been modified by the Committee Actions on the other proposals on Chapter 5.	Accept	
4	Means of Egress	5-12.2	Mechanical and boiler rooms one means of egress allowance	5-12.2 Stories used exclusively for mechanical equipment, furnaces, or boilers shall be permitted to have a single means of egress where the travel distance to an exit on that story is not more than the common path of travel limitations of 5-12.1.	5-12.2 Stories used exclusively for mechanical equipment, furnaces, or boilers shall be permitted to have a single means of egress where the travel distance to an exit on that story does not exceed the common path of travel limitations of 5-12.1.	Fall 1996 - ROP	101 - 30	Log # CP200	Technical Committee on Means of Egress	The changes recommended by this proposal are meant to be only editorial in nature. The changes are intended to clarify meaning and facilitate use of the chapter. The draft does not implement the technical changes being made by the committee actions on other proposals. The technical changes made by those proposals are not intended to be superseded by these editorial changes. However, the editorial changes are to be applied, to the degree feasible, to text that has been modified by the Committee Actions on the other proposals on Chapter 5.	Accept	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
5	Convenience Openings	6-2.4.8	Two story convenience openings	<p>6-2.4.8 Convenience Openings. Where permitted by Chapters 8 through 29, unenclosed vertical openings not concealed within the building construction shall be permitted as follows:</p> <p>(a) Such openings shall connect a maximum of two adjacent stories (pierce one floor only), and</p> <p>(b) Such openings shall be separated from unprotected vertical openings serving other floors by a barrier complying with 6-2.4.4, and</p> <p>(c) Such openings shall be separated from corridors, and</p> <p>(d) Such openings shall not serve as a required means of egress.</p>	Rearranging provisions	Fall 1996 - ROP	101 - 132	Log # 413	James Lathrop, Koffel Associates, Inc.	This is an attempt to coordinate several exceptions that occur throughout the Code. Some of these currently only allow stairs, but as pointed out by the Technical Committee on Health Care Occupancies the main criteria is that the opening not be concealed. Whether a stair is in the opening or not is irrelevant. With the exception of industrial and storage occupancies, only those occupancies that currently address such openings are in the list above. Industrial and storage have been added for two reasons. First they are commonly a mixed occupancy with business which allows such openings and secondly, there appeared no reason not to include them. If an occupancy wants to further restrict it, that is fine if it is occupancy justified, but the provisions here should serve as a good base.	Accept in Principle in Part	The Committee Action accomplishes most of what the submitter requested. Editorially, the committee has positioned the new text as 6-2.4.8 because it is more closely related to current 6-2.4.7. Also, in (a) the committee has clarified that the two floors must be adjacent. This should meet most of the submitter's intent. The Technical Committees responsible for the occupancy chapters will be shown the above changes. They can generate committee proposals to accomplish the submitter's last recommendation, as appropriate
6	Interior Finish	6-5.3.5	New requirements for expanded vinyl wall covering	<p>6-5.3.5 Expanded Vinyl Wall Coverings.</p> <p>6-5.3.5.1 Expanded vinyl wall covering shall comply with the requirements in 6-5.3.4.</p>	New requirements	Fall 1996 ROP	101 - 145	Log # CP403	Technical Committee on Furnishings and Contents	The reformatting of 6-5.2 and 6-5.3 into subsections 6-5.2 through 6-5.4 is mainly editorial for organization and ease of use. Note that 6-5.3.1 (via reference to 6-5.4.4 and 6-5.3.2) includes new requirements for testing wall finish materials in accordance with NFPA 265, and ceiling finish materials in accordance with ISO 9705, if the wall or ceiling material is not self supporting or is not supported in a fashion representative of its intended use during NFPA 255 / ASTM E84 testing. This corrects a deficiency in the current requirements.	Accept	
7	Renovations	12-1.1.4.5 13-1.1.4.5	Updated section for renovations	<p>Renovations, alterations, and modernizations comply, to the extent practical, with the requirements for new construction in accordance with 1-4.6. Where major renovations, alterations, or modernizations significantly modify the life safety features in a non sprinklered facility, the automatic sprinkler requirements... Where minor renovations, alterations... Revise Appendix Notes A-12-1.1.4.5 and A-1 3-1.1.4.5 to read: The Code does not attempt to establish specific monetary limits or percentage values to determine if a project is "minor", as this requires judgment. It is not the intent of this paragraph to exempt significant renovations and modernization projects for which the Code does intend to apply the automatic sprinkler mandate. Where a single project or a phased series of building changes will not significantly affect the current construction of corridor walls, means of egress, smoke barriers, vertical openings or similar life safety features, it is not the intent of this paragraph to apply the automatic sprinkler mandate. For the purpose of this requirement, a floor that is not divided by a smoke barrier is considered one smoke compartment.</p>	<p>Renovations, alterations, and modernizations shall comply, to the extent practical, with requirements for new construction in accordance with 1-4.6. Where renovations, alterations, or modernizations are done in a nonsprinklered facility, the automatic sprinkler requirements of Chapter 12 shall apply to the smoke compartment undergoing the renovation, alteration, or modernization. However, in cases where the building is not protected throughout by an approved, automatic sprinkler system, the requirements of 13-1.6 and 13-2.3.2 shall also apply. Exception No. 2 to 12-3.7.3 shall be permitted only where adjacent smoke compartments are protected throughout by an approved, supervised automatic sprinkler system in accordance with 12-3.5.2. Where minor renovations, alterations, modernizations, or repairs are done in a nonsprinklered facility, the requirements of 12-3.5.1 shall not apply, but in such cases, the renovations, alterations, modernizations, or repairs shall not reduce life safety below which existed before, nor below the requirements of Chapter 13 for nonsprinklered buildings.</p>	Fall 1996 ROP	101 - 246	Log # 425	Douglas S. Erickson, American Hospital Association	There is a need to define what is a major renovation, alteration, and modernization. By adding the 50 percent rule in the paragraph it will clarify that the intent of this standard is not be overly restrictive. Some authorities having jurisdiction have taken this requirement to mean that almost any work performed in a smoke or fire zone would require following new construction standards. It is time the committee clarify its intent.	Accept in Principle	The Committee Action accomplishes that which the submitter requested but does so using more general language that better explains intent. This should meet the submitter's intent.

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
8	Vertical Openings	12-3.1.1 Exception 3	New multi-tier housing in psychiatric facilities	<p>Exception No. 3: Multilevel patient sleeping areas in psychiatric facilities where the majority of the occupants are ambulatory shall be permitted without enclosure protection between levels provided all the following conditions are met:</p> <p>(a) The entire normally occupied area, including all communicating floor levels, is sufficiently open and unobstructed that a fire or other dangerous condition in any part shall be obvious to the occupants or supervisory personnel in the area.</p> <p>(b) Egress capacity is sufficient to provide simultaneously for all the occupants of all communicating levels and areas, with all communicating levels in the same fire area being considered as a single floor area for purposes of determination of required egress capacity.</p> <p>(c) The height between the highest and lowest finished floor levels shall not exceed 13 ft (4 m). The number of levels shall not be restricted.</p>		Fall 1996 ROP	101 - 255	Log # 311	Kenneth J. Schwartz, Rolf Jensen & Associates, Inc.	In psychiatric facilities the patient sleeping rooms may be arranged with two levels open to a common day room similar to the design often found in detention and correctional occupancies. This exception would permit such a design without the need to classify the opening as an atrium. The exception is the same as that used in Chapters 14 and 15 for detention and correctional occupancies.	Accept in Principle	As explained in the submitter's substantiation, the proposed exception has utility within psychiatric facilities where a greater portion of the occupants can be expected to be ambulatory than in a general hospital. This limitation to psychiatric facilities should be part of the wording. The above Committee Action should accomplish the submitter's intent.
10	Smoke Detection	12-3.4.5.3	Smoke detection for nursing homes	<p>12-3.4.5.3 Nursing Homes. An approved automatic smoke detection system shall be installed in corridors throughout smoke compartments containing patient sleeping rooms and in spaces open to corridors as permitted in nursing homes by 12-3.6.1.</p> <p>Exception No. 1: Corridor systems shall not be required where each patient sleeping room is protected by an approved smoke detection system.</p> <p>Exception No. 2: Corridor systems shall not be required where patient room doors are equipped with automatic door-closing devices with integral smoke detectors on the room side installed in accordance with their listing, provided that the integral detectors provide occupant notification.</p> <p>Add a new appendix note to read: A-12-3.4.5.3. The requirement for smoke detectors in spaces open to the corridors eliminates the requirement for direct supervision by the facility staff contained in 12-3.6.1 for nursing homes.</p>		Fall 1996 ROP	101 - 261	Log # 110	Thomas W. Jaeger, American Health Care Association	The American Health Care Association (AHCA), in coordination with the National Electrical Manufacturers Association (NEMA), and the American Fire Alarm Association (AFAA), support the requirement for smoke detectors in corridors of patient, sleeping areas and spaces open to the corridors as permitted by the Code. AHCA believes that there should be some redundancy to the sprinkler system in nursing homes. Although AHCA recognizes that a supervised sprinkler system does provide a high degree of reliability and protection, with sleeping room doors maintained in the open position, the corridor smoke detectors will provide some redundancy to the sprinkler system. A similar code change is being submitted to each of the model building codes with the intent of coordinating the requirements for nursing homes in all four codes. In the last several years, there has been extensive controversy concerning the requirements for smoke detectors in nursing homes. It is hoped that the coordination of NEMA, AFAA, and AHCA will at least reduce the controversy in the future.	Accept in Principle	The above Committee Action accomplishes that which the submitter requested but changes the wording for clarity and to use terminology common to Code requirements. Although the Committee agrees with the proposal and the substantiation of the submitter, the Committee believes that staffing patterns and the type of patients in a nursing home also warrant the requirement for corridor smoke detectors. The Committee supports coordinating occupancy requirements with the model building codes (via BCMC) but does not agree that coordination alone is sufficient technical substantiation for changing technical requirements of the Life Safety Code applicable to health care facilities.
11	Upholstered Furniture	12-7.5.2 (ROC covers 31-4.5.2).	New upholstered furniture in existing buildings	Newly introduced upholstered furniture within health care occupancies shall meet the criteria specified when tested in accordance with the methods cited in 6-6.2(b) and 6-6.3.		Fall 1996 ROC	101 - 455	Log # 335	Edward V. Glougherty, Worcester Polytechnic Inst.	Recommendation accepted by committee only cited a testing requirement, it is necessary to cite both criteria and a test method to measure performance and demonstrate compliance.	Accept	
12	Mattresses	12-7.5.3 (ROC covers 31-4.5.3).	New mattresses in existing buildings	Newly introduced mattresses within health care occupancies shall meet the criteria specified when tested in accordance with the methods cited in 31-1.4.2© and 31-1.4.4		Fall 1996 ROC	101 - 460	Log # 334	Edward V. Glougherty, Worcester Polytechnic Inst.	Recommendation accepted by committee only cited a testing requirement, it is necessary to cite both criteria and a test method to measure performance and demonstrate compliance.	Accept	

Changes to NFPA 101 - Life Safety Code - Changes affecting FSES for Health Care Facilities

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Scope	1.2.3	Other consideration in the document	1-2.3 Other Considerations. The code addresses other considerations that are essential to life safety in recognition that life safety is more than a matter of egress. The code also addresses protective features and systems, building services, operating features, maintenance activities and other provisions in recognition that achieving an acceptable degree of life safety depends upon additional safeguards to provide adequate egress time or protection for people exposed to fire.	Complete rearranging of section	Fall 1999 - ROC	101 - 5	Log # 121	Mark Chubb, Incendiis Consultants	As currently worded, the section is commentary more appropriate to the appendix. The revisions address what the other considerations are and what contribution they are intended to make to life safety. The items listed reflect the contents of the occupancy chapters and other provisions of the code.	Accept in Principle	The existing language is necessary and thus is being retained. The concept addressed by the submitter is being added. This should meet the submitter's intent.
2	Means of Egress	3.3.63.1	Definition of "Level of Exit Discharge"	3.3.63.1 Exit Discharge, Level of. (1) The lowest story from which not less than 50 percent of the required number of exits and not less than 50 percent of the required egress capacity from such a story discharge directly outside at grade; (2) the story with the smallest elevation change needed to reach grade where no story has 50 percent or more of the required number of exits and 50 percent or more of the required egress capacity from such a story discharge directly outside at grade.	11-1.3 Story of Exit Discharge. That story or stories from which the exits are primarily doors discharging directly outside essentially at grade level (level of exit discharge). Where no such story exists, the story of exit discharge shall be that story with the smallest elevation change needed to reach the level of exit discharge.	Fall 1999 - ROP	101 - 50	Log # CP503	Technical Committee on Means of Egress	The proposed definition is meant to reduce the confusion that exists because currently the Code does not define the term Level of Exit Discharge (LED). The proposed definition does not conflict with the definition of Street Floor, nor with the definition of Story of Exit Discharge. The definition is essentially a modified version of Story of Exit Discharge. It reinforces that the STORY having exits primarily at grade is the LED, not the grade level outside the building to which the exits discharge. The additional requirement addressing the minimum "50 percent of the required number of exits and 50 percent of the required egress capacity from that story" is intended to quantify the vague phrase "are primarily doors discharging directly outside" that is contained in the definition of Story of Exit Discharge.	Accept	
3	Goal	4.1.1	Goals	4.1.1* Fire and Similar Emergency. The goal of this Code is to provide an environment for the occupants that is reasonably safe from fire and similar emergencies by the following means: (1) *Protection of occupants not intimate with the initial fire development (2) Improvement of the survivability of occupants intimate with the initial fire development	New section	Fall 1999 - ROP Fall 1999 - ROC	101 - 3 101 - 10	Log # CP205 Log # CC1	Technical Committee on Fundamentals	The revision to Chapter 1: - establishes Goals and Objectives via new Sections 1-5 and 1-6 that can be applied to either the current prescriptive-based design or the new performance-based design	Accept	
4	Objectives	4.2	Objectives	4.2.1 Occupant Protection. A structure shall be designed, constructed, and maintained to protect occupants who are not intimate with the initial fire development for the time needed to evacuate, relocate, or defend in place. 4.2.2 Structural Integrity. Structural integrity shall be maintained for the time needed to evacuate, relocate, or defend in place occupants who are not intimate with the initial fire development. 4.2.3 Systems Effectiveness. Systems utilized to achieve the goals of Section 4.1 shall be effective in mitigating the hazard or condition for which they are being used, shall be reliable, shall be maintained to the level at which they were designed to operate, and shall remain operational.	New section	Fall 1999 - ROP	101 - 3	Log # CP205	Technical Committee on Fundamentals	The revision to Chapter 1: - establishes Goals and Objectives via new Sections 1-5 and 1-6 that can be applied to either the current prescriptive-based design or the new performance-based design	Accept	
										The proposed new Chapter 3, Performance-Based Design, provides the details needed to support the performance-based design option codified in proposed new Section 1-8, Life Safety		

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
	Performance- 5Based Design	Chapter 5	New performance-based design chapter	Chapter 5 Performance-Based Design	New chapter	Fall 1999 - ROP	101 - 12	Log # CP206	Technical Committee on Fundamentals	<p>Design Options; the new Section 1-5, Goals; and new Section 1-6, Objectives. The chapter addresses those portions of a performance-based design approach that were identified in the July 1995 report of the NFPA in-house task group titled "NFPA's Future in Performance-Based Codes and Standards." Also, it was developed in concert with the principles presented in the September 1997 NFPA document titled "Primer #1 -- Performance-based Goals, Objectives and Criteria," and those in draft versions of primers that will be published on the subjects of scenarios and verification methods. The performance-based design chapter was developed by the Life Safety Technical Committee on Fundamentals. The technical committee considered input from the various life safety technical committees responsible for the occupancy chapters, and also asked for and received information from the NFPA performance-based design support team. The resulting chapter is intended by the committee to provide enough detail to assist the design professional and the authority having jurisdiction without intruding unnecessarily on the prerogatives of either. The proposed chapter presents procedures and sources for information, rather than specific details, in technical areas that are rapidly changing, but the resulting process is complete and suitable for use as a code. The performance-based design option is offered not as a replacement for prescriptive-based design, but as a more flexible alternative to it, in keeping with the long-established equivalency option. The performance-based approach treats design components as part of a system. Such systems analysis might provide for more cost-effective design. It permits the authority having jurisdiction to assess the effectiveness of the life safety system as a whole, instead of dealing with those components in isolation. Applying judgment to specific situations has a long-standing basis in NFPA codes and standards application. The proposed chapter takes the alternative approaches concept to the next higher level by consolidating into the Code the key attributes of a performance-based life safety system. Incorporation of a performance-based design option into the Code will provide users with the means to apply life safety concepts properly. Such concepts have been the basis of the Code for more than 70 years. Proposed Chapter 3 presents one approach for utilizing the performance-based design option. The equivalency concept of Chapter 1 will remain a viable tool for adapting the methodology defined in Chapter 3, or for supporting another approach, for presentation to the authority having jurisdiction for consideration. The committee encourages the reviewer to submit public comments, for committee consideration during the ROC preparation, that might assist in further enhancing the document's usability and completeness.</p>	Accept	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
6	Incidental Occupancies	6.1.14.2	Exception for incidental occupancies	<p>Exception:* Where incidental to another occupancy, buildings used as follows shall be permitted to be considered part of the predominant occupancy and subject to the provisions of the Code that apply to the predominant occupancy:</p> <p>(a) Mercantile, business, industrial, or storage use</p> <p>(b) Nonresidential use with an occupant load fewer than that established by Section 6.1 for the occupancy threshold</p>	<p>Exception: An occupancy incidental to operations in another occupancy shall be permitted to be considered as part of the predominant occupancy and shall be subject to the provisions of this Code that apply to the predominant occupancy.</p>	Fall 1999 - ROP	101 - 81	Log # CP7	Lee J. Dosedlo, Underwriters Laboratories Inc.	The proposed rewrite of Section 4-1 is meant to format the section so that the definitions of each of the occupancies stands as a legitimate definition that can be extracted for publication in the NFPA Glossary of Terms. Some reformatting and rewording has been done for consistency among the occupancy subsections. Parenthetical "See"-type references (other than those following the main title line for each occupancy type) have been moved to the appendix. All lists of examples of each occupancy have also been moved to the appendix as advisory information that is inappropriate for the body of the Code.	Accept	
7	Smoke Partitions	8.2.4	Criteria for smoke partitions	<p>8.2.4 Smoke Partitions.</p> <p>8.2.4.1 Where required elsewhere in this Code, smoke partitions shall be provided to limit the transfer of smoke.</p> <p>8.2.4.2 Smoke partitions shall extend from the floor to the underside of the floor or roof deck above, through any concealed spaces, such as those above suspended ceilings, and through interstitial structural and mechanical spaces.</p> <p>Exception:* Smoke partitions shall be permitted to terminate at the underside of a monolithic or suspended ceiling system where the following conditions are met:</p> <p>(a) The ceiling system forms a continuous membrane.</p> <p>(b) A smoketight joint is provided between the top of the smoke partition and the bottom of the suspended ceiling.</p> <p>(c) The space above the ceiling is not used as a plenum.</p>	New Section	Fall 1999 - ROP	101 - 260	Log # CP607	Technical Committee on Fire Protection Features	This proposed new section addressing smoke partitions was created to develop a single point of reference for consistency and clarification on the provisions addressing the issue of limiting the transfer of smoke. Currently there are 8 terms used in the Code to describe this specific element. This proposal was an attempt to clarify and consolidate the provisions addressing this issue into one location that could be used by the other technical committees as they deemed necessary, such as the enclosure requirement for a sprinklered hazardous area or a corridor wall requirement in a sprinklered building. The terms "resist" and "limit" have certain implied meanings. These items can have a time factor associated with them and the effectiveness of holding smoke to one side of the barrier is subjective to the reviewer. Each application needs a case by case review and determination. A good example of one technical committee's attempt to quantify what is the intent of limiting the passage of smoke can be found in appendix note A-15-5.6.2.2. This proposal was developed using material currently found within the Code addressing the requirements for what a smoke partition is and does not include any new additional provisions. This proposed section was intended not to be more restrictive than those identified for a fire barrier (6-2.3). NFPA 80 was referenced to provide consistency for the acceptable clearances for doors in a smoke partition. By placing all of the provisions for smoke partitions into one section, consistency can be established for the user of the document in defining this particular building element. This proposal recognizes that this building element has been evolving for some time and changes are being made continually and therefore there was a need to establish a single point of reference.	Accept	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
8	Interior Finish	10.2.3.5	Reference to NFPA 286	10.2.3.5 Products tested in accordance with NFPA 265, Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings, shall comply with the criteria of 10.2.3.5.1 or 10.2.3.5.2. Products tested in accordance with NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth, shall comply with the criteria of 10.2.3.5.3.	New section; rearrange previous sections for interior finish Include reference to NFPA 286	Fall 1999 ROP	101 - 274	Log # CP561	Technical Committee on Furnishings and Contents	The subjects of interior finish, contents and furnishings are sufficiently different from the other subjects addressed in Chapter 6 to justify placement in a separate chapter. With the advent of a performance-based design option and the expected resultant objective of preventing flashover, the subjects of interior finish, contents and furnishings will become more important -- again, justifying placement in a separate chapter. Via the committee action on Proposal 101-2 (Log #248), the number of Code chapters is being expanded for the year-2000 edition; now is the time for making these types of format changes. The Technical Committee on Fire Protection Features has responsibility for Sections 6-1 through 6-4 and the Technical Committee on Furnishings and Contents has responsibility for Sections 6-5 and 6-6. By creating a separate chapter, neither committee will have to share responsibility for any chapter.	Accept in Principle	
9	Interior Finish	10.2.3.5	Reference to NFPA 286	10.2.3.5 Products tested in accordance with NFPA 265, Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings, shall comply with the criteria of 10.2.3.5.1 or 10.2.3.5.2. Products tested in accordance with NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth, shall comply with the criteria of 10.2.3.5.3.	Reference to NFPA 286	Fall 1999 ROP	101 - 905	Log # 224	Marcelo M. Hirschler, GBH Int'l, Inc.	Interior finish materials have always been required to meet both flame spread and smoke obscuration criteria. The reason for these requirements is that materials can have low flame spread and heat release but high smoke obscuration. In fact, several materials, potential interior finish products, when tested in the room-corner test, do not reach flashover (or reach it only after a 300 kW exposure) but have very high smoke releases. Heat release is by far the more important characteristic in terms of fire hazard. However, some materials may exhibit adequate heat release characteristics and still have undesirable smoke release. This may hinder escape or rescue, through lack of visibility, and trap occupants inside a burning building. In the late 1980s it was discovered, by conducting full scale room/corner fire test research, that the flame spread indices produced by the Steiner tunnel test, NFPA 255, may not reliably predict all aspects of the fire behavior of wall coverings. Therefore, NFPA 265, Standard Fire Test for Evaluating Room Fire Growth Contribution of Textile Wall Coverings, was developed, as a test that uses a reasonable sized ignition source to show that the material will not spread fire to involve objects remote from the area of origin, and that the textile product will not generate sufficient energy to cause the room of origin to flashover. The use of that test method then became mandatory for textile wall coverings. However, when the test method was originally developed, it did not include smoke obscuration measurements. The latest edition of NFPA 265 now incorporates smoke obscuration measurements; and therefore, the omission can now be rectified. Moreover, NFPA 286, Fire Test for Evaluating Room Fire Growth Contribution of Interior Finish, is [being promulgated through the NFPA Fire Tests Committee as a new standard which can be used for testing interior finish materials of different kinds.	Accept in Principle	The committee action revises the submitter's language for clarity. Other proposed wording was deleted for consistency with the committee actions taken on other proposals. This should meet the submitter's intent.

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
10	Goals and Objectives	18.1.1.2 19.1.1.2	Goals and objectives - new reference	18.1.1.2* Goals and Objectives. The goals and objectives of Sections 4.1 and 4.2 shall be met with due consideration for functional requirements. This is accomplished by limiting the development and spread of a fire emergency to the room of fire origin and reducing the need for occupant evacuation, except from the room of fire origin.	12-1.1.2* Objective. The objective of this chapter is to provide a reasonable level of safety by reducing the probability of injury and loss of life from the effects of fire with due consideration for functional requirements. This is accomplished by limiting the development and spread of a fire emergency to the room of fire origin and reducing the need for occupant evacuation, except from the room of fire origin.							
11	Corridor Door	18.3.6.3.1 19.3.6.3.1	Corridor door clearance	18.3.6.3.1* Doors protecting corridor openings shall be constructed to resist the passage of smoke. Compliance with NFPA 80, Standard for Fire Doors and Fire Windows, shall not be required. Clearance between the bottom of the door and the floor covering not exceeding 1 in. (2.5 cm) shall be permitted for corridor doors.	12-3.6.3.1* Doors protecting corridor openings shall be constructed to resist the passage of smoke. Exception: Doors to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces that do not contain flammable or combustible materials.							

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Renovations	18.1.1.4.6	New text establishes threshold for major and minor rehabilitation for determination of when a smoke compartment needs to be sprinklered as part of a rehabilitation	<p>18.1.1.4.6 Rehabilitation.</p> <p>18.1.1.4.6.1 For purposes of the provisions of this chapter, the following shall apply:</p> <p>(1) A major rehabilitation shall involve the modification of more than 50 percent, or more than 420 m2 (4500 ft2), of the area of the smoke compartment.</p> <p>(2) A minor rehabilitation shall involve the modification of not more than 50 percent, and not more than 420 m2 (4500 ft2), of the area of the smoke compartment.</p> <p>18.1.1.4.6.2 Work that is exclusively plumbing, mechanical, fire protection system, electrical, medical gas, or medical equipment shall not be included in the computation of the modification area within the smoke compartment. 18.1.1.4.6.3* Where major rehabilitation is made in a nonsprinklered smoke compartment, the automatic sprinkler requirements of 18.3.5.1 shall apply to the smoke compartment undergoing the rehabilitation, and, in cases where the building is not protected throughout by an approved automatic sprinkler system, the requirements of 18.4.3.2 and 18.4.3.3(2) shall also apply.</p> <p>18.1.1.4.6.4* Where minor rehabilitation is done in a nonsprinklered smoke compartment, the requirements of 18.3.5.1 shall not apply, but, in such cases, the rehabilitation shall not reduce life safety below the level that previously existed or below the level of requirements of 18.4.3 for nonsprinklered smoke compartment rehabilitation. (See 4.6.8.)</p>	<p>18.1.1.4.5* Renovations, Alterations, and Modernizations.</p> <p>Where major renovations, alterations, or modernizations are made in a nonsprinklered facility, the automatic sprinkler requirements of Chapter 18 shall apply to a smoke compartment undergoing the renovation, alteration, or modernization. However, in cases where the building is not protected throughout by an approved automatic sprinkler system, the requirements of 19.1.6 and 19.2.3.2 shall also apply. Exception No. 2 to 18.3.7.3 shall be permitted only where adjacent smoke compartments are protected throughout by an approved, supervised automatic sprinkler system in accordance with 18.3.5.2. Where minor renovations, alterations, modernizations, or repairs are done in a nonsprinklered facility, the requirements of 18.3.5.1 shall not apply but, in such cases, the renovations, alterations, modernizations, or repairs shall not reduce life safety below the level that previously existed, nor below the level of requirements of Chapter 19 for nonsprinklered buildings. (See 4.6.7.)</p>	Fall 2002 - ROC	101 - 226	Log # CC1	Technical Committee on Health Care Occupancies	The changes are a reformatting to place the provisions for nonsprinklered rehabilitation of existing buildings in a self-contained subsection. This is consistent with the way the subject is treated in Life Safety Code Chapter 22 for detention/correctional occupancies. The 50 percent or 4500 ft2 threshold for what constitutes major rehabilitation, and use of the term "rehabilitation," are consistent with that in NFPA 5000, Building Code.	Accept	
2	Interior Walls	18.1.6.7	New provision for fire-retardant treated wood	<p>18.1.6.7 Fire-retardant-treated wood that serves as supports for the installation of fixtures and equipment shall be permitted to be installed behind noncombustible or limited-combustible sheathing.</p>	New code section	Fall 2002 - ROP	101 - 404	Log # 412	Jim Mackey, Diamond Insurance	The current text tends to limit the type of material being installed as a backing material to that of noncombustible or limited combustible. This revision permits the use of limited application of fire treated wood within these interior walls. This will ease installation and provide the necessary structural strength needed to install handrails and other fixtures.	Accept in Principle	The committee action accomplishes what the submitter requested.
3	Gift Shops - Hazard Separation	18.3.2.5	Specialized treatment of gift shops deleted from 18.3.2 Protection from hazards.	Deleted code text	<p>18.3.2.5 Gift Shops. Gift shops shall be protected as hazardous areas where used for the storage or display of combustibles in quantities considered hazardous. Gift shops not considered hazardous and having separately protected storage shall be permitted to be as follows:</p> <p>(1) Open to a lobby or corridor if the gift shop does not exceed 500 ft2 (46.5 m2)</p> <p>(2) Separated from a lobby or corridor with non-fire-rated walls</p>	Fall 2002 - ROP	101 - 411	Log # CP172	Technical Committee on Health Care Occupancies	The language of 18.3.2.5 is ambiguous. Given that all new health care occupancies are required to be sprinklered, it should be safe to permit gifts shops not exceeding 500 ft2 (46.5 m2) to be open to the corridor or lobby without having to judge the hazard presented by the actual quantity of combustibles present in a specific gift shop.	Accept	
4	Interior Finish	18.3.3.2	Class B removed, Class C removed, Class C removed	<p>18.3.3.2* Interior Wall and Ceiling Finish. Interior wall and ceiling finish materials complying with Section 10.2 shall be permitted throughout if Class A except as indicated in 18.3.3.2.1 or 18.3.3.2.2.</p> <p>18.3.3.2.1 Walls and ceilings shall be permitted to have Class A or Class B interior finish in individual rooms having a capacity not exceeding four persons.</p> <p>18.3.3.2.2 Corridor wall finish not exceeding 1220 mm (48 in.) in height that is restricted to the lower half of the wall shall be permitted to be Class A or Class B.</p>	<p>18.3.3.2 Interior Wall and Ceiling Finish. Interior wall and ceiling finish materials complying with 10.2.3 shall be permitted throughout if Class A or Class B. The provisions of 10.2.8.1 shall not apply.</p> <p>Exception No. 1: Walls and ceilings shall be permitted to have Class A, Class B, or Class C interior finish in individual rooms having a capacity not exceeding four persons.</p> <p>Exception No. 2: Corridor wall finish not exceeding 4 ft (1.2 m) in height that is restricted to the lower half of the wall shall be permitted to be Class A, Class B, or Class C.</p>	Fall 2002 - ROP	101 - 401	Log # CP167	Technical Committee on Health Care Occupancies	The changes are meant to be editorial only in nature. The NFPA Manual of Style dictates that exceptions not be used.	Accept	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
5	Corridor Separation	18.3.6.1	Subitem (4) in 18.3.6.1 Corridor Separation permits gift shop to be open to corridor if small and building is sprinklered.	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 (see also 18.2.5.9), unless otherwise permitted by the following: (4) Gift shops not exceeding 46.4 m2 (500 ft2) shall be permitted to be open to the corridor or lobby, provided the building is protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.	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. (See also 18.2.5.9.) Exception No. 4: Gift shops open to the corridor here protected in accordance with 18.3.2.5.	Fall 2002 - ROP	101 - 401	Log # CP167	Technical Committee on Health Care Occupancies	The changes are meant to be editorial only in nature. The NFPA Manual of Style dictates that exceptions not be used.	Accept	
6	Special Provisions	18.4.1	Changed from windowless to limited access	18.4.1 Limited Access Buildings. Limited access buildings or limited access portions of buildings shall not be used for patient sleeping rooms and shall comply with Section 11.7.	18.4.1 Windowless Buildings. Windowless buildings or windowless portions of buildings shall not be used for patient sleeping rooms. Windowless buildings or windowless portions of buildings shall comply with Section 11.7.	Fall 2002 - ROC	101 - 167	Comment on Proposal 101 - 243	Technical Correlating Committee on Safety to Life	The Technical Correlating Committee on Safety to Life (SAF-AAC) requests that SAF-IND prepare a more-detailed and complete recommendation. It currently states in the recommendation that the term "windowless" be globally replaced by "limited access" where appropriate, and then states in the last paragraph of the substantiation (not in the recommendation) that something else should be done in the 2.9 subsection of Chapters 14 through 17. The recommendation, as revised at the ROC-preparation meeting, is to list all occurrences of terms located throughout the Code that need to be replaced and how the replacement is to read. Further, the Technical Correlating Committee on Safety to Life (SAF-AAC) directs that the action requested by its public comment to SAF-IND include consideration of Klein's explanation of negative, especially where he claims that "changing from 'windowless' to 'limited access' is of questionable value given the universal understanding and definition in this Code and most of the other codes and standards of a windowless building or a story."	Accept in Principle	The Technical Committee identified those paragraphs that contain the term "windowless" and that should be changed to "limited access". Please note that these references are to the 2000 edition of NFPA 101. Please note for clarification purposes this comment included the revision related to the applicable definitions even though it was noted in the original proposal. The entries related to 11.7.3 are based on current text of 2000 edition of NFPA 101 and have not been renumbered as requested in proposal 101-243. The revisions to 11.7.3.3 have been accomplished by comment 101-(Log # 79). As noted in the technical committee's substantiation on proposal 101-243, it was the intent to have the technical correlating committee develop a comment for the other technical committees to review this proposal as they see the need. This was an activity that had occurred for many other proposals in the past. It was a way to identify those areas that may need additional input from the other technical committees. The technical committee further discussed the comment of Mr. Klien as requested by the technical correlating committee and determined that no additional revisions are necessary. The technical committee as noted in the original proposal 101-243 believes the current term "windowless" is technically incorrect. Other types of openings can occur in the exterior wall of a structure, such as doors, can be included in the determination if a facility is considered a limited access structure.
7	Special Provisions	18.4.3	New subsection 18.4.3 added (see extensive detail in Code) for special requirements applicable when a nonsprinklered existing smoke compartment undergoes rehabilitation as required by the new 18.1.1.4.6.4 [Subsection 18.4.3 reinstates the detailed criteria that applied to nonsprinklered smoke compartments in earlier editions prior to Chapter 18 requiring all new health care occupancies to be sprinklered]	18.4.3 Nonsprinklered Existing Smoke Compartment Rehabilitation. 18.4.3.1* General. Where a modification in a nonsprinklered smoke compartment is exempted by the provisions of 18.1.1.4.6.4 from the sprinkler requirement of 18.3.5.1, the requirements of 18.4.3.2 through 18.4.3.8 shall apply.	New Section	Fall 2002 - ROC	101 - 226	Comment on Proposal 101 - 399	Technical Committee on Health Care Occupancies	The changes are a reformatting to place the provisions for nonsprinklered rehabilitation of existing buildings in a self-contained subsection. This is consistent with the way the subject is treated in Life Safety Code Chapter 22 for detention/correctional occupancies. The 50 percent or 4500 ft2 threshold for what constitutes major rehabilitation, and use of the term "rehabilitation," are consistent with that in NFPA 5000, Building Code.	Accept	

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8	Renovations	19.1.1.4.6.1	Changes made to correspond with new provisions in 18.1.1.4.6 for building rehabilitation. User is just as apt to consult Chapter 19 as he/she is to consult Chapter 18 for existing building rehabilitation criteria	<p>19.1.1.4.6 Rehabilitation.</p> <p>19.1.1.4.6.1 For purposes of the provisions of this chapter, the following shall apply:</p> <p>(1) A major rehabilitation shall involve the modification of more than 50 percent, or more than 420 m2 (4500 ft2), of the area of the smoke compartment.</p> <p>(2) A minor rehabilitation shall involve the modification of not more than 50 percent, and not more than 420 m2 (4500 ft2), of the area of the smoke compartment.</p> <p>19.1.1.4.6.2 Work that is exclusively plumbing, mechanical, fire protection system, electrical, medical gas, or medical equipment shall not be included in the computation of the modification area within the smoke compartment.</p> <p>19.1.1.4.6.3* Where major rehabilitation is made in a nonsprinklered smoke compartment, the automatic sprinkler requirements of Chapter 18 shall apply to the smoke compartment undergoing the rehabilitation, and, in cases where the building is not protected throughout by an approved automatic sprinkler system, the requirements of 18.4.3.2 and 18.4.3.3(2) shall also apply.</p> <p>19.1.1.4.6.4* Where minor rehabilitation is done in a nonsprinklered smoke compartment, the requirements of 18.3.5.1 shall not apply but, in such cases, the rehabilitation shall not reduce life safety below the level that previously existed or below the level of requirements of 18.4.3 for nonsprinklered smoke compartment rehabilitation. (See 4.6.8.)</p>	<p>19.1.1.4.5* Renovations, Alterations, and Modernizations.</p> <p>Where major renovations, alterations, or modernizations are made in a nonsprinklered facility, the automatic sprinkler requirements of Chapter 18 shall apply to a smoke compartment undergoing the renovation, alteration, or modernization. However, in cases where the building is not protected throughout by an approved automatic sprinkler system, the requirements of 19.1.6 and 19.2.3.2 shall also apply. Exception No. 2 to 18.3.7.3 shall be permitted only where adjacent smoke compartments are protected throughout by an approved, supervised automatic sprinkler system in accordance with 18.3.5.2. Where minor renovations, alterations, modernizations, or repairs are done in a nonsprinklered facility, the requirements of 18.3.5.1 shall not apply but, in such cases, the renovations, alterations, modernizations, or repairs shall not reduce life safety below the level that previously existed, nor below the level of the requirements of Chapter 19 for nonsprinklered buildings. (See 4.6.7.)</p>	Fall 2002 - ROC	101 - 226	Log # CC1	Technical Committee on Health Care Occupancies	The changes are a reformatting to place the provisions for nonsprinklered rehabilitation of existing buildings in a self-contained subsection. This is consistent with the way the subject is treated in Life Safety Code Chapter 22 for detention/correctional occupancies. The 50 percent or 4500 ft2 threshold for what constitutes major rehabilitation, and use of the term "rehabilitation," are consistent with that in NFPA 5000, Building Code.	Accept	
9	Gift Shops - Hazard Separation	19.3.6.1(4)	Specialized treatment of gift shops deleted from 19.3.2 Protection from hazards.	<p>(4) Gift shops not exceeding 46.4 m2 (500 ft2) shall be permitted to be open to the corridor or lobby, provided that one of the following is met:</p> <p>(a) The building is protected throughout by an approved automatic sprinkler system in accordance with Section 9.7</p> <p>(b) The gift shop is protected throughout by an approved automatic sprinkler system in accordance with Section 9.7 and storage is separately protected.</p>	Exception No. 4: Gift shops open to the corridor where protected in accordance with 19.3.2.5.	Fall 2002 - ROP	101 - 401	Log # CP167	Technical Committee on Health Care Occupancies	The changes are meant to be editorial only in nature. The NFPA Manual of Style dictates that exceptions not be used.	Accept	
10	Interior Finish	19.3.3.2	Removed "Newly Installed" Provisions	<p>19.3.3.2* Interior Wall and Ceiling Finish. Existing interior wall and ceiling finish materials complying with Section 10.2 shall be permitted to be Class A or Class B.</p>	<p>19.3.3.2 Interior Wall and Ceiling Finish. Interior wall and ceiling finish materials complying with 10.2.3 shall be permitted as follows:</p> <p>(1) Existing materials — Class A or Class B Exception: In rooms protected by an approved, supervised automatic sprinkler system, existing Class C interior finish shall be permitted to be continued to be used on walls and ceilings within rooms separated from the exit access corridors in accordance with 19.3.6.</p> <p>(2) Newly installed materials — Class A Exception No. 1: Newly installed walls and ceilings shall be permitted to have Class A or Class B interior finish in individual rooms having a capacity not exceeding four persons. Exception No. 2: Newly installed corridor wall finish not exceeding 4 ft (1.2 m) in height that is restricted to the lower half of the wall shall be permitted to be Class A or Class B.</p>	Fall 2002 - ROP	101 - 401	Log # CP167	Technical Committee on Health Care Occupancies	The changes are meant to be editorial only in nature. The NFPA Manual of Style dictates that exceptions not be used.	Accept	
11	Interior Finish	19.3.3.3	Removed "Newly Installed" Provisions	<p>19.3.3.3 Interior Floor Finish. No restrictions shall apply to existing interior floor finish.</p>	<p>19.3.3.3 Interior Floor Finish. Newly installed interior floor finish complying with 10.2.7 shall be permitted in corridors and exits if Class I. No restrictions shall apply to existing interior floor finish. Exception: In smoke compartments protected throughout by an approved, supervised automatic sprinkler system in accordance with 19.3.5.2, no interior floor finish requirements shall apply.</p>	Fall 2002 - ROP	101 - 401	Log # CP167	Technical Committee on Health Care Occupancies	The changes are meant to be editorial only in nature. The NFPA Manual of Style dictates that exceptions not be used.	Accept	

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12	Rehabilitation	Chapter 43	New Chapter to address Building Rehabilitation			Fall 2002 - ROP	101 - 46	Log # CP57	Technical Committee on Fundamentals	<p>The revisions to Chapter 4 and the creation of a new Chapter 43 introduce specific requirements for rehabilitation work in existing buildings. The current Code unrealistically requires that rehabilitation work be done per the requirements for new construction. Because of the costs and physical impracticalities of having to meet the requirements for new construction, many existing buildings are not rehabilitated, they're simply maintained at the level of protection require of an existing building. Other existing buildings are abandoned, rather than rehabilitated. The proposed new chapter takes a balanced approach and increases the requirements based on each increase in the scope of the rehabilitation via the subclassifications of repair, renovation, modification, reconstruction, change of occupancy, and addition. A special section on historic buildings completes the chapter. The new Chapter 43 is modeled closely on the Nationally Applicable Recommended Rehabilitation Provisions (NARRP) as established by HUD. However, it raises the level of life safety above that which is normally provided during rehabilitation of an existing building. It does this through a series of thresholds at which automatic sprinkler protection must be provided. The sprinklers are needed to achieve an acceptable level of life safety without forcing the entire rehabilitation project to meet the full package of requirements applicable to new construction. The Technical Committee on Fundamentals solicits public comments on this proposal. It also asks the other technical committees within the life safety project to review the chapter's impact on their provisions; offer comments for correlation; and note any needed corrections with respect to cross references.</p>	Accept	

Changes to NFPA 101 - Life Safety Code - Changes affecting FSES for Health Care Facilities

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	General Requirements	18.1.1.1.1	Deleted (2) through (4), as 4.6.7 and new Chapter 43, Building Rehabilitation, govern.	18.1.1.1.1* The requirements of this chapter shall apply to new buildings or portions thereof used as health care occupancies (see 1.3.1).	18.1.1.1.1 The requirements of this chapter shall apply to the following: (1) New buildings or portions thereof used as health care occupancies (see 1.3.1) (2) Additions made to, or used as, a health care occupancy (see 4.6.7 and 18.1.1.4), unless all of the following criteria are met: (a) The addition is classified as other than a health care occupancy. (b) The addition is separated from the health care occupancy in accordance with 18.1.2.2(2). (c) The addition conforms to the requirements for the specific occupancy in accordance with Chapter 12 through Chapter 17 and Chapter 20 through Chapter 42, as appropriate. (3) Alterations, modernizations, or renovations of existing health care occupancies (see 4.6.8 and 18.1.1.4) (4)*Existing buildings or portions thereof upon change of occupancy to a health care occupancy (see 4.6.12), unless the authority having jurisdiction has determined equivalent safety has been provided in accordance with Section 1.4.	Fall 2002 - ROP	101 - 46	Log # CP57	Technical Committee on Fundamentals	The revisions to Chapter 4 and the creation of a new Chapter 43 introduce specific requirements for rehabilitation work in existing buildings. The current Code unrealistically requires that rehabilitation work be done per the requirements for new construction. Because of the costs and physical impracticalities of having to meet the requirements for new construction, many existing buildings are not rehabilitated, they're simply maintained at the level of protection require of an existing building. Other existing buildings are abandoned, rather than rehabilitated. The proposed new chapter takes a balanced approach and increases the requirements based on each increase in the scope of the rehabilitation via the subclassifications of repair, renovation, modification, reconstruction, change of occupancy, and addition. A special section on historic buildings completes the chapter. The new Chapter 43 is modeled closely on the Nationally Applicable Recommended Rehabilitation Provisions (NARRP) as established by HUD. However, it raises the level of life safety above that which is normally provided during rehabilitation of an existing building. It does this through a series of thresholds at which automatic sprinkler protection must be provided. The sprinklers are needed to achieve an acceptable level of life safety without forcing the entire rehabilitation project to meet the full package of requirements applicable to new construction. The Technical Committee on Fundamentals solicits public comments on this proposal. It also asks the other technical committees within the life safety project to review the chapter's impact on their provisions; offer comments for correlation; and note any needed corrections with respect to cross references.	Accept	
2	Interior Finish	18.1.6.6	New provision for fire-retardant treated wood	18.1.6.6 Any building of Type I(442), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that the following criteria are met: (1) The roof covering shall meet Class A requirements in accordance with NFPA 256, Standard Methods of Fire Tests of Roof Coverings. (2) The roof/ceiling assembly shall be constructed with fire-retardant-treated wood meeting the requirements of NFPA 220, Standard on Types of Building Construction.	New section	Annual 2005 - ROP	101 - 397	Log # 191	Joseph T. Holland, III, Hoover Treated Wood Products	Fire-retardant-treated wood has been allowed in this application for many years. There is no adverse fire record. Because of its unique capabilities it is allowed many uses in codes where noncombustible materials are required. FRTW has a flame spread of less than 25 (10-15), a very low smoke-developed index (50 or less), cannot be used to start a fire, and if involved in a fire it will not continue to burn when the source of ignition is consumed or removed.	Accept in Principle	The committee action draws wording from NFPA 5000, 7.2.3.2.12 which addresses the subject adequately for buildings of Type I or Type II construction. Corresponding changes are being made to Chapter 19 for correlation.
3	Interior Finish	18.1.6.8	New provision for fire-retardant treated wood	18.1.6.8 Interior nonbearing walls required to have a fire resistance rating of 2 hours or less shall be permitted to be of fire-retardant-treated wood enclosed within noncombustible or limited-combustible materials, provided that such walls are not used as shaft enclosures.	New section	Annual 2005 - ROP	101 - 397	Log # 191	Joseph T. Holland, III, Hoover Treated Wood Products	Fire-retardant-treated wood has been allowed in this application for many years. There is no adverse fire record. Because of its unique capabilities it is allowed many uses in codes where noncombustible materials are required. FRTW has a flame spread of less than 25 (10-15), a very low smoke-developed index (50 or less), cannot be used to start a fire, and if involved in a fire it will not continue to burn when the source of ignition is consumed or removed.	Accept in Principle	The committee action draws wording from NFPA 5000, 7.2.3.2.12 which addresses the subject adequately for buildings of Type I or Type II construction. Corresponding changes are being made to Chapter 19 for correlation.

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4	Sliding Doors	18.2.2.9	New provision for sliding doors	18.2.2.9.2 Horizontal-sliding doors serving an occupant load of fewer than 10 shall be permitted, provided that all of the following criteria are met: (1) The area served by the door has no high hazard contents. (2) The door is readily operable from either side without special knowledge or effort. (3) The force required to operate the door in the direction of door travel is not more than 30 lbf (133 N) to set the door in motion and is not more than 15 lbf (67 N) to close the door or open it to the minimum required width. (4) The door assembly complies with any required fire protection rating, and, where rated, is self-closing or automatic closing by means of smoke detection in accordance with 7.2.1.8 and is installed in accordance with NFPA80, Standard for Fire Doors and Fire Windows. (5) Corridor doors shall have a latch or other mechanism that ensures that the doors will not rebound into a partially open position if forcefully closed.		Annual 2005 - ROP	101 - 400	Log # CP1215	Technical Committee on Health Care Occupancies	The use of horizontal sliding doors in ICU, CCU, Neonatal ICU and other special areas is an important clinical need for the patient care. A number of local and state officials are requiring a break away feature to all doors due to the reference to the whole of 7.2.1.14. For life safety purposes a single door opening provides adequate egress from a patient room. The breakaway feature is not needed for this low number of occupants. ICU, CCU, etc. have functional requirements of smooth threshold into the rooms. This is for infection control and ease of cleaning. A breakaway sliding door requires a bottom rail for a portion of the door. Based on the minimum required width, the staff levels and staff training, allowing these types of horizontal sliding doors in health care occupancies will provide adequate egress from the patient rooms. The new provision draws from the applicable portions of 7.2.1.14.	Accept	
5	Means of Egress	18.2.5.5.3	Provision added for corridor access	18.2.5.5.3 Rooms having an exit door opening directly to the outside from the room at ground level shall not be required to have an exit access door leading directly to an exit access corridor.		Annual 2005 - ROP	101 - 407	Log # 241	James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
6	Means of Egress	18.2.5.5.2	Exception was moved to Sleeping Suite Provisions Exception was moved to Non-Sleeping Suite Provisions	18.2.5.5.2 Exit access from a patient sleeping room with not more than eight patient beds shall be permitted to pass through one intervening room to reach an exit access corridor, provided that the intervening room is equipped with an approved automatic smoke detection system in accordance with Section 9.6.	18.2.5.1 Every habitable room shall have an exit access door leading directly to an exit access corridor, unless otherwise permitted by the following: (1) The requirement of 18.2.5.1 shall not apply if there is an exit door opening directly to the outside from the room at ground level. (2) Exit access from a patient sleeping room with not more than eight patient beds shall be permitted to pass through one intervening room to reach the exit access corridor. (3) Exit access from a sleeping or nursing suite shall be permitted to pass through one intervening room to reach the exit access corridor where the arrangement allows for direct and constant visual supervision by nursing personnel. (4) Exit access from a suite of rooms, other than patient sleeping rooms, shall be permitted to pass through not more than two adjacent rooms to reach the exit access corridor where the travel distance within the suite is in accordance with 18.2.5.8.	Annual 2005 - ROP	101 - 407	Log # 241	James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
7	Means of Egress	18.2.5.5.4	Provision added	18.2.5.5.4 Rooms within suites complying with 18.2.5.6 shall not be required to have an exit access door leading directly to an exit access corridor.		Annual 2005 - ROP	101 - 407	Log # 241	James K. Lathrop, Koffel Assoc., Inc.	This proposal was prepared as part of the committee answer to Proposal 101-407 (Log #241) on 18.2.5 and 19.2.5. The committee used the "committee proposal" format so the text could appear in the Recommendation field. If the lengthy text had been positioned in the Committee Action field of the referenced proposal, it would have been truncated in the	Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
8	Means of Egress	18.2.5.6.1.1	Provision added	18.2.5.6.1.1 Suite Permission. Suites complying with 18.2.5.6 shall be permitted to be used to meet the corridor access requirements of 18.2.5.5.		Annual 2005 - ROP	101 - 407	Log # 241	James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.

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9	Means of Egress	18.2.5.6.1.2	Clarification of separation requirements	18.2.5.6.1.2 Suite Separation. Suites shall be separated from the remainder of the building by walls and doors meeting the requirements of 18.3.6.2 through 18.3.6.5.	18.2.5.4 Any suite of rooms that complies with the requirements of 18.2.5 shall be permitted to be subdivided with nonfire-rated, noncombustible, or limited-combustible partitions.	Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.	form of the report used for committee balloting. In the NFPA database where the proposals reside, the reports permit a lengthy Recommendation, but a much shorter Committee Action. See Proposal 101-407 (Log #241). See Committee Proposal 101-40 (Log #CP1221) for associated 3.3.xx definitions of Suite, Non-Sleeping Suite, and Sleeping Suite.	Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
10	Hazardous Areas - Suites	18.2.5.6.1.3	Provision added	18.2.5.6.1.3 Suite Hazardous Contents Areas. (A)* Intervening rooms shall not be hazardous areas as defined by 18.3.2. (B) Hazardous areas within a suite shall be separated from the remainder of the suite in accordance with 18.3.2.1, unless otherwise provided in 18.2.5.6.1.3(C). (C)* Hazardous areas within a suite shall not be required to be separated from the remainder of the suite where complying with all of the following: (1) The suite is primarily a hazardous area. (2) The suite is protected by an approved automatic smoke detection system in accordance with Section 9.6. (3) The suite is separated from the rest of the health care facility as required for a hazardous area by 18.3.2.1.	18.2.5.5 Intervening rooms shall not be hazardous areas as defined by 18.3.2.	Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.	This proposal is based on work done the the committee's task force on suites. Since the work of the task force was not finalized by the time for proposal closing, I am submitting this to assure that the work is considered as a proposal. I want to emphasize that this proposal is not from the task force, but is the draft the task force has completed to this point. All the material is here, but not all has been totally agreed upon by the task force. The intent of the proposal is to close loop holes in the suites provisions, but at the same time provide some flexibility in the provisions. Extensive annex notes are provided to clarify issues. There are several differences between new and existing in order to prevent as much impact on existing as possible. There are several new provisions that will benefit existing conditions. The vast majority of this is editorial to improve user friendliness but there are technical changes. This change provides a needed barrier to separate the suite from the rest of the building rather than just to the corridor. Technically under the existing code you could paint a line on the floor and say that this separates suites. This proposal will require a wall that at least resists the passage of smoke (even in existing non-sprinklered). It also allows an option of full height non glass partitions provided smoke detection is present. The proposal addresses the second means of egress from the suite. Currently the Code does not say if the second way must go to a corridor or if it could be to another suite. The task force felt there was a benefit to allow the second way out to be through another suite since this could provide services to the patient that are not found in a corridor (med gasses, emergency power, etc.). As mentioned above, this proposal is based on the task force work. Some areas of controversy involve the height of the "limited height" partitions, degree of observation, suites used as hazardous areas, and hazardous areas within suites. Areas were there has not been controversy involve the editorial rearrangement, separation of the suite from the rest of the facility, secondary egress through an adjoining suite, suite definitions, and the annex notes on habitable rooms.	Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
11	Suites	18.2.5.6.1.4	Provision added	18.2.5.6.1.4 Suite Subdivision. The subdivision of suites shall be by means of noncombustible or limited-combustible partitions or partitions constructed with fire-retardant-treated wood enclosed with noncombustible or limited-combustible materials, and such partitions shall not be required to be fire rated.	New provision	Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
12	Suites	18.2.5.6.2	Section added	18.2.5.6.2 Sleeping Suites. 18.2.5.6.2.1 Sleeping Suite Arrangement. (A)* Occupants of habitable rooms within sleeping suites shall have exit access to a corridor complying with 18.3.6 without having to pass through more than one intervening room. (B) Sleeping suites shall be provided with constant staff supervision within the suite. (C) Sleeping suites shall be arranged in accordance with one of the following: (1)*Patient sleeping rooms within sleeping suites shall provide one of the following: (a) The patient sleeping rooms shall be arranged to allow for direct supervision from a normally attended location within the suite, such as is provided by glass walls, and cubicle curtains shall be permitted. (b) Any patient sleeping rooms without the direct supervision required by 18.2.5.6.2.1(C)(1)(a) shall be provided with smoke detection in accordance with Section 9.6 and 18.3.4. (2) Sleeping suites shall be provided with a total coverage (complete) automatic smoke detection system in accordance with 9.6.2.8 and 18.3.4.	New section	Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
13	Suites	18.2.5.6.2.2	Section added	18.2.5.6.2.2 Sleeping Suite Number of Means of Egress. (A) Sleeping suites of more than 1000 ft2 (93m2) shall have not less than two exit access doors remotely located from each other. (B)* One means of egress from the suite shall be directly to a corridor complying with 18.3.6. (C)* For suites requiring two means of egress, one means of egress from the suite shall be permitted to be into another suite, provided that the separation between the suites complies with the corridor requirements of 18.3.6.2 through 18.3.6.5.	New section	Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
14	Non-Sleeping Suite	18.2.5.6.3.1	Section added	18.2.5.6.3.1* Non-Sleeping Suite Arrangement. Occupants of habitable rooms within non-sleeping suites shall have exit access to a corridor complying with 18.3.6 without having to pass through more than two intervening rooms.	New section	Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.

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15	Non-Sleeping Suite	18.2.5.6.3.2	Section added	18.2.5.6.3.2 Non-Sleeping Suite Number of Means of Egress. (A) Non-sleeping suites of more than 2500 ft2 (230 m2) shall have not less than two exit access doors remotely located from each other. (B)* One means of egress from the suite shall be directly to a corridor complying with 18.3.6. (C)* For suites requiring two means of egress, one means of egress from the suite shall be permitted to be into another suite, provided that the separation between the suites complies with the corridor requirements of 18.3.6.2 through 18.3.6.5.		Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
16	Non-Sleeping Suite	18.2.5.6.3.3	Section added	18.2.5.6.3.3 Non-Sleeping Suite Maximum Size. Non-sleeping suites shall not exceed 10,000 ft2 (930 m2).		Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
17	Means of Egress	18.2.6.2.6	Added for correlation with revised 18.2.5	18.2.6.2.6 The travel distance within suites shall be in accordance with 18.2.5.6.	18.2.6.2.6 The travel distance between any point in a suite of sleeping rooms as permitted by 18.2.5 and an exit access door of that suite shall not exceed 30 m (100 ft) and shall meet the requirements of 18.2.6.2.3.	Annual 2005 - ROP	101 - 406 101 - 407	Log # CP1222 Log # 241	Technical Committee on Health Care Occupancies James K. Lathrop, Koffel Assoc., Inc.		Accept / Accept in Principle	See Committee Proposals 101-40 (Log #CP1221) on 3.3.xx definitions of suites, 101-406 (Log #CP1222) on 18.3.5, and 101-441 (Log #CP1223) on 19.3.5.
										The SAF-HEA committee supports the new text for alcohol-based hand-rub solutions dispensers. Substantiation for the changes appears above in the proposed annex text A.18.3.2.6. Further, the Technical Committee on Health Care Occupancies accepts the substantiation submitted by ASHE, in its request for a related TIA, which follows: The American Society for Healthcare Engineering (ASHE) of the American Hospital Association is requesting a TIA be issued for Chapters 18 and 19 (new and existing health care occupancies) and Chapters 20 and 21 (new and existing ambulatory healthcare occupancies) of the 2000 edition of NFPA 101, Life Safety Code®, allowing the use of alcohol based hand rubs in these occupancies. The acceptance of this TIA will allow		

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18	Protection from Hazards	18.3.2.6	New provisions for alcohol-based hand-rub dispensers.	<p>18.3.2.6* Alcohol-Based Hand-Rub Dispensers. Alcohol-based hand-rub dispensers shall be protected in accordance with 8.7.3, unless all of the following conditions are met:</p> <p>(1) Where dispensers are installed in a corridor, the corridor shall have a minimum width of 6 ft (1830 mm).</p> <p>(2) The maximum individual dispenser fluid capacity shall be as follows:</p> <p>(a) 0.32 gal (1.2 L) for dispensers in rooms, corridors, and areas open to corridors</p> <p>(b) 0.53 gal (2.0 L) for dispensers in suites of rooms</p> <p>(3) The dispensers shall be separated from each other by horizontal spacing of not less than 48 in. (1220 mm).</p> <p>(4) Not more than an aggregate 10 gal (37.8 L) of alcohol based hand-rub solution shall be in use outside of a storage cabinet in a single smoke compartment.</p> <p>(5) Storage of quantities greater than 5 gal (18.9 L) in a single smoke compartment shall meet the requirements of NFPA 30, Flammable and Combustible Liquids Code.</p> <p>(6) The dispensers shall not be installed over or directly adjacent to an ignition source.</p> <p>(7) Dispensers installed directly over carpeted floors shall be permitted only in sprinklered smoke compartments.</p>		Annual 2005 - ROP	101 - 410	Log # CP1206	Technical Committee on Health Care Occupancies	<p>healthcare organizations to implement medical practices that have been proven to save thousands of patient lives a year. As reported by the Centers for Disease Control and Prevention (CDC) healthcare acquired infections (HAIs) affect nearly 10% of all patients admitted to healthcare facilities, totaling 2 million persons annually. \$2.5 billion is spent annually treating patients with HAI, which will contribute to the death of 90,000 people each year. In October 2002, the CDC released guidance urging healthcare organizations to utilize alcohol hand rub solutions to prevent the spread of dangerous germs leading to significant reduction in HAIs and saving lives.</p> <p>Our challenge is to permit the installation of dispensers containing a small quantity of alcohol-based hand-rubs (Class 1B flammable liquid) in egress corridors of healthcare facilities. The medical community (see stakeholders minutes attached) has been working diligently to find the right mixture of dispenser location, education, and staff monitoring to attack the epidemic of patients acquiring healthcare associated infections. Providing easy access to hand rub dispensers is critical to the success rate of usage, and ultimately reduced infection rates. Code changes are necessary to permit the installation of dispensers in a manner in which the medical community is comfortable with the ultimate success of its use. In order to provide the technical support for this TIA, ASHE commissioned a fire modeling analysis using a prominent fire protection firm. The technical report is included for viewing by the Health Care Occupancy Technical Committee, Safety to Life Technical Correlating Committee, and Standards Council. We fully understand that the Standards Council does not typically issue a TIA on an edition other than the most recently published, which would be the 2003 Life Safety Code, however the extenuating circumstances of this request should be thoroughly reviewed by the Council membership. If this proposed TIA code change language is to be of value to the enforcing community with the ultimate goal of saving thousands of patient lives in health care occupancies, the edition of the Code currently being enforced is the 2000 and we see no movement by the federal government to use any portion of the 2003 document in enforcing the rules and regulations for the Centers for Medicare and Medicaid Services.</p> <p>We ask the Standards Council to weigh the minimal potential of increased fire risk verse the proven potential of decreased infections leading to reduced deaths. We believe that when you couple the risk analysis with fire modeling performed to assess the overall performance of the installation criteria, and the fact that NFPA's own statistics are only showing a fire loss of one patient per year for the past five years in hospitals and we have the potential for a tremendous life savings success story.</p>	Accept	

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19	Interior Finish	18.3.3.3.1	New requirements for interior floor finish	18.3.3.3.1 Interior floor finish shall comply with Section 10.2. 18.3.3.3.2 Interior floor finish in exit enclosures and exit access corridors and spaces not separated from them by walls complying with 18.3.6 shall be Class I or Class II. 18.3.3.3.3 Interior floor finish shall comply with 10.2.7.1 or 10.2.7.2, as applicable.	New sections	Annual 2005 - ROP	101 - 411	Log # 242	James K. Lathrop, Koffel Assoc., Inc. / Rep. Carpet & Rug	The proposed wording for 18.3.3.3.1 and 18.3.3.3.3 is not new. It was approved in the November 2002 ROC (see 101-230 (18.3.3) on page 415 of the ROC. For some reason it is not in NFPA 101 properly. Modifications have been made to 18.3.3.3.2 to coordinate the differences between NFPA 101 and NFPA 5000 as well as to recognize that 18.4.3 in NFPA 101 now addresses new interior floor finish in nonsprinklered existing buildings	Accept	
20	Notification	18.3.4.3	New provision for notification	18.3.4.3 Notification. Positive alarm sequence in accordance with 9.6.3.4 shall be permitted.	New provision	Annual 2005 - ROC	101 - 256	Log # 395	J. Jeffrey Moore, Hughes Associates, Inc.	This comment is based on the work of a task group of the Technical Committee on Protected Premises Fire Alarm Systems. The subject of Section 18.3.4.3.2.2 is emergency forces notification. This notification will not occur until positive alarm sequence or alarm verification (where used) is complete. If positive alarm sequence is specified, location in another section would be more appropriate. Note that Section 55.2.3.4 addresses positive alarm sequence under occupant notification. If "positive alarm sequence" is specified (as indicated in Proposal 101-414), the timing for this sequence should be consistent with that addressed in NFPA 72. The timing for positive alarm sequence is specified in NFPA 72 and includes an allowance of up to 15 seconds for acknowledgment and then up to 180 seconds for alarm investigation. The proposed language does not reflect this two-phase sequence terminology and will cause confusion in implementation. The acknowledgment period should agree with that in NFPA 72. (If a different timing of the investigation phase is specified, the rationale for the different timing should be addressed and provided as annex material for the related code section in accordance with Annex A-9 of the NFPA Committee Officer's Guide.)	Accept in Principle	
21	Notification	18.3.4.3.2	Exception deleted for correlation with NFPA 72	18.3.4.3.2 Emergency Forces Notification. 18.3.4.3.2.1 Fire department notification shall be accomplished in accordance with 9.6.4. 18.3.4.3.2.2 Smoke detection devices, or smoke detection systems, equipped with reconfirmation features shall not be required to automatically notify the fire department unless the alarm condition is reconfirmed after a period not exceeding 120 seconds.	18.3.4.3.2 Emergency Forces Notification. 18.3.4.3.2.1 Fire department notification shall be accomplished in accordance with 9.6.4.	Annual 2005 - ROC	101 - 256	Log # 395	J. Jeffrey Moore, Hughes Associates, Inc.	Positive alarm sequence will permit a 180 second delay before remote signals are sent off-site. This will help to prevent unnecessary runs by the fire department. With the addition of text permitting positive alarm sequence, 18.3.4.3.2.2 can be deleted. However, 19.3.4.3.2.2 must be retained for existing systems utilizing the 120-second reconfirmation feature.	Accept in Principle	
22	Furnishings, Bedding, and Decorations	18.7.5.1(3)	New provisions for draperies in patient sleeping rooms	18.7.5.1* Draperies, curtains, and other loosely hanging fabrics and films serving as furnishings or decorations in health care occupancies shall be in accordance with the provisions of 10.3.1 (see 18.3.5.9), and the following also shall apply: (3) Such draperies and curtains shall not include draperies and curtains at windows in patient sleeping rooms.	New provision	Annual 2005 - ROP	101 - 435	Log # CP1220	Technical Committee on Health Care Occupancies	In nursing homes, patients bring in their own furniture and furnishings, including window draperies. There is insufficient substantiation to require window draperies to pass NFPA 701 testing if the draperies are at windows in patient sleeping rooms that are sprinklered.	Accept	
23	Construction	19.1.6.6	New provisions for fire-retardant-treated wood	19.1.6.6 Any building of Type I(442), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that the following criteria are met: (1) The roof covering shall meet Class A requirements in accordance with NFPA 256, Standard Methods of Fire Tests of Roof Coverings. (2) The roof/ceiling assembly shall be constructed with fire retardant-treated wood meeting the requirements of NFPA 220, Standard on Types of Building Construction. (3) The roof/ceiling assembly shall have the required fire resistance rating for the type of construction.	19.1.6.5* Any building of Type I(443), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that the following criteria are met: (1) The roof covering shall meet Class C requirements in accordance with NFPA 256, Standard Methods of Fire Tests of Roof Coverings. (2) The roof shall be separated from all occupied portions of the building by a noncombustible floor assembly that includes not less than 63 mm (2 1/2 in.) of concrete or gypsum fill. (3) The attic or other space shall be either unoccupied or protected throughout by an approved automatic sprinkler system.	Annual 2005 - ROP	101 - 397	Log # 191	Joseph T. Holland, III, Hoover Treated Wood Products	Fire-retardant-treated wood has been allowed in this application for many years. There is no adverse fire record. Because of its unique capabilities it is allowed many uses in codes where noncombustible materials are required. FRTW has a flame spread of less than 25 (10-15), a very low smoke-developed index (50 or less), cannot be used to start a fire, and if involved in a fire it will not continue to burn when the source of ignition is consumed or removed.	Accept in Principle	The committee action draws wording from NFPA 5000, 7.2.3.2.12 which addresses the subject adequately for buildings of Type I or Type II construction. Corresponding changes are being made to Chapter 19 for correlation.

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24	Construction	19.1.6.8	New provisions for fire-retardant-treated wood	19.1.6.8 Interior nonbearing walls required to have a fire resistance rating of 2 hours or less shall be permitted to be fire retardant-treated wood enclosed within noncombustible or limited-combustible materials, provided that such walls are not used as shaft enclosures.	19.1.6.6 All interior walls and partitions in buildings of Type I or Type II construction shall be of noncombustible or limitedcombustible materials, unless otherwise permitted by 19.1.6.7.	Annual 2005 - ROP	101 - 397	Log # 191	Joseph T. Holland, III, Hoover Treated Wood Products	Fire-retardant-treated wood has been allowed in this application for many years. There is no adverse fire record. Because of it's unique capabilities it is allowed many uses in codes where noncombustible materials are required. FRTW has a flame spread of less than 25 (10-15), a very low smoke-developed index (50 or less), cannot be used to start a fire, and if involved in a fire it will not continue to burn when the source of ignition is consumed or removed.	Accept in Principle	The committee action draws wording from NFPA 5000, 7.2.3.2.12 which addresses the subject adequately for buildings of Type I or Type II construction. Corresponding changes are being made to Chapter 19 for correlation.
25	Construction	19.1.6.9	New provision for correlation with 18.1.6.9	19.1.6.9 Fire-retardant-treated wood that serves as supports for the installation of fixtures and equipment shall be permitted to be installed behind noncombustible or limitedcombustible sheathing.	New provision	Annual 2005 - ROP	101 - 397	Log # 191	Joseph T. Holland, III, Hoover Treated Wood Products	Fire-retardant-treated wood has been allowed in this application for many years. There is no adverse fire record. Because of it's unique capabilities it is allowed many uses in codes where noncombustible materials are required. FRTW has a flame spread of less than 25 (10-15), a very low smoke-developed index (50 or less), cannot be used to start a fire, and if involved in a fire it will not continue to burn when the source of ignition is consumed or removed.	Accept in Principle	The committee action draws wording from NFPA 5000, 7.2.3.2.12 which addresses the subject adequately for buildings of Type I or Type II construction. Corresponding changes are being made to Chapter 19 for correlation.
26	Sliding Doors	19.2.2.9	New provision for sliding doors	19.2.2.9.2 Horizontal-sliding doors serving an occupant load of fewer than 10 shall be permitted, provided that all of the following criteria are met: (1) The area served by the door has no high hazard contents. (2) The door is readily operable from either side without special knowledge or effort. (3) The force required to operate the door in the direction of door travel is not more than 30 lbf (133 N) to set the door in motion and is not more than 15 lbf (67 N) to close the door or open it to the minimum required width. (4) The door assembly complies with any required fire protection rating, and, where rated, is self-closing or automatic closing by means of smoke detection in accordance with 7.2.1.8 and is installed in accordance with NFPA80, Standard for Fire Doors and Fire Windows. (5) Corridor doors shall have a latch or other mechanism that ensures that the doors will not rebound into a partially open position if forcefully closed.	New section	Annual 2005 - ROP	101 - 400	Log # CP1215	Technical Committee on Health Care Occupancies	The use of horizontal sliding doors in ICU, CCU, Neonatal ICU and other special areas is an important clinical need for the patient care. A number of local and state officials are requiring a break away feature to all doors due to the reference to the whole of 7.2.1.14. For life safety purposes a single door opening provides adequate egress from a patient room. The breakaway feature is not needed for this low number of occupants. ICU, CCU, etc. have functional requirements of smooth threshold into the rooms. This is for infection control and ease of cleaning. A breakaway sliding door requires a bottom rail for a portion of the door. Based on the minimum required width, the staff levels and staff training, allowing these types of horizontal sliding doors in health care occupancies will provide adequate egress from the patient rooms. The new provision draws from the applicable portions of 7.2.1.14.	Accept	
27	Suite - Hazardous Areas	19.2.5.6.1.3	New provision for suite hazardous content areas	19.2.5.6.1.3 Suite Hazardous Contents Areas. (A)* Intervening rooms shall not be hazardous areas as defined by 19.3.2. (B) Hazardous areas within a suite shall be separated from the remainder of the suite in accordance with 19.3.2.1, unless otherwise provided in 19.2.5.6.1.3(C) or 19.2.5.6.1.3(D). (C)* Hazardous areas within a suite shall not be required to be separated from the remainder of the suite where complying with both of the following: (1) The suite is primarily a hazardous area. (2) The suite is separated from the rest of the health care facility as required for a hazardous area by 19.3.2.1. (D)* Spaces containing sterile surgical materials limited to aone-day supply in operating suites or similar spaces that are sprinklered in accordance with 19.3.5.6 shall be permitted to be open to the remainder of the suite without separation.	New section	Annual 2005 - ROP	101 - 441	Log # CP1223	Technical Committee on Health Care Occupancies	This proposal was prepared as part of the committee answer to Proposal 101-407 (Log #241) on 18.2.5 and 19.2.5. The committee used the "committee proposal" format so the text could appear in the Recommendation field. If the lengthy text had been positioned in the Committee Action field of the referenced proposal, it would have been truncated in the form of the report used for committee balloting. In the NFPA database where the proposals reside, the reports permit a lengthy Recommendation, but a much shorter Committee Action. See	Accept	

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28	Means of Egress	19.2.5.6.2.2	New provisions	<p>19.2.5.6.2.2 Sleeping Suite Number of Means of Egress.</p> <p>(A) Sleeping suites of more than 1000 ft² (93 m²) shall have not less than two exit access doors remotely located from each other.</p> <p>(B)* One means of egress from the suite shall be directly to a corridor complying with 19.3.6.</p> <p>(C)* For suites requiring two means of egress, one means of egress from the suite shall be permitted to be into another suite, provided that the separation between the suites complies with the corridor requirements of 19.3.6.2 through 19.3.6.5.</p>	New section	Annual 2005 - ROP	101 - 441	Log # CP1223	Technical Committee on Health Care Occupancies	<p>but a much shorter Committee Action. See Proposal 101-407 (Log #241). See Committee Proposal 101-40 (Log #CP1221) for associated 3.3.xx definitions of Suite, Non-Sleeping Suite, and Sleeping Suite.</p>	Accept	
										<p>This committee proposal was prepared in answer to Proposal 101-393 (Log #508) received from ASHE. If this action had appeared in the Committee Action field of that proposal, it would have been too lengthy for all of it to print in the report used by the committee for balloting. The Recommendation field has room for much more text, thus, the committee-proposal option was utilized.</p> <p>The SAF-HEA committee supports the new text for alcohol-based hand-rub solutions dispensers. Substantiation for the changes appears above in the proposed annex text A.19.3.2.6. Further, the Technical Committee on Health Care Occupancies accepts the substantiation submitted by ASHE, in its request for a related TIA, which follows:</p> <p>The American Society for Healthcare Engineering (ASHE) of the American Hospital Association is requesting a TIA be issued for Chapters 18 and 19 (new and existing health care occupancies) and Chapters 20 and 21 (new and existing ambulatory healthcare occupancies) of the 2000 edition of NFPA 101, Life Safety Code®, allowing the use of alcohol based hand rubs in these occupancies. The acceptance of this TIA will allow healthcare organizations to implement medical practices that have been proven to save thousands of patient lives a year. As reported by the Centers for Disease Control and Prevention (CDC) healthcare acquired infections (HAIs) affect nearly 10% of all patients admitted to healthcare facilities, totaling 2 million persons annually. \$2.5 billion is spent annually treating patients with HAI, which will contribute to the death of 90,000 people each year. In October 2002, the CDC released guidance urging healthcare organizations to utilize alcohol hand rub solutions to prevent the spread of dangerous germs leading to significant reduction in HAIs and saving lives.</p> <p>Our challenge is to permit the installation of dispensers containing a small quantity of alcohol-based hand-rubs (Class 1B flammable liquid) in egress corridors of healthcare facilities. The medical community (see stakeholders minutes attached) has been working diligently to find the right mixture of dispenser location, education, and staff monitoring to attack the epidemic of patients acquiring healthcare associated infections. Providing easy access to hand rub dispensers is critical to the success rate of usage, and ultimately reduced infection rates. Code changes are necessary to permit the installation of dispensers in a manner in which the medical community is comfortable with the ultimate success of its use. In order to provide the technical support for this TIA, ASHE</p>		

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29	Special Hazards	19.3.2.6	New provisions	<p>19.3.2.6* Alcohol-Based Hand-Rub Dispensers. Alcohol-based hand-rub dispensers shall be protected in accordance with 8.7.3, unless all of the following conditions are met:</p> <p>(1) Where dispensers are installed in a corridor, the corridor shall have a minimum width of 6 ft (1830 mm).</p> <p>(2) The maximum individual dispenser fluid capacity shall be as follows:</p> <p>(a) 0.32 gal (1.2 L) for dispensers in rooms, corridors, and areas open to corridors</p> <p>(b) 0.53 gal (2.0 L) for dispensers in suites of rooms</p> <p>(3) The dispensers shall be separated from each other by horizontal spacing of not less than 48 in. (1220 mm).</p> <p>(4) Not more than an aggregate 10 gal (37.8 L) of alcohol based hand-rub solution shall be in use outside of a storage cabinet in a single smoke compartment.</p> <p>(5) Storage of quantities greater than 5 gal (18.9 L) in a single smoke compartment shall meet the requirements of NFPA 30, Flammable and Combustible Liquids Code.</p> <p>(6) The dispensers shall not be installed over or directly adjacent to an ignition source.</p> <p>(7) Dispensers installed directly over carpeted floors shall be permitted only in sprinklered smoke compartments.</p>	New section	Annual 2005 - ROP	101 - 445	Log # CP1207	Technical Committee on Health Care Occupancies	<p>commissioned a fire modeling analysis using a prominent fire protection firm. The technical report is included for viewing by the Health Care Occupancy Technical Committee, Safety to Life Technical Correlating Committee, and Standards Council. We fully understand that the Standards Council does not typically issue a TIA on an edition other than the most recently published, which would be the 2003 Life Safety Code, however the extenuating circumstances of this request should be thoroughly reviewed by the Council membership. If this proposed TIA code change language is to be of value to the enforcing community with the ultimate goal of savings thousands of patient lives in health care occupancies, the edition of the Code currently being enforced is the 2000 and we see no movement by the federal government to use any portion of the 2003 document in enforcing the rules and regulations for the Centers for Medicare and Medicaid Services.</p> <p>We ask the Standards Council to weigh the minimal potential of increased fire risk verse the proven potential of decreased infections leading to reduced deaths. We believe that when you couple the risk analysis with fire modeling performed to assess the overall performance of the installation criteria, and the fact that NFPA's own statistics are only showing a fire loss of one patient per year for the past five years in hospitals and we have the potential for a tremendous life savings success story.</p>		
30	Notification	19.3.4.3	New provisions	<p>19.3.4.3 Notification. Positive alarm sequence in accordance with 9.6.3.4 shall be permitted in health care occupancies protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1).</p>	New section	Annual 2005 - ROC	101 - 256	Log # 395	J. Jeffrey Moore, Hughes Associates, Inc.	<p>This comment is based on the work of a task group of the Technical Committee on Protected Premises Fire Alarm Systems. The subject of Section 18.3.4.3.2.2 is emergency forces notification. This notification will not occur until positive alarm sequence or alarm verification (where used) is complete. If positive alarm sequence is specified, location in another section would be more appropriate. Note that Section 55.2.3.4 addresses positive alarm sequence under occupant notification. If "positive alarm sequence" is specified (as indicated in Proposal 101-414), the timing for this sequence should be consistent with that addressed in NFPA 72. The timing for positive alarm sequence is specified in NFPA 72 and includes an allowance of up to 15 seconds for acknowledgment and then up to 180 seconds for alarm investigation. The proposed language does not reflect this two-phase sequence terminology and will cause confusion in implementation. The acknowledgment period should agree with that in NFPA 72. (If a different timing of the investigation phase is specified, the rationale for the different timing should be addressed and provided as annex material for the related code section in accordance with Annex A-9 of the NFPA Committee Officer's Guide.)</p>	Accept in Principle	Positive alarm sequence will permit a 180 second delay before remote signals are sent off-site. This will help to prevent unnecessary runs by the fire department. With the addition of text permitting positive alarm sequence, 18.3.4.3.2.2 can be deleted. However, 19.3.4.3.2.2 must be retained for existing systems utilizing the 120-second reconfirmation feature.
31	Extinguishment	19.3.5.1	New provisions	<p>19.3.5.1 Buildings containing nursing homes shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7, unless otherwise permitted by 19.3.5.4.</p>	New section	Annual 2005 - ROP	101 - 449	Log # 265	Charles H. Roadman, American Health Care Association	<p>Until 2003, the fire safety record for nursing homes has been excellent. For the past 20 years the average number of fire deaths in nursing homes from multiple death fires has averaged one death per year. For the past 10 years, the average has been 0.3 deaths per year, less than one death per year. Unfortunately, in 2003 there have been two multiple death nursing home</p>	Accept in Principle	The committee action does what was recommended, and shows the new text in the context of all of 19.3.5.

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32	Extinguishment	19.3.5.7 (1)	Item (1) revised to permit sprinklering just the smoke compartment where the applicable exemption permits such	(1) It shall be installed throughout the building or smoke compartment in accordance with Section 9.7.	Revised Section	Annual 2005 - ROP	101 - 449	Log # 265	Charles H. Roadman, American Health Care Association	fires. There is nothing more important to the American Health Care Association than to insure the protection of patients entrusted in the care of our member facilities. Although compliance with the Life Safety Code, including in nonsprinklered buildings, has proven over the last 20 years to provide a very high level of fire safety, the two recent nursing home multiple death fires requires us to reevaluate nursing home fire safety requirements. Following review of all the multiple death nursing home fires since Medicare/Medicaid Regulations adopted the Life Safety Code in 1970, it is our opinion that have sprinklers installed in all nursing homes will significantly reduce, if not eliminate, multiple death nursing home fires. Approximately 25 percent of the nursing homes in the United States are not fully sprinklered and our data shows that it will cost approximately 1 billion dollars to retrofit sprinklers in all nonsprinklered nursing homes. This is a significant cost and local, state, and federal governments must work with the nursing home profession to find a way to pay for this. These funds must be available to providers well in advance of the required date for compliance. Like cost, compliance must be considered when requiring that all nursing homes be fully sprinklered. There must be a reasonable period of time allowed for that takes into consideration the enormous undertaking of the task which may necessitate the safe temporary relocation of patients and will also impact the fire sprinkler industry. It is important that the proposed Annex note be included to recognize the excellent fire/life safety record of existing sprinkler systems using standard sprinkler heads and the lack of a need to replace these existing sprinkler heads with quick response or residential heads.	Accept in Principle	The committee action does what was recommended, and shows the new text in the context of all of 19.3.5.
33	Corridor Separation	19.3.6.1 (1), (2), and (5)	Revised section to require sprinkler system, including quick response sprinklers	Items (1), (2), and (5) revised to require sprinkler system to meet 19.3.5.7, which includes quick-response sprinklers	Revised Section	Annual 2005 - ROP	101 - 453	Log # CP1213	Technical Committee on Health Care Occupancies	Correction of reference. Error made when Code was reformatted during last revision cycle.	Accept	
34	Furnishings, Bedding, and Decorations	19.7.5.1(3)	New provisions for draperies in patient sleeping rooms	19.7.5.1* Draperies, curtains, and other loosely hanging fabrics and films serving as furnishings or decorations in health care occupancies shall be in accordance with the provisions of 10.3.1 (see 19.3.5.9), and the following also shall apply: (3) Such draperies and curtains shall not include draperies and curtains at windows in patient sleeping rooms.	New provision	Annual 2005 - ROP	101 - 435	Log # CP1220	Technical Committee on Health Care Occupancies	In nursing homes, patients bring in their own furniture and furnishings, including window draperies. There is insufficient substantiation to require window draperies to pass NFPA 701 testing if the draperies are at windows in patient sleeping rooms that are sprinklered.	Accept	
35	Furnishings, Bedding, and Decorations	19.7.5.2	Revised to maintain the sprinkler exemption that was deleted from Section 10.3; and to maintain the smoke detector option for upholstered furniture belonging to the patient.	19.7.5.2 Newly introduced upholstered furniture within health care occupancies shall comply with one of the following provisions, unless otherwise provided in 19.7.5.3: (1) The furniture shall meet the criteria specified in 10.3.2.1 and 10.3.3. (2) The furniture shall be in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1).	19.7.5.2 Newly introduced upholstered furniture within health care occupancies shall meet the criteria specified when tested in accordance with the methods cited in 10.3.2(2) and 10.3.3.	Annual 2005 - ROC	101 - 267a	Log # CC205	Technical Committee on Health Care Occupancies	In ROP Proposals 101-275 and 101-276, the SAF-FUR Furnishings Committee acted to remove the sprinkler exemption under which upholstered furniture and mattresses were not required to be tested for cigarette ignition resistance. The action on this comment retains the current sprinkler exemption for health care occupancies.	Accept	
36	Furnishings, Bedding, and Decorations	19.7.5.4	Revised to maintain the sprinkler exemption that was deleted from Section 10.3; and to maintain the smoke detector option for upholstered furniture belonging to the patient.	19.7.5.4 Newly introduced mattresses within health care occupancies shall comply with one of the following provisions, unless otherwise provided in 19.7.5.5: (1) The mattresses shall meet the criteria specified in 10.3.2.2 and 10.3.4. (2) The mattresses shall be in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1).	19.7.5.4 Newly introduced mattresses within health care occupancies shall meet the criteria specified when tested in accordance with the methods cited in 10.3.2(3) and 10.3.4.	Annual 2005 - ROC	101 - 267a	Log # CC205	Technical Committee on Health Care Occupancies		Accept	

Changes to NFPA 101 - Life Safety Code - Changes affecting FSES for Health Care Facilities

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Occupancy	18.1.1.4.2	Former item (1) deleted for correlation with Chapter 43. Remainder revised to have application to change of use, as well as change of occupancy classification.	18.1.1.4.2 Changes of Use or Occupancy Classification. Changes of use or occupancy classification shall comply with 4.6.12, unless otherwise permitted by the following: (1) A change from a hospital to a nursing home or from a nursing home to a hospital shall not be considered a change in occupancy classification or a change in use. (2) A change from a hospital or nursing home to a limited care facility shall not be considered a change in occupancy classification or a change in use. (3) A change from a hospital or nursing home to an ambulatory health care facility shall not be considered a change in occupancy classification or a change in use.	18.1.1.4.2 Changes of Occupancy. Changes of occupancy shall comply with 4.6.11, and the following also shall apply: (1) A change from one health care occupancy subclassification to another shall require compliance with the requirements for new construction. (2) A change from a hospital to a nursing home or from a nursing home to a hospital shall not be considered a change in occupancy or occupancy subclassification. (3) A change from a hospital or nursing home to a limited care facility shall not be considered a change in occupancy or occupancy subclassification. (4) A change from a hospital or nursing home to an ambulatory health care facility shall not be considered a change in occupancy or occupancy subclassification.	Annual 2008 - ROP	101 - 276c	Log # CP651	Technical Committee on Health Care Occupancies	When Chapter 43 on existing building rehabilitation was added to the 2006 edition of the Code, it was not the intent of the health care occupancies committee to be stricter than Chapter 43. Current 18/19.1.1.4.2(1) is stricter and, therefore subitem (1) is being deleted. The other changes are for correlation with the terminology used in Chapter 4 and Chapter 43.	Accept	
2	Elevator Lobby	18.2.2.2.4	Elevator lobby locking added	(4) Elevator lobby exit access door locking in accordance with 7.2.1.6.3 shall be permitted.	New provision	Annual 2008 - ROP	101 - 285a	Log # CP658	Technical Committee on Health Care Occupancies	The proposed provisions of 7.2.1.6.3 are of the format "where permitted in Chapters 11 through 42." The SAFHEA health care occupancies committee believes there are sufficient safeguards proposed for 7.2.1.6.3 to make the feature acceptable for use in health care occupancies.	Accept	
3	Door Locks	18.2.2.2.5.2	Provisions on door locking expanded to include locking for specialized protective measures for patient safety (e.g., infant abduction concerns); delayed egress locking provision revised to remove former limitation of one such device per egress path	18.2.2.2.5.2 Door-locking arrangements shall be permitted where patient special needs require specialized protective measures for their safety, provided that all of the following criteria are met: (1) Staff can readily unlock doors at all times in accordance with 18.2.2.2.6. (2) A total (complete) smoke detection system is provided throughout the locked space in accordance with 9.6.2.9, or locked doors can be remotely unlocked at an approved, constantly attended location within the locked space. (3)*The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with 18.3.5.1. (4) The locks are electrical locks that fail safely so as to release upon loss of power to the device. (5) The locks release by independent activation of each of the following: (a) Activation of the smoke detection system required by 18.2.2.2.5.2(2) (b) Waterflow in the automatic sprinkler system required by 18.2.2.2.5.2(3)	New provision	Annual 2008 - ROP	101 - 282a	Log # 654	Technical Committee on Health Care Occupancies	Locking of doors is needed in health care occupancies for more than just the clinical needs of the patients. Detention/correctional patients, under court order to be detained must not be let free. Infant abduction is a serious threat that only locked doors can control. The criteria being added offer the necessary safeguards to assure life safety under fire and similar emergency. The current limitation on there being only one delayed-egress lock within an egress path is not needed for this occupancy for which staff action is a crucial part of the emergency plan.	Accept	

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4	Means of Egress	18.2.4.2	New provision for number of means of egress	18.2.4.2 Not less than two separate exits shall be accessible from every part of every story.	18.2.4.1 Not less than two exits of the types described in 18.2.2.2 through 18.2.2.10, remotely located from each other, shall be provided for each floor or fire section of the building.	Annual 2008 - ROP	101 - 290	Log # 208	James K. Lathrop, Koffel Associates, Inc.	The Code does not define fire compartment, but it does define fire barrier. Even hazardous areas with 1-hr fire barriers are a fire compartment. By changing this to 2-hrs it will definitely make the Code more consistent as Chapter 7 does this same requirement for horizontal exits.	Accept in Principle	The submitter's language would not prohibit a blank wall from dividing a floor into two sections such that occupants of either section would have access to only one exit although there would be two exits on the floor. The revised 18.2.4.1 and the new 18.2.4.2 use language from the business occupancy chapters to state that in addition to having two exits on the floor, all portions of the floor must have access to both of the required exits. The deletion of 18.2.4.2 and 18.2.4.3 is based on the current provision accomplishing nothing. Paragraph 18.2.4.2 seems to have intended that a fire compartment cannot have all of its exits via horizontal exits but it doesn't achieve that because existing 18.2.4.3 says to combine the noncompliant fire compartment with the adjacent compartment. Given that the health care occupancies chapters have no maximum fire compartment size, and no minimum number of fire compartments per floor, nothing is gained by the rule. Existing 18.2.4.3 is being retained as there are requirements for a minimum number of smoke compartments, and other limitations on maximum smoke compartment size. The concept of not having to enter the smoke compartment of fire origin in order to access an exit is important. In existing 18.2.4.1 the words "of the types described in 18.2.2.2 through 18.2.2.10, remotely located from each other" are being deleted as 18.2.2.1 already limits what components can comprise the egress system, and not all the permitted components are capable of serving alone as an exit. The concept of having the exits arranged to be remotely located is well covered in Chapter 7. Similarly in existing 18.2.4.4 the words "of the types described in 18.2.2.2 through 18.2.2.10" are being deleted. The changes being made to Chapter 19 are for correlation with the changes explained above.
5	Suites	18.2.5.7.2	New provision for sleeping suites	18.2.5.7.2 Sleeping Suites. Sleeping suites shall be in accordance with the following: (1) Sleeping suites for patient care shall comply with the provisions of 18.2.5.7.2.1 through 18.2.5.7.2.4. (2) Sleeping suites not for patient care shall comply with the provisions of 18.2.5.7.4.	New provision	Annual 2008 - ROP	101 - 293	Log # 287	Sharon Gilyeat, Koffel Associates, Inc.	Often there are non-patient care suites in a nonseparated mixed use area of a building (health care and assembly for example) where limits for a suite (intended to protect patients) are not necessary. Occupants in these areas should not be regulated by the same conservative egress requirements as health care occupants. These occupants are fully capable of responding to an alarm and exiting from the building as required by their respective occupancy chapter requirements. By clarifying the suite requirements only apply to patient care areas it will allow health care occupants more flexibility in designing laboratories, dining areas, auditoriums, administration areas, etc.	Accept in Principle	The committee action accomplishes what the submitter requested, and adds text for correlation between the provisions for sleeping suites and those for non-sleeping suites. A nonpatient care suite might be of either the sleeping or the non-sleeping variety.
6	Suites	18.2.5.7.3	New provisions for non-sleeping suites	18.2.5.7.3 Non-Sleeping Suites. Non-sleeping suites shall be in accordance with the following: (1) Non-sleeping suites for patient care shall comply with the provisions of 18.2.5.7.3.1 through 18.2.5.7.3.4. (2) Non-sleeping suites not for patient care shall comply with the provisions of 18.2.5.7.4.	New provision	Annual 2008 - ROP	101 - 293	Log # 287	Sharon Gilyeat, Koffel Associates, Inc.		Accept in Principle	

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7	Suites	18.2.5.7.4	New provisions for non-patient care suites	18.2.5.7.4 Non-Patient-Care Suites. The egress provisions for non-patient-care suites shall be in accordance with the primary use and occupancy of the space, except that in no case shall the maximum travel distance to an exit from within the suite exceed 200 ft (61 m).		Annual 2008 - ROP	101 - 293	Log # 287	Sharon Gilyeat, Koffel Associates, Inc.		Accept in Principle									
8	Travel Distance	18.2.6.2.1 (Previous Section)	Deleted provisions	Provisions deleted	18.2.6.2.1 The travel distance between any room door required as an exit access and an exit shall not exceed 150 ft (46 m). 18.2.6.2.2 Reserved. 18.2.6.2.3 The travel distance between any point in a room and an exit shall not exceed 200 ft (61 m). 18.2.6.2.4 Reserved. 18.2.6.2.5 The travel distance between any point in a health care sleeping room and an exit access door in that room shall not exceed 50 ft (15 m). 18.2.6.2.6 The travel distance within suites shall be in accordance with 18.2.5.6.	Annual 2008 - ROP	101 - 297	Log # 334	Michael A. Crowley, Rolf Jensen & Assoc., Inc	Travel distance from the room door to an exit is not as relevant as travel distance to a smoke barrier. This requirement has been in the Code for a long time with no technical justification. Healthcare has a total travel distance, a travel distance in the sleeping room, travel distance in suites and travel distance to a smoke barrier. There is no relevance for the travel distance from a room door.	Accept	The committee action does what the submitter requested and makes similar changes to Chapter 19 for correlation and consistency.								
9	Hazardous Protection	Table 18.3.2.1	Entries for soiled linen and collected trash revised to include volume threshold for protection as a hazardous area.	<table border="0" style="width: 100%;"> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">Rooms with soiled linen in volume exceeding 64 gal (242 L)</td> <td style="padding-left: 20px;">1 hour</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">Storage rooms larger than 50 ft² (4.6 m²) but not exceeding 100 ft² (9.3 m²) and storing combustible material</td> <td style="padding-left: 20px;">See 18.3.6.3.11.</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">Storage rooms larger than 100 ft² (9.3 m²) and storing combustible material</td> <td style="padding-left: 20px;">1 hour</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">Rooms with collected trash in volume exceeding 64 gal (242 L)</td> <td style="padding-left: 20px;">1 hour</td> </tr> </table>	Rooms with soiled linen in volume exceeding 64 gal (242 L)	1 hour	Storage rooms larger than 50 ft ² (4.6 m ²) but not exceeding 100 ft ² (9.3 m ²) and storing combustible material	See 18.3.6.3.11.	Storage rooms larger than 100 ft ² (9.3 m ²) and storing combustible material	1 hour	Rooms with collected trash in volume exceeding 64 gal (242 L)	1 hour		Annual 2008 - ROP	101 - 298	Log # 355	James Everitt, Western Regional Fire Code Development Committee	This option makes the language similar to storage rooms in the same table and provides guidance in determining what constitutes a soiled linen room.	Accept in Principle	The submitter is correct that further guidance is needed on what constitutes a soiled linen collection room which needs to be protected as a hazardous area. The area of the room should not be the deciding factor as space within the room might be taken by sinks and work tables so as to preclude the introduction of much soiled linen. The presence of a single bag of soiled linen does not necessarily constitute a hazardous area. The committee action expresses the volume in gallons based on the precedent of the criteria of 18/19.7.5.7. Changes were also made to the "trash collection room" entry and to Chapter 19 for correlation and consistency.
Rooms with soiled linen in volume exceeding 64 gal (242 L)	1 hour																			
Storage rooms larger than 50 ft ² (4.6 m ²) but not exceeding 100 ft ² (9.3 m ²) and storing combustible material	See 18.3.6.3.11.																			
Storage rooms larger than 100 ft ² (9.3 m ²) and storing combustible material	1 hour																			
Rooms with collected trash in volume exceeding 64 gal (242 L)	1 hour																			

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
10	Alcohol Dispensers	18.3.2.6	<p>Item (3) is new and recognizes aerosol dispensers</p> <p>Item (5) revised to set maximum quantity for aerosol products</p> <p>Item (7) replaces former requirement that dispensers not be installed over or directly adjacent to an ignition source.</p>	<p>(3) Where aerosol containers are used, the maximum capacity of the aerosol dispenser shall be 18 oz. (0.51 kg) and shall be limited to Level 1 aerosols as defined in NFPA 30B, Code for the Manufacture and Storage of Aerosol Products.</p> <p>(5) Not more than an aggregate 10 gal (37.8 L) of alcoholbased hand-rub solution or 1135 oz (32.2 kg) of Level 1 aerosols, or a combination of liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gal (37.8 L) or 1135 oz (32.2 kg,) shall be in use outside of a storage cabinet in a single smoke compartment.</p> <p>(7) Dispensers shall not be installed in the following locations: (a) Above an ignition source for a horizontal distance of 1 in. (25 mm) to each side of the ignition source (b) To the side of an ignition source within a 1 in. (25 mm) horizontal distance from the ignition source (c) Beneath an ignition source within a 1 in. (25 mm) vertical distance from the ignition source</p>		Annual 2008 - ROC	101 - 250	Comment on Proposal 101 - 301a Log # CP666	William E. Koffel, Koffel Associates, Inc.	<p>The Technical Committee on Health Care Occupancies introduced this proposal and rejected it to allow time to review the report Alcohol Based Hand Sanitizers prepared by Dave Fredrickson and to incorporate any changes that took place during the debate on the issue at the International Fire Code hearings. The report was provided to the committee and the IFC adopted a similar proposal with an amendment establishing a maximum quantity of combined liquids and aerosols. That amendment is provided in the revision. NFPA 101, Life Safety Code allows limited quantities of alcohol based hand sanitizers in corridors, but not aerosol alcohol hand sanitizers because aerosols were not addressed in the supporting documentation when the provisions were originally adopted (aerosol products make up approximately 33% of the use of alcohol based hand sanitizers). The aerosol industry conducted a study and testing to show that aerosols could also be allowed in the same application. The study was previously distributed. As a result, only Level 1 aerosols are proposed for inclusion in the code. Level 1 aerosols are treated as ordinary combustibles by NFPA 1. The alcohol content is equal to that currently in alcohol liquid or gel hand sanitizers. Testing of the aerosol configuration was done and the results showed that the hazard of level 1 aerosols was less than that of the allowed hand sanitizers and that the aerosol can would not release its contents before the temperatures in the corridor would be untenable. Aerosol based hand sanitizers were first introduced into the hospital market in the early 1970s and have been marketed widely in that market for over 30 years. We have reviewed the fire history of all alcohol hand sanitizers (gel and aerosol) and found that there have been only 3 incidents reported in the public domain in the last 7 years. These were all associated with alcohol based hand rubs in a gel formulation. In addition, the quality tracking system of one of the major manufacturers of alcohol based hand antiseptic products (estimated to provide 30 % of the product used in the US) recorded an additional 5 incidents. None of these involved aerosols and all were minor (confined to the product user, resulting in minor burns to the hands) with the cause of the fires being attributed either to electrostatic discharge, or improper use of the product (user lighting cigarette before hands were dry (3 cases), contact with electrical equipment or gas stove before hands were dry (2 cases)) Based on the limited number of incidents compared to the level of use, the safety profile of these aerosol products has been excellent. It is estimated that 95% or 4,465 out of 4,700 hospitals greater than 100 beds are now using alcohol based hand sanitizers. Aerosol alcohol hand rubs make up approximately 33% of the overall healthcare market, with over 3 million units of this product type used annually. The aerosol alcohol form of these products has shown no greater safety risk than gel based formulations. Furthermore, "Alcohol Hand Rub Solutions have been used, without incident of fire, for over 20 years in hospitals throughout Great Britain, Germany, Switzerland, Austria and Australia. In March 2003, the Infectious Disease Society of America (SHEA) conducted a study of 840 U.S. hospitals with over 95% indicating the ongoing use of alcohol hand rubs with dispensers in rooms and/or corridors ... None of the respondents reported having a fire attributed to (or involving) an alcohol-based rub dispenser had occurred in his or her facility." (from Infection Control and Hospital Epidemiology, August 2003, pp. 618-619.) Testing and experience has shown that all alcohol based hand sanitizers, including aerosol alcohol hand sanitizers can safely be used in hospital corridors. Although not submitted on behalf of any clients, it should be noted that we do provide consulting services to the Consumer Specialty Products Association and the American Hospital Association.</p>	Accept	
11	Doors	18.3.6.3.7	New provision	<p>18.3.6.3.7 Powered doors that comply with the requirements of 7.2.1.9 shall not be required to meet the latching requirements of 18.3.6.3.5, provided that: (1) The door is equipped with a means for keeping the door closed that is acceptable to the authority having jurisdiction (2) The device used is capable of keeping the door fully closed if a force of 5 lbf (22N) is applied at the latch edge of a swinging door and applied in any direction to a sliding or folding door.</p>		Annual 2008 - ROC	101 - 257a	Comment on Proposal 101 - 307 Log # 373	David P. Klein, US Department of Veterans Affairs	<p>Powered doors without latches are commonly used in healthcare facilities. Although these doors do not have latches, their normal position is the closed position and they are typically held closed with sufficient force that latching is not necessary.</p>	Accept in Principle	<p>The action does what the submitter requested; specifically states that the text is to be added to both Chapter 128 and Chapter 19; and clarifies further how the subsequent paragraphs are to be renumbered.</p>

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12	Smoke Barriers	18.3.7.3 (Previous Section)	Provision deleted	Provision deleted	18.3.7.3 Smoke barriers shall be provided on stories that are usable but unoccupied.	Annual 2008 - ROP	101 - 308	Log # 11	Jon Nisja, Northcentral Regional Fire Code Development Committee	The requirements of 18.3.7.3 are covered by subsection (2) of 18.3.7.1 and subsections (1) and (3) of 18.3.7.2. As currently written, any finished (usable) but unoccupied floors located directly above a health care occupancy must have a smoke barrier, but if these same floors were finished (usable) and occupied, they do not require a smoke barrier per subsection (1) of 18.3.7.2. This does not seem consistent. If the concern is that an unfinished (but usable) floor could be used for storage, then subsections (1) and (3) of 18.3.7.2 apply because the floor is now classified as a storage occupancy.	Accept in Principle	The committee action accomplishes what the submitter requested. The changes to Chapter 19 are editorial only for purposes of keeping the paragraph numbering between the chapters parallel.
13	Occupancy	19.1.1.4.2	Former item (1) deleted for correlation with Chapter 43. Remainder revised to have application to change of use, as well as change of occupancy classification.	19.1.1.4.2 Changes of Use or Occupancy Classification. Changes of use or occupancy classification shall comply with 4.6.12, unless otherwise permitted by the following: (1) A change from a hospital to a nursing home or from a nursing home to a hospital shall not be considered a change in occupancy classification or a change in use. (2) A change from a hospital or nursing home to a limited care facility shall not be considered a change in occupancy classification or a change in use. (3) A change from a hospital or nursing home to an ambulatory health care facility shall not be considered a change in occupancy classification or a change in use.	19.1.1.4.2 Changes of Occupancy. Changes of occupancy shall comply with 4.6.11, and the following also shall apply: (1) A change from one health care occupancy subclassification to another shall require compliance with the requirements for new construction. (2) A change from a hospital to a nursing home or from a nursing home to a hospital shall not be considered a change in occupancy or occupancy subclassification. (3) A change from a hospital or nursing home to a limited care facility shall not be considered a change in occupancy or occupancy subclassification. (4) A change from a hospital or nursing home to an ambulatory health care facility shall not be considered a change in occupancy or occupancy subclassification.	Annual 2008 - ROP	101 - 276c	Log # CP651	Technical Committee on Health Care Occupancies	When Chapter 43 on existing building rehabilitation was added to the 2006 edition of the Code, it was not the intent of the health care occupancies committee to be stricter than Chapter 43. Current 18/19.1.1.4.2(1) is stricter and, therefore subitem (1) is being deleted. The other changes are for correlation with the terminology used in Chapter 4 and Chapter 43.	Accept	
14	Doors	19.2.2.2.5.2	Provisions on door locking expanded to include locking for specialized protective measures for patient safety (e.g., infant abduction concerns); delayed egress locking provision revised to remove former limitation of one such device per egress path	19.2.2.2.5.2* Door-locking arrangements shall be permitted where patient special needs require specialized protective measures for their safety, provided that all of the following are met: (1) Staff can readily unlock doors at all times in accordance with 19.2.2.2.6. (2) A total (complete) smoke detection system is provided throughout the locked space in accordance with 9.6.2.9, or locked doors can be remotely unlocked at an approved, constantly attended location within the locked space. (3)*The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with 19.3.5.1. (4) The locks are electrical locks that fail safely so as to release upon loss of power to the device. (5) The locks release by independent activation of each of the following: (a) Activation of the smoke detection system required by 19.2.2.2.5.2(2) (b) Waterflow in the automatic sprinkler system required by 19.2.2.2.5.2(3)	New provision	Annual 2008 - ROP	101 - 282a	Log # 654	Technical Committee on Health Care Occupancies	Locking of doors is needed in health care occupancies for more than just the clinical needs of the patients. Detention/correctional patients, under court order to be detained must not be let free. Infant abduction is a serious threat that only locked doors can control. The criteria being added offer the necessary safeguards to assure life safety under fire and similar emergency. The current limitation on there being only one delayed-egress lock within an egress path is not needed for this occupancy for which staff action is a crucial part of the emergency plan.	Accept	
15	Sliding Doors	19.2.2.2.10.2	New provision for sliding doors	(5) Where corridor doors are required to latch, the doors are equipped with a latch or other mechanism that ensures that the doors will not rebound into a partially open position if forcefully closed.	New provision	Annual 2008 - ROP	101 - 288	Log # 297	Joshua Elvove, Aurora, CO	Though 18.3.6.3.5/19.3.6.3.5 require corridor doors to latch, there are exceptions (see 18.3.6.3.6/19.3.6.3.6). Therefore, 18.2.2.2.9.2(5)/19.2.2.2.9.2(5) both need to be revised to reflect this allowance. Otherwise, one might assume from reading current text in 18.2.2.2.9.2(5)/19.2.2.2.9.2(5) that all horizontal sliding doors must latch.	Accept	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
16	Means of Egress	19.2.4.2 and 19.2.4.3	New provision	19.2.4.1 Not less than two exits shall be provided on every story. 19.2.4.2 Not less than two separate exits shall be accessible from every part of every story.	19.2.4.1 Not less than two exits shall be provided on every story. 19.2.4.2 Not less than two separate exits shall be accessible from every part of every story.	Annual 2008 - ROP	101 - 290	Log # 208	James K. Lathrop, Koffel Associates, Inc.	The Code does not define fire compartment, but it does define fire barrier. Even hazardous areas with 1-hr fire barriers are a fire compartment. By changing this to 2-hrs it will definitely make the Code more consistent as Chapter 7 does this same requirement for horizontal exits.	Accept in Principle	The submitter's language would not prohibit a blank wall from dividing a floor into two sections such that occupants of either section would have access to only one exit although there would be two exits on the floor. The revised 18.2.4.1 and the new 18.2.4.2 use language from the business occupancy chapters to state that in addition to having two exits on the floor, all portions of the floor must have access to both of the required exits. The deletion of 18.2.4.2 and 18.2.4.3 is based on the current provision accomplishing nothing. Paragraph 18.2.4.2 seems to have intended that a fire compartment cannot have all of its exits via horizontal exits but it doesn't achieve that because existing 18.2.4.3 says to combine the noncompliant fire compartment with the adjacent compartment. Given that the health care occupancies chapters have no maximum fire compartment size and no minimum number of fire compartments per floor, nothing is gained by the rule. Existing 18.2.4.3 is being retained as there are requirements for a minimum number of smoke compartments, and other limitations on maximum smoke compartment size. The concept of not having to enter the smoke compartment of fire origin in order to access an exit is important. In existing 18.2.4.1 the words "of the types described in 18.2.2.2 through 18.2.2.10, remotely located from each other" are being deleted as 18.2.2.1 already limits what components can comprise the egress system, and not all the permitted components are capable of serving alone as an exit. The concept of having the exits arranged to be remotely located is well covered in Chapter 7. Similarly in existing 18.2.4.4 the words "of the types described in 18.2.2.2 through 18.2.2.10" are being deleted. The changes being made to Chapter 19 are for correlation with the changes explained above.
17	Means of Egress	19.2.5.2	Provision revised to permit existing dead-end corridors not exceeding that permitted for new construction to remain in use.	19.2.5.2* Dead-End Corridors. Existing dead-end corridors shall be permitted to continue in use if it is impractical and unfeasible to alter them.	19.2.5.2* Dead-End Corridors. Existing dead-end corridors shall be permitted to continue in use if it is impractical and unfeasible to alter them so that exits are accessible in not less than two different directions from all points in corridors.	Annual 2008 - ROP	101 - 318a	Log # CP652	Technical Committee on Health Care Occupancies	An existing dead-end corridor, regardless of length, is permitted to remain in use if it is impractical and unfeasible to alter it. Therefore, if it is practical and feasible to alter an existing deadend corridor, the language of 19.2.5.2 – if strictly applied – has the effect of requiring such alteration even if the dead-end corridor is not in excess of 30 ft (9140 mm). That is not the intent of the provision and users should consider an existing dead-end corridor not in excess of 30 ft (9140 mm) as being Code compliant as such is permitted for new construction by 18.2.5.2. Paragraph A.19.2.5.2 helps to clarify the issue.	Accept	
18	Means of Egress	19.2.5.7.1.2	Provision expanded to require separation from adjacent suites, not just non-suite spaces.	19.2.5.7.1.2* Suite Separation. Suites shall be separated from the remainder of the building, and from other suites, by one of the following: (1) Walls and doors meeting the requirements of 19.3.6.2 through 19.3.6.5 (2) Existing approved barriers and doors that limit the transfer of smoke	19.2.5.6.1.2* Suite Separation. Suites shall be separated from the remainder of the building by one of the following: (1) Walls and doors meeting the requirements of 19.3.6.2 through 19.3.6.5 (2) Existing approved barriers and doors that limit the transfer of smoke.	Annual 2008 - ROP	101 - 295	Log # 213	James K. Lathrop, Koffel Associates, Inc.	During the preparation of the 2006 LSC Seminars, it was pointed out by some of the instructors that this paragraph could be read to allow clustering of suites without any separation. This change should clarify the intent. The Committee may wish to process this as a TIA also.	Accept in Principle	The committee action accomplishes what the submitter requested and adds annex text for clarity.

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19	Suites	19.2.5.7.2.3	New roadmap to steer user to correct subsection depending on whether sleeping suite is for patient care	19.2.5.7.2 Sleeping Suites. Sleeping suites shall be in accordance with the following: (1) Sleeping suites for patient care shall comply with the provisions of 19.2.5.7.2.1 through 19.2.5.7.2.4. (2) Sleeping suites not for patient care shall comply with the provisions of 19.2.5.7.4.	19.2.5.7.2 Sleeping Suites. Sleeping suites shall be in accordance with the following: (1) Sleeping suites for patient care shall comply with the provisions of 19.2.5.7.2.1 through 19.2.5.7.2.4. (2) Sleeping suites not for patient care shall comply with the provisions of 19.2.5.7.4.	Annual 2008 - ROP	101 - 293	Log # 287	Sharon Gilyeat, Koffel Associates, Inc.	Often there are non-patient care suites in a nonseparated mixed use area of a building (health care and assembly for example) where limits for a suite (intended to protect patients) are not necessary. Occupants in these areas should not be regulated by the same conservative egress requirements as health care occupants. These occupants are fully capable of responding to an alarm and exiting from the building as required by their respective occupancy chapter requirements. By clarifying the suite requirements only apply to patient care areas it will allow health care occupants more flexibility in designing laboratories, dining areas, auditoriums, administration areas, etc.	Accept in Principle	The committee action accomplishes what the submitter requested, and adds text for correlation between the provisions for sleeping suites and those for non-sleeping suites. A nonpatient care suite might by of either the sleeping or the non-sleeping variety.
20	Suites	19.2.6.2.1 (Previous Section)	Provisions deleted	Provisions deleted	19.2.6.2.1 The travel distance between any room door required as an exit access and an exit shall not exceed 100 ft (30 m), unless otherwise permitted by 19.2.6.2.2. 19.2.6.2.2 The maximum travel distance specified in 19.2.6.2.1 shall be permitted to be increased by 50 ft (15 m) in buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 19.3.5.6.	Annual 2008 - ROP	101 - 297	Log # 334	Michael A. Crowley, Rolf Jensen & Assoc., Inc	Travel distance from the room door to an exit is not as relevant as travel distance to a smoke barrier. This requirement has been in the Code for a long time with no technical justification. Healthcare has a total travel distance, a travel distance in the sleeping room, travel distance in suites and travel distance to a smoke barrier. There is no relevance for the travel distance from a room door.	Accept	The committee action does what the submitter requested and makes similar changes to Chapter 19 for correlation and consistency.
21	Hazardous Areas	19.3.2.1.5	Items (5) and (6) for soiled linen and collected trash revised to include volume threshold for protection as a hazardous area.	(5) Rooms with soiled linen in volume exceeding 64 gal (242 L) (6) Rooms with collected trash in volume exceeding 64 gal (242 L)	(5) Rooms with soiled linen in volume exceeding 64 gal (242 L) (6) Rooms with collected trash in volume exceeding 64 gal (242 L)	Annual 2008 - ROP	101 - 298	Log # 35	James Everitt, Western Regional Fire Code Development Committee	This option makes the language similar to storage rooms in the same table and provides guidance in determining what constitutes a soiled linen room.	Accept in Principle	The submitter is correct that further guidance is needed on what constitutes a soiled linen collection room which needs to be protected as a hazardous area. The area of the room should not be the deciding factor as space within the room might be taken by sinks and work tables so as to preclude the introduction of much soiled linen. The presence of a single bag of soiled linen does not necessarily constitute a hazardous area. The committee action expresses the volume in gallons based on the precedent of the criteria of 18/19.7.5.7. Changes were also made to the "trash collection room" entry and to Chapter 19 for correlation and consistency.

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment	
22	Hazardous Areas	19.3.2.6	<p>Item (3) is new and recognizes aerosol dispensers</p> <p>Item (5) revised to set maximum quantity for aerosol products</p> <p>Item (7) replaces former requirement that dispensers not be installed over or directly adjacent to an ignition source.</p>	<p>(3) Where aerosol containers are used, the maximum capacity of the aerosol dispenser shall be 18 oz. (0.51 kg) and shall be limited to Level 1 aerosols as defined in NFPA 30B, Code for the Manufacture and Storage of Aerosol Products.</p> <p>(5) Not more than an aggregate 10 gal (37.8 L) of alcohol based hand-rub solution or 1135 oz (32.2 kg) of Level 1 aerosols, or a combination of liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gal (37.8 L) or 1135 oz (32.2 kg,) shall be in use outside of a storage cabinet in a single smoke compartment.</p> <p>(7) Dispensers shall not be installed in the following locations: (a) Above an ignition source for a horizontal distance of 1 in. (25 mm) to each side of the ignition source (b) To the side of an ignition source within a 1 in. (25 mm) horizontal distance from the ignition source (c) Beneath an ignition source within a 1 in. (25 mm) vertical distance from the ignition source</p>		Annual 2008 - ROC	101 - 250	101 - 301a	CP666	William E. Koffel, Koffel Associates, Inc.	<p>introduced this proposal and rejected it to allow time to review the report Alcohol Based Hand Sanitizers prepared by Dave Fredrickson and to incorporate any changes that took place during the debate on the issue at the International Fire Code hearings. The report was provided to the committee and the IFC adopted a similar proposal with an amendment establishing a maximum quantity of combined liquids and aerosols. That amendment is provided in the revision.</p> <p>NFPA 101, Life Safety Code allows limited quantities of alcohol based hand sanitizers in corridors, but not aerosol alcohol hand sanitizers because aerosols were not addressed in the supporting documentation when the provisions were originally adopted (aerosol products make up approximately 33% of the use of alcohol based hand sanitizers). The aerosol industry conducted a study and testing to show that aerosols could also be allowed in the same application. The study was previously distributed. As a result, only Level 1 aerosols are proposed for inclusion in the code. Level 1 aerosols are treated as ordinary combustibles by NFPA 1. The alcohol content is equal to that currently in alcohol liquid or gel hand sanitizers. Testing of the aerosol configuration was done and the results showed that the hazard of level 1 aerosols was less than that of the allowed hand sanitizers and that the aerosol can would not release its contents before the temperatures in the corridor would be untenable.</p> <p>Aerosol based hand sanitizers were first introduced into the hospital market in the early 1970s and have been marketed widely in that market for over 30 years. We have reviewed the fire history of all alcohol hand sanitizers (gel and aerosol) and found that there have been only 3 incidents reported in the public domain in the last 7 years.</p> <p>These were all associated with alcohol based hand rubs in a gel formulation. In addition, the quality tracking system of one of the major manufacturers of alcohol based hand antiseptic products (estimated to provide 30 % of the product used in the US) recorded an additional 5 incidents. None of these involved aerosols and all were minor (confined to the product user, resulting in minor burns to the hands) with the cause of the fires being attributed either to electrostatic discharge, or improper use of the product (user lighting cigarette before hands were dry (3 cases), contact with electrical equipment or gas stove before hands were dry (2 cases)) Based on the limited number of incidents compared to the level of use, the safety profile of these aerosol products has been excellent. It is estimated that 95% or 4,465 out of 4,700 hospitals greater than 100 beds are now using alcohol based hand sanitizers. Aerosol alcohol hand rubs make up approximately 33% of the overall healthcare market, with over 3 million units of this product type used annually. The aerosol alcohol form of these products has shown no greater safety risk than gel based formulations. Furthermore, "Alcohol Hand Rub Solutions have been used, without incident of fire, for over 20 years in hospitals throughout Great Britain, Germany, Switzerland, Austria and Australia. In March 2003, the Infectious Disease Society of America (SHEA) conducted a study of 840 U.S. hospitals with over 95% indicating the ongoing use of alcohol hand rubs with dispensers in rooms and/or corridors ...</p> <p>None of the respondents reported having a fire</p>	Accept	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
23	Extinguishment	19.3.5.2	New provision	19.3.5.2 High-rise buildings shall comply with 19.4.2.	New provision	Annual 2008 - ROP	101 - 322	Log # 257	Peter A. Larrimer, Department of Veterans Affairs	All of the other existing occupancy chapters require sprinkler protection throughout for high rise buildings; existing assembly, existing detention, existing hotels, existing apartment buildings, existing board and care in apartment buildings, existing mercantile, and existing business. The LSC currently requires retroactive sprinkler protection for these high rise occupancies even though the occupants are capable of self-preservation. Health care occupants ought to be afforded the same level of reliable fire protection.	Accept in Principle in Part	The committee realizes that the submitter offered the engineered life safety system so as to make the recommended retroactive high-rise building sprinkler requirement more palatable. However, an engineered life safety system leads to approval of a package of features that is NOT the equivalent of complete sprinkler protection. By adding the 12-year implementation deadline, the new sprinkler requirement is feasible and realistic. The changes to Chapter 18 are editorial to keep the paragraph numbering parallel between Chapter 18 and Chapter 19.
24	Doors	19.3.6.3.7	New provision	19.3.6.3.7 Powered doors that comply with the requirements of 7.2.1.9 shall be considered as complying with the requirements of 19.3.6.3.5 provided the door is equipped with a means for keeping the door closed that is acceptable to the authority having jurisdiction and the device used is capable of keeping the door fully closed if a force of 5 lbf (22N) is applied at the latch edge of a swinging door and applied in any direction to a sliding or folding door.	New provision	Annual 2008 - ROC	101 - 257a	Comment on Proposal 101 - 307	David P. Klein, US Department of Veterans Affairs	Powered doors without latches are commonly used in healthcare facilities. Although these doors do not have latches, their normal position is the closed position and they are typically held closed with sufficient force that latching is not necessary.	Accept in Principle	The action does what the submitter requested; specifically states that the text is to be added to both Chapter 128 and Chapter 19; and clarifies further how the subsequent paragraphs are to be renumbered.

Changes to NFPA 101 - Life Safety Code - Changes affecting FSES for Health Care Facilities

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Multiple Occupancies	18.1.3.3	Change from "health care occupants" to "four or more inpatients" to allow occasional inpatients in non-health care parts of the buildings	18.1.3.3* Sections of health care facilities shall be permitted to be classified as other occupancies, provided that they meet both of the following conditions: (1) They are not intended to provide services simultaneously for four or more inpatients for purposes of housing, treatment, or customary access by inpatients incapable of selfpreservation.	18.1.2.2* Sections of health care facilities shall be permitted to be classified as other occupancies, provided that they meet all of the following conditions: (1) They are not intended to serve health care occupants for purposes of housing, treatment, or customary access by patients incapable of self-preservation. (2) They are separated from areas of health care occupancies by construction having a minimum 2-hour fire resistance rating in accordance with 8.2.1.3. (3) The construction type and supporting construction of the health care occupancy is based on the story on which it is located in the building in accordance with the provisions of 18.1.6 and Table 18.1.6.1. (4) The construction type of the areas of the building enclosing the other occupancies is based on the applicable occupancy chapters of this Code.	Annual 2011 - ROP	101 - 178	Log # 217	Peter A. Larrimer, US Department of Veterans Affairs	Many users interpret Section 18/19.1.2.2 to require facilities that provide "customary access by patients incapable of self preservation" to be classified as healthcare occupancies even when the facility the facility doesn't provide housing for 24 hours. Section 18/19.1.1.1.7 states: "Facilities that do not provide housing on a 24-hour basis for their occupants shall be classified as other occupancies and shall be covered by other chapters of this Code.", but this section appears to conflict that if customary access by only one "health care occupant" that is incapable of self preservation goes routinely into a space. There are situations where inpatients incapable of self preservation are taken to other facilities or sections of separated healthcare facilities, that do not provide housing on a 24 hour basis, but the facility is not used for housing on a 24 hour basis. Are these healthcare occupancies, ambulatory healthcare occupancies, or other occupancies based on the criteria in this section? The change would mandate compliance with healthcare occupancy rules when four or more "inpatients" (not just healthcare occupants) that are incapable of self preservation routinely go into a facility or section that does not provide housing on a 24 hour basis. Coordination with section 18/19.1.1.1.7 is needed to establish occupancy type when an incapable inpatient goes to facility or section of a facility that doesn't provided 24 hour housing. I offer the following alternate annex note in an attempt to clarify the criteria.	Accept in Principle	The committee action does what the submitter and additionally makes editorial corrections and clarifications.
2	Construction	18.1.6.3	NFPA 256 was withdrawn and is no longer published. ASTM E 108 and ANSI/UL 790 are the applicable test standards	18.1.6.3 Any building of Type I(442), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that all of the following criteria are met: (1) The roof covering shall meet Class A requirements in accordance with ASTM E 108, Standard Test Methods for Fire Tests of Roof Coverings, or ANSI/UL 790, Test Methods for Fire Tests of Roof Coverings.	18.1.6.3 Any building of Type I(442), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that the following criteria are met: (1) The roof covering shall meet Class A requirements in accordance with NFPA 256, Standard Methods of Fire Tests of Roof Coverings.	Annual 2011 - ROC	101 - 182	Comment on Proposal 101 - 10	Technical Committee on Fundamentals	NFPA 256 was withdrawn and is no longer published. ASTM E 108 and ANSI/UL 790 are the applicable test standards.	Accept	
3	Construction	18.1.6.2	New provision added for interstitial spaces	(3) Interstitial spaces used solely for building or process systems directly related to the level above or below are not considered a separate story.	New provision							

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment	
4	Means of Egress	18.2.3.4	Provisions added	<p>(5)*Where the corridor width is at least 8 ft (2440 mm), projections into the required width shall be permitted for fixed furniture, provided that all of the following conditions are met:</p> <p>(a) The fixed furniture is securely attached to the floor or to the wall.</p> <p>(b) The fixed furniture does not reduce the clear unobstructed corridor width to less than 6 ft (1830 mm), except as permitted by 18.2.3.4(2).</p> <p>(c) The fixed furniture is located only on one side of the corridor.</p> <p>(d) The fixed furniture is grouped such that each grouping does not exceed an area of 50 ft² (4.6 m²).</p> <p>(e) The fixed furniture groupings addressed in 18.2.3.4(5)(d) are separated from each other by a distance of at least 10 ft (3050 mm).</p> <p>(f)*The fixed furniture is located so as to not obstruct access to building service and fire protection equipment.</p> <p>(g) Corridors throughout the smoke compartment are protected by an electrically supervised automatic smoke detection system in accordance with 18.3.4, or the fixed furniture spaces are arranged and located to allow direct supervision by the facility staff from a nurses' station or similar space.</p> <p>(6)*Cross-corridor door openings in corridors with a required minimum width of 8 ft (2440 mm) shall have a clear width of not less than 6 ft 11 in. (2110 mm) for pairs of doors or a clear width of not less than 41 1/2 in. (1055 mm) for a single door.</p>	New provision	Annual 2011 - ROC	101 - 189a	Comment on Proposal 101 - 265a	Log # CC650	Technical Committee on Health Care Occupancies	<p>Technical Changes observed previously in 101 - 265 to:</p> <p>Some items can be safely accommodated within a minimum 8-ft wide corridor.</p> <p>This comment makes NO TECHNICAL CHANGES. It editorially combines the changes from the Committee Actions on other comments so as to present a draft of how 18.2.3.4, 18.2.3.5 and 19.2.3.5 will read. SAF-HEA Technical Committee members are cautioned to address all technical balloting issues on the comment that makes the technical change (i.e., Comments 101-188, 101-189, 101-190 or 101-193). This comment is editorial in nature only.</p>	Accept in Principle	
5	Suites	18.2.5.7.2.1	Provisions added	<p>18.2.5.7.2.1 Sleeping Suite Arrangement.</p> <p>(A)* Occupants of habitable rooms within sleeping suites shall have exit access to a corridor complying with 18.3.6, or to a horizontal exit, directly from the suite.</p> <p>(B) Where two or more exit access doors are required from the suite by 18.2.5.5.1, one of the exit access doors shall be permitted to be directly to an exit stair, exit passageway, or exit door to the exterior.</p>	Provisions added	Annual 2011 - ROP	101 - 269a	Log # CP669	Technical Committee on Health Care Occupancies	The requirements should be based upon the time needed for safely relocating patients from the suite and/or the protection needed for patients in the suite should they remain in place. This can be provided by either increasing the barrier protection (if they are to remain in place) or to rely on a reasonable travel distance requirement plus ensuring adequate width for any door opening and "aisle". This proposal uses 100 feet from the most remote portion of the suite to the nearest exit access door from the suite versus the 50 feet requirement.	Accept		
6	Suites	18.2.5.7.2.3	Maximum allowable suite size is enlarged	<p>18.2.5.7.2.3 Sleeping Suite Maximum Size.</p> <p>(A) Reserved.</p> <p>(B) Sleeping suites shall not exceed 7500 ft² (700 m²), unless otherwise provided in 18.2.5.7.2.3(C).</p> <p>(C) Sleeping suites greater than 7500 ft² (700 m²) and not exceeding 10,000 ft² (930 m²) shall be permitted where both of the following are provided in the suite:</p> <p>(1)*Direct visual supervision in accordance with 18.2.5.7.2.1(D)(1)(a)</p> <p>(2) Total coverage (complete) automatic smoke detection in accordance with 9.6.2.9 and 18.3.4</p>	<p>18.2.5.7.2.3 Sleeping Suite Maximum Size.</p> <p>(A) Sleeping suites shall not exceed 5000 ft² (460 m²), unless otherwise provided in 18.2.5.7.2.3(B).</p> <p>(B) Sleeping suites greater than 5000 ft² (460 m²) and not exceeding 7500 ft² (700 m²) shall be permitted where both of the following are provided in the suite:</p> <p>(1)*Direct visual supervision in accordance with 18.2.5.7.2.1(C)(1)(a)</p> <p>(2) Total coverage (complete) automatic smoke detection in accordance with 9.6.2.9 and 18.3.4</p>	Annual 2011 - ROP	101 - 271	Log # 250	Frank L. Van Overmeiren, FP&C Consultants, Inc.	The 5000 ft ² sleeping suite maximum size limitation existed for over 30 years prior to the 2006 edition. No means of automatic sprinkler protection or automatic smoke detection was required. Additional credit to increase suite size should be given when one or both of these fire protection and life safety features are provided.	Accept in Principle in Part	maximum allowable suite size as recommended by the submitter. The action makes similar changes to Chapter 19 so that once a suite becomes "existing" its size will continue to be recognized as being code-compliant. The committee action does not relax the smoke detection requirement as the submitter has not substantiated such change.	

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
7	Cooking Facilities	18.3.2.5.3	Provisions added for culture changes	<p>18.3.2.5.3* Within a smoke compartment, where residential or commercial cooking equipment is used to prepare meals for 30 or fewer persons, one cooking facility shall be permitted to be open to the corridor, provided that all of the following conditions are met:</p> <p>(1) The portion of the health care facility served by the cooking facility is limited to 30 beds and is separated from other portions of the health care facility by a smoke barrier constructed in accordance with 18.3.7.3, 18.3.7.6, and 18.3.7.8.</p> <p>(2) The cooktop or range is equipped with a range hood of a width at least equal to the width of the cooking surface, with grease baffles or other grease-collecting and cleanout capability.</p> <p>(3)*The hood systems have a minimum airflow of 500 cfm (14,000 L/min).</p> <p>(4) The hood systems that are not ducted to the exterior additionally have a charcoal filter to remove smoke and odor.</p> <p>(5) The cooktop or range complies with all of the following:</p> <p>(a) The cooktop or range is protected with a fire suppression system listed in accordance with UL 300, Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment, or is tested and meets all requirements of UL 300A, Extinguishing System Units for Residential Range Top Cooking Surfaces, in accordance with the applicable testing document's scope.</p> <p>(b) A manual release of the extinguishing system is provided in accordance with NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, Section 10.5.</p> <p>(c) An interlock is provided to turn off all sources of fuel and electrical power to the cooktop or range when the suppression system is activated.</p> <p>(6)*The use of solid fuel for cooking is prohibited.</p> <p>(7)*Deep-fat frying is prohibited</p> <p>(8) Portable fire extinguishers in accordance with NFPA 96 are located in all kitchen areas.</p> <p>(9)*A switch meeting all of the following is provided:</p> <p>(a) A locked switch, or a switch located in a restricted location, is provided within the cooking facility that deactivates the cooktop or range.</p> <p>(b) The switch is used to deactivate the cooktop or range whenever the kitchen is not under staff supervision.</p> <p>(c) The switch is on a timer, not exceeding a 120-minute capacity, that automatically deactivates the cooktop or range, independent of staff action.</p> <p>(10) Procedures for the use, inspection, testing, and maintenance of the cooking equipment are in accordance with Chapter 11 of NFPA 96 and the manufacturer's instructions and are followed.</p> <p>(11)*Not less than two AC-powered photoelectric smoke alarms, interconnected in accordance with 9.6.2.10.3, equipped with a silence feature, and in accordance with NFPA 72, National Fire Alarm and Signaling Code, are located not closer than 20 ft (6.1 m) from the cooktop or range.</p> <p>(12) No smoke detector is located less than 20 ft (6.1 m) from the cooktop or range.</p>		Annual 2011 - ROC	101 - 208 Comment on Proposal 101 - 277	Log # 118	Amy Carpenter, Rep. Pioneer Network and National Long-term Care Life Safety Task Force	This comment was generated on behalf of the Pioneer Network with assistance from a Task Group of the Technical Committee on Health Care Occupancies consisting of the following individuals: Bonnie Kantor (Chair), Tom Jaeger, Peter Larrimer, Dan O'Connor and Amy Carpenter. Section 18.3.6.1 was added for correlation. Section 19.3.6.1 was also added for correlation but the last three section numbers were changed to keep consistent numbering between chapters.	Accept in Principle	The Committee Action does what the submitter requested but editorially reformats the material for clarity. Other changes were made by the Committee with the concurrence of the submitter who was present for the ROC meeting. Such changes are for fine-tuning and completeness.

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8	Hazardous	18.3.2.6	Item (6) is new Item (11) added to address automatic dispensers and make clear that they are permitted.	(6) One dispenser complying with 18.3.2.6(2) or (3) per room and located in that room shall not be included in the aggregated quantity addressed in 18.3.2.6(5). (11) Operation of the dispenser shall comply with the following criteria: (a) The dispenser shall not release its contents except when the dispenser is activated, either manually or automatically by touch-free activation. (b) Any activation of the dispenser shall occur only when an object is placed within 4 in. (100 mm) of the sensing device. (c) An object placed within the activation zone and left in place shall not cause more than one activation. (d) The dispenser shall not dispense more solution than the amount required for hand hygiene consistent with label instructions. (e) The dispenser shall be designed, constructed, and operated in a manner that ensures that accidental or malicious activation of the dispensing device is minimized. (f) The dispenser shall be tested in accordance with the manufacturer's care and use instructions each time a new refill is installed.		Annual 2011 - ROC	101 - 211a	Log # CC655	Technical Committee on Health Care Occupancies	Correlation with a similar change made by the SAF-FIR fire protection features committee on the new 8.7.3.3 being added by ROP Proposal 101-193a which was prepared and submitted by the SAF-HEA health care occupancies committee.	Accept	
9	Extinguishment	18.3.5.10	New provision	18.3.5.10* Sprinklers shall not be required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 ft2 (0.55 m2), provided that 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, Standard for the Installation of Sprinkler Systems.		Annual 2011 - ROC	101 - 217	Log # 100	David P. Klein, U.S. Dept. of Veterans Affairs	This proposal was developed by the NFPA 99 / NFPA 13 Intercommittee Task Group on Sprinkler Protection. This proposed exception is based on the limited amount of combustibles (i.e., clothing) typically found in hospital patient room closets. In many of today's hospitals, it is difficult to differentiate between clothes closets and cabinet work. Many closets are smaller in volume than nearby cabinet work or casework which is not required to be protected by sprinklers. Nurse servers, which are as large in cubic footage and typically contain significantly more combustibles, are not required to be protected by sprinklers (see 8.1.1(7) of NFPA 13). This new exception is limited to hospitals as it is the opinion of the Task Group that nursing homes and many limited care facilities may have more combustibles in the closet. The 6 ft2 maximum area is based on a very informal survey of hospitals which showed that this number is a reasonable upper limit for hospitals. In NFPA 101, hotels are currently allowed 24 ft2 and apartment buildings are allowed 12 ft2. The amount of clothing in a hospital closet is far less than in an apartment closet and depending on the occupant of the hotel room probably less than most hotel rooms. The requirement in these other occupancies that the least dimension not exceed 3 feet is not needed due the limited size being proposed. The limitation on non-combustible or limited combustible in these other occupancies will not work as many new closets are constructed like built-in cabinets and therefore have wood inside. NFPA 13 specifically exempts wood wardrobes which could easily be 12 ft2 and full of clothes (see 8.1.1(7)), yet the closets often found in hospitals are essentially built-in wardrobes, therefore since this comment presents a far safer arrangement, it should be permitted. It should be noted that the overall water supply demand for the sprinkler system will not be impacted by this - see 22.4.4.6.2 of NFPA 13 -2007.	Accept in Principle	The Committee Action does what the submitter requested but shows the text for Chapter 18 separate from that for Chapter 19 and performs edits for compliance with the Manual of Style.

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
10	Doors	18.3.6.3.9	New allowance for roller latches	18.3.6.3.9 Roller Latches. 18.3.6.3.9.1 Roller latches shall be prohibited, except as permitted by 18.3.6.3.9.2 18.3.6.3.9.2 Roller latches shall be permitted for acute psychiatric settings where patient special clinical needs require specialized protective measures for their safety, provided that the roller latches are capable of keeping the door fully closed if a force of 5 lbf (22 N) is applied at the latch edge of the door.	18.3.6.3.9 Roller latches shall be prohibited.	Annual 2011 - ROP	101 - 288	Log # 371	Peter A. Larrimer, US Department of Veterans Affairs	The change would allow roller latches to be used only in acute psychiatric areas. Roller latches allow the door to be operated by being pushed or pulled without other door hardware (handles) allowing the clinicians to have a safer clinical environment while maintaining a fire safe environment.	Accept in Principle	The committee action does what the submitter requested and the committee notes that a similar change is not needed in 19.3.5.3.5 as its subitems (1) and (2) already permit for existing roller latches in sprinklered buildings if the 5 pound force requirement is met.
11	Smoke Barrier	18.3.7.2	Item (4) is new.	(4) Stories located directly below a health care occupancy where such stories house mechanical equipment only and are separated from the story above by 2-hour fire resistance-rated construction	New sub-item							
12	Fireplaces	18.5.2.3	Criteria for fireplace use expanded with new provisions in (2) and (3)	(2) Direct-vent gas fireplaces, as defined in NFPA 54, National Fuel Gas Code, shall be permitted inside of smoke compartments containing patient sleeping areas, provided that all of the following criteria are met: (a) All such devices shall be installed, maintained, and used in accordance with 9.2.2. (b) No such device shall be located inside of a patient sleeping room. (c) The smoke compartment in which the direct-vent gas fireplace is located shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1) with listed quickresponse or listed residential sprinklers. (d)*The direct-vent fireplace shall include a sealed glass front with a wire mesh panel or screen. (e)*The controls for the direct-vent gas fireplace shall be locked or located in a restricted location. (f) Electrically supervised carbon monoxide detection in accordance with Section 9.8 shall be provided in the room where the fireplace is located. (3) Solid fuel-burning fireplaces shall be permitted and used only in areas other than patient sleeping areas, provided that all of the following criteria are met: (a) Such areas are separated from patient sleeping spaces by construction having not less than a 1-hour fire resistance rating. (b) The fireplace complies with the provisions of 9.2.2. (c) The fireplace is equipped with both of the following: i. Hearth raised not less than 4 in. (100 mm) ii. Fireplace enclosure guaranteed against breakage up to a temperature of 650°F (343°C) and constructed of heat-tempered glass or other approved material (d) Electrically supervised carbon monoxide detection in accordance with Section 9.8 is provided in the room where the fireplace is located	New provisions	Annual 2011 - ROC	101 - 228	Comment on Proposal 101 - 293	Bonnie Kantor, Pioneer Network	This comment was generated on behalf of the Pioneer Network with assistance from a Task Group of the Technical Committee on Health Care Occupancies consisting of the following individuals: Skip Gregory (chair), George Stevens, Pete Larrimer and Gary Furdell. This comment revises the original proposal by relocating it to a new section under 18 & 19.5.2.3, and adding additional safety requirements. These additional safety requirements include the use of only a "direct vent fireplace" that takes all combustion air from outdoors and meets all the requirements of NFPA 54, the installation of a wire mesh or screen over the sealed glass front to protect patients and residents from accidental burns, the requirement to restrict the fireplace controls for staff use only, and the requirement for sprinklering the smoke compartment in which the device is located with QRS or residential sprinklers. With these added safety requirements, the use of a direct vent gas fireplace inside the smoke compartment of patient/resident sleeping rooms will provide ample safety features for this device, while enhancing the environment to increase its home like atmosphere.	Accept in Principle	The Committee Action does what the submitter requested but additionally requires carbon monoxide detection in the room where the fireplace is present in order to complete the protection package to assure occupant safety.
13	Furnishings, Bedding, and Decorations	18.7.5.1	Item (4) is new	(4) Such draperies and curtains shall not include draperies and curtains in other rooms or areas where the draperies and curtains comply with both of the following: (a) Individual drapery or curtain panel area does not exceed 48 ft2 (4.5 m2) (b) Total area of drapery and curtain panels per room or area does not exceed 20 percent of the aggregate area of the wall on which they are located	New provision	Annual 2011 - ROC	101 - 231	Comment on Proposal 101 - 302	Log # 156 Thomas W. Jaeger, Jaeger and Associates, LLC / Rep. American Health Care Association	This comment is being submitted to respond to the Committee Statement that the proposal did not set limits for draperies and curtains in other areas and rooms other than sleeping rooms.	Accept in Principle	The text, as revised by the Committee Action, accomplishes what the submitter requested.

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14	Combustible Decorations	18.7.5.6	Expanded original exception to include amounts for permitted decorations Items (2) and (3) are new.	<p>18.7.5.6 Combustible decorations shall be prohibited in any health care occupancy, unless one of the following criteria is met:</p> <p>(1) They are flame-retardant or are treated with approved fire-retardant coating that is listed and labeled for application to the material to which it is applied.</p> <p>(2) The decorations meet the requirements of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.</p> <p>(3) The decorations exhibit a heat release rate not exceeding 100 kW when tested in accordance with NFPA 289, Standard Method of Fire Test for Individual Fuel Packages, using the 20 kW ignition source.</p> <p>(4)*The decorations, such as photographs, paintings, and other art, are attached directly to the walls, ceiling, and non-fire-rated doors in accordance with the following:</p> <p>(a) Decorations on non-fire-rated doors do not interfere with the operation or any required latching of the door and do not exceed the area limitations of 18.7.5.6(b), (c), or (d).</p> <p>(b) Decorations do not exceed 20 percent of the wall, ceiling, and door areas inside any room or space of a smoke compartment that is not protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.</p> <p>(c) Decorations do not exceed 30 percent of the wall, ceiling, and door areas inside any room or space of a smoke compartment that is protected throughout by an approved supervised automatic sprinkler system in accordance with Section 9.7.</p> <p>(d) Decorations do not exceed 50 percent of the wall, ceiling, and door areas inside patient sleeping rooms having a capacity not exceeding four persons, in a smoke compartment that is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.</p>	<p>18.7.5.6 Combustible decorations shall be prohibited in any health care occupancy, unless one of the following criteria is met:</p> <p>(1) They are flame-retardant.</p> <p>(2)*They are decorations, such as photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present.</p>	Annual 2011 - ROC	101 - 235	Comment on Proposal 101 - 305	Log # 119	Amy Carpenter, Rep. Pioneer Network and National Long-term Care Life Safety Task Force	<p>Revisions to above text were based on Committee concerns and feedback. Much of the substantive information remains the same as the prior proposals. Bonnie Kantor was involved in the drafting of this comment.</p> <p>While a great number of long-term facilities already allow personal and seasonal decorations to be hung from the walls, ceilings and doors, there has not been a consistent means of regulating or permitting this to occur without incurring a citation. It is not practical or feasible to require listed, tested flammability statistics on all decorations that are introduced to the facility. The limitations given in this proposal are in line with what is already permitted in day care centers. Specific changes include the clarification that decorations may not interfere with operation of life safety equipment, and reordering of the limitations for better flow. In addition, a statement about specifically when decorations may be permitted inside of stair towers - a movement that we are seeing in many healthcare settings to encourage more physical fitness among staff and visitors.</p> <p>This was a suggested addition by the SAF-HEA committee.</p> <p>Chapter 19 numbering was changed in order to match numbers of Chapter 18 yet retain language that would allow existing conditions to remain and not make the Code more stringent.</p>	Accept in Part	The Committee Action accepts all of what the submitter recommended except the allowance for decorations to be installed inside exit stair enclosures. The exit enclosure is required to be an area that is sterile with respect to combustibles. If exit stair enclosures need to be decorated, murals can be painted on walls so as not to increase the combustible loading. The action also edits the material for compliance with Manual of Style so that the numbered subitems of 18/19.7.5.6 are parallel in construction.
15	Soiled Linen and Trash	18.7.5.7.2	New provision	<p>18.7.5.7.2* Containers used solely for recycling clean waste or for patient records awaiting destruction shall be permitted to be excluded from the requirements of 18.7.5.7.1 where all the following conditions are met:</p> <p>(1) Each container shall be limited to a maximum capacity of 96 gal (363 L), except as permitted by 18.7.5.7.2(2) or (3).</p> <p>(2)*Containers with capacities greater than 96 gal (363 L) shall be located in a room protected as a hazardous area when not attended.</p> <p>(3) Container size shall not be limited in hazardous areas.</p> <p>(4) Containers for combustibles shall be labeled and listed as meeting the requirements of FMApapproval Standard 6921, Containers for Combustible Waste; however, such testing, listing, and labeling shall not be limited to FM Approvals.</p>	<p>18.7.5.7.2* Containers used solely for recycling clean waste or for patient records awaiting destruction shall be permitted to be excluded from the requirements of 18.7.5.7.1 where all the following conditions are met:</p> <p>(1) Each container shall be limited to a maximum capacity of 96 gal (363 L), except as permitted by 18.7.5.7.2(2) or (3).</p> <p>(2)*Containers with capacities greater than 96 gal (363 L) shall be located in a room protected as a hazardous area when not attended.</p> <p>(3) Container size shall not be limited in hazardous areas.</p> <p>(4) Containers for combustibles shall be labeled and listed as meeting the requirements of FMApapproval Standard 6921, Containers for Combustible Waste; however, such testing, listing, and labeling shall not be limited to FM Approvals.</p>	Annual 2011 - ROC	101 - 237	Comment on Proposal 101 - 305a	Log # 137	James K. Lathrop, Koffel Associates, Inc. / Rep. Loss Prevention	<p>Current wording is very problematic for "HIPPA" containers which tend to be over the 32 gallon limit. Also with several different types of recycling containers adjacent to each other (glass, cans, paper, etc) the 32 gallon per 64 sq ft rule affects recycling efforts. This is basically "clean" waste and does not contain materials that spontaneously combust. This is similar to the different way the code addresses clean linen and soiled linen. The FM 6921 standard assures that a fire in the container will be contained where it is intended that the container contain combustibles. This cannot be used for soiled linen and general trash.</p>	Accept in Principle	The Committee Action does what the submitter but with revised wording that the submitter worked with the committee to draft at the ROC meeting.

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16	Construction	19.1.6.2	NFPA 256 was withdrawn and is no longer published. ASTM E 108 and ANSI/UL 790 are the applicable test standards	19.1.6.2* Any building of Type I(442), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that all of the following criteria are met: (1) The roof covering shall meet Class C requirements in accordance with ASTM E 108, Standard Test Methods for Fire Tests of Roof Coverings, or ANSI/UL 790, Test Methods for Fire Tests of Roof Coverings.	19.1.6.2* Any building of Type I(442), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that the following criteria are met: (1) The roof covering shall meet Class C requirements in accordance with NFPA 256, Standard Methods of Fire Tests of Roof Coverings.	Annual 2011 - ROC	101 - 182	Comment on Proposal 101 - 10 Log # CC2	Technical Committee on Fundamentals	NFPA 256 was withdrawn and is no longer published. ASTM E 108 and ANSI/UL 790 are the applicable test standards.	Accept	
17	Construction	19.1.6.3	NFPA 256 was withdrawn and is no longer published. ASTM E 108 and ANSI/UL 790 are the applicable test standards	19.1.6.3 Any building of Type I(442), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that all of the following criteria are met: (1) The roof covering shall meet Class A requirements in accordance with ASTM E 108, Standard Test Methods for Fire Tests of Roof Coverings, or ANSI/UL 790, Test Methods for Fire Tests of Roof Coverings.	19.1.6.3 Any building of Type I(442), Type I(332), Type II(222), or Type II(111) construction shall be permitted to include roofing systems involving combustible supports, decking, or roofing, provided that the following criteria are met: (1) The roof covering shall meet Class A requirements in accordance with NFPA 256, Standard Methods of Fire Tests of Roof Coverings.	Annual 2011 - ROC	101 - 182	Comment on Proposal 101 - 10 Log # CC2	Technical Committee on Fundamentals	NFPA 256 was withdrawn and is no longer published. ASTM E 108 and ANSI/UL 790 are the applicable test standards.	Accept	
18	Suite	19.2.5.7.2.3	Maximum allowable suite size is enlarged	19.2.5.7.2.3 Sleeping Suite Maximum Size. (A) Sleeping suites shall not exceed 5000 ft ² (460 m ²), unless otherwise provided in 19.2.5.7.2.3(B) or 19.2.5.7.2.3(C). (B) Sleeping suites shall not exceed 7500 ft ² (700 m ²) where the smoke compartment is protected throughout by one of the following: (1) Approved electrically supervised sprinkler system in accordance with 19.3.5.7 and total coverage (complete) automatic smoke detection in accordance with 9.6.2.9 and 19.3.4 (2) Approved electrically supervised sprinkler system protection complying with 19.3.5.8 (C) Sleeping suites greater than 7500 ft ² (700 m ²), and not exceeding 10,000 ft ² (930 m ²), shall be permitted where all of the following are provided in the suite: (1)*Direct visual supervision in accordance with 19.2.5.7.2.1(D)(1)(a) (2) Total coverage (complete) automatic smoke detection in accordance with 9.6.2.9 and 19.3.4 (3) Approved electrically supervised sprinkler system protection complying with 19.3.5.8	19.2.5.7.2.3 Sleeping Suite Maximum Size. (A) Sleeping suites shall not exceed 5000 ft ² (460 m ²), unless otherwise provided in 19.2.5.7.2.3(B). (B) Sleeping suites greater than 5000 ft ² (460 m ²) and not exceeding 7500 ft ² (700 m ²) shall be permitted where all of the following are provided in the suite: (1)*Direct visual supervision in accordance with 19.2.5.7.2.1(C)(1)(a) (2) Total coverage (complete) automatic smoke detection in accordance with 9.6.2.9 and 19.3.4 (3) Approved, electrically supervised sprinkler system protection complying with 19.3.5.7	Annual 2011 - ROP	101 - 271	Log # 250	Frank L. Van Overmeiren, FP&C Consultants, Inc.	The 5000 ft ² sleeping suite maximum size limitation existed for over 30 years prior to the 2006 edition. No means of automatic sprinkler protection or automatic smoke detection was required. Additional credit to increase suite size should be given when one or both of these fire protection and life safety features are provided.	Accept in Principle in Part	The committee action changes the maximum allowable suite size as recommended by the submitter. The action makes similar changes to Chapter 19 so that once a suite becomes "existing" its size will continue to be recognized as being code-compliant. The committee action does not relax the smoke detection requirement as the submitter has not substantiated such change. See also Proposal 101-309.
19	Means of Egress - Suite	19.2.6.2.2 (Previous Code Section)	Provision deleted	Provision deleted	19.2.6.2.1 The travel distance between any point in a room and an exit shall not exceed 150 ft (46 m), unless otherwise permitted by 19.2.6.2.2.							
20	Protection from Hazards	19.3.2.2 19.3.2.3 19.3.2.4	Corrects the referenced portions of NFPA 99 to those that are applicable to existing systems	19.3.2.2* Laboratories. Laboratories employing quantities of flammable, combustible, or hazardous materials that are considered as a severe hazard shall be in accordance with Section 8.7 and the provisions of NFPA 99, Health Care Facilities Code, applicable to administration, maintenance, and testing. 19.3.2.3 Anesthetizing Locations. Anesthetizing locations shall be in accordance with Section 8.7 and the provisions of NFPA 99, Health Care Facilities Code, applicable to administration, maintenance, and testing. 19.3.2.4 Medical Gas. Medical gas storage and administration areas shall be in accordance with Section 8.7 and the provisions of NFPA 99, Health Care Facilities Code, applicable to administration, maintenance, and testing.	19.3.2.2* Laboratories. Laboratories employing quantities of flammable, combustible, or hazardous materials that are considered as a severe hazard shall be protected in accordance with NFPA 99, Standard for Health Care Facilities. 19.3.2.3 Anesthetizing Locations. Anesthetizing locations shall be protected in accordance with NFPA 99, Standard for Health Care Facilities. 19.3.2.4 Medical Gas. Medical gas storage and administration areas shall be protected in accordance with NFPA 99, Standard for Health Care Facilities.	Annual 2011 - ROP	101 - 311	Log # 144	Chad E. Beebe, Washington State Department of Health	Delete this entire paragraph. NFPA 99 does not apply to existing construction other than for maintenance. This section implies that all existing facilities have to comply with the current requirements of NFPA 99 which is impractical and unfeasible. An installed system should only be required to meet the requirements of the edition of NFPA 99 that was enforced at the time of its design/installation.	Accept in Principle	The committee action corrects the referenced portions of NFPA 99 to those that are applicable to existing systems.

2012 - NFPA 101

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment	
20	Cooking Facilities	19.3.2.5.3	Provisions added for culture changes	<p>accordance with Chapter 11 of NFPA 96 and the manufacturer's instructions and are followed.</p> <p>(11)*Not less than two AC-powered photoelectric smoke alarms, interconnected in accordance with 9.6.2.10.3, equipped with a silence feature, and in accordance with NFPA 72, National Fire Alarm and Signaling Code, are located not closer than 20 ft (6.1 m) from the cooktop or range.</p> <p>(12) No smoke detector is located less than 20 ft (6.1 m) from the cooktop or range.</p> <p>(13) The smoke compartment is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.</p> <p>19.3.2.5.4* Within a smoke compartment, residential or commercial cooking equipment that is used to prepare meals for 30 or fewer persons shall be permitted, provided that the cooking facility complies with all of the following conditions:</p> <p>(1) The space containing the cooking equipment is not a sleeping room.</p> <p>(2) The space containing the cooking equipment shall be separated from the corridor by partitions complying with 19.3.6.2 through 19.3.6.5.</p> <p>(3) The requirements of 19.3.2.5.3(1) through (10) and (13) are met.</p> <p>19.3.2.5.5* Where cooking facilities are protected in accordance with 9.2.3, the presence of the cooking equipment shall not cause the room or space housing the equipment to be classified as a hazardous area with respect to the requirements of 19.3.2.1, and the room or space shall not be permitted to be open to the corridor.</p>		Annual 2011 - ROC	101 - 208	Comment on Proposal 101 - 277	Log # 118	Amy Carpenter, Rep. Pioneer Network and National Long-term Care Life Safety Task Force	<p>This comment was generated on behalf of the Pioneer Network with assistance from a Task Group of the Technical Committee on Health Care Occupancies consisting of the following individuals: Bonnie Kantor (Chair), Tom Jaeger, Peter Larrimer, Dan O'Connor and Amy Carpenter.</p> <p>Section 18.3.6.1 was added for correlation. Section 19.3.6.1 was also added for correlation but the last three section numbers were changed to keep consistent numbering between chapters.</p>	Accept in Principle	The Committee Action does what the submitter requested but editorially reformats the material for clarity. Other changes were made by the Committee with the concurrence of the submitter who was present for the ROC meeting. Such changes are for fine-tuning and completeness,
21	Extinguishment	19.3.5.7	Provisions added to ensure system meets NFPA 13, 13D, or 13R	<p>19.3.5.7* Where this Code permits exceptions for fully sprinklered buildings or smoke compartments, the sprinkler system shall meet all of the following criteria:</p> <p>(1) It shall be in accordance with Section 9.7.</p> <p>(2) It shall be installed in accordance with 9.7.1.1(1), unless it is an approved existing system.</p> <p>(3) It shall be electrically connected to the fire alarm system.</p> <p>(4) It shall be fully supervised.</p> <p>(5) In Type I and Type II construction, where the authority having jurisdiction has prohibited sprinklers, approved alternative protection measures shall be permitted to be substituted for sprinkler protection in specified areas without causing a building to be classified as nonsprinklered.</p>						Not marked as a change			

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
22	Extinguishment	19.3.5.10	Provision added	19.3.5.10* Sprinklers shall not be required in clothes closets of patient sleeping rooms in hospitals where the area of the closet does not exceed 6 ft2 (0.55 m2), provided that 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, Standard for the Installation of Sprinkler Systems.	Provision added	Annual 2011 - ROC	101 - 217	Log # 100	David P. Klein, U.S. Dept. of Veterans Affairs	<p>This proposal was developed by the NFPA 99 / NFPA 13 Intercommittee Task Group on Sprinkler Protection. This proposed exception is based on the limited amount of combustibles (i.e., clothing) typically found in hospital patient room closets. In many of today's hospitals, it is difficult to differentiate between clothes closets and cabinet work. Many closets are smaller in volume than nearby cabinet work or casework which is not required to be protected by sprinklers. Nurse servers, which are as large in cubic footage and typically contain significantly more combustibles, are not required to be protected by sprinklers (see 8.1.1(7) of NFPA 13). This new exception is limited to hospitals as it is the opinion of the Task Group that nursing homes and many limited care facilities may have more combustibles in the closet. The 6 ft2 maximum area is based on a very informal survey of hospitals which showed that this number is a reasonable upper limit for hospitals. In NFPA 101, hotels are currently allowed 24 ft2 and apartment buildings are allowed 12 ft2.</p> <p>The amount of clothing in a hospital closet is far less than in an apartment closet and depending on the occupant of the hotel room probably less than most hotel rooms. The requirement in these other occupancies that the least dimension not exceed 3 feet is not needed due the limited size being proposed.</p> <p>The limitation on non-combustible or limited combustible in these other occupancies will not work as many new closets are constructed like built-in cabinets and therefore have wood inside. NFPA 13 specifically exempts wood wardrobes which could easily be 12 ft2 and full of clothes (see 8.1.1(7)), yet the closets often found in hospitals are essentially built-in-wardrobes, therefore since this comment presents a far safer arrangement, it should be permitted. It should be noted that the overall water supply demand for the sprinkler system will not be impacted by this – see 22.4.4.6.2 of NFPA 13 -2007.</p>	Accept in Principle	The Committee Action does what the submitter requested but shows the text for Chapter 18 separate from that for Chapter 19 and performs edits for compliance with the Manual of Style.
23	Openings	A19.3.6.5.1	New annex clarifies the intent of the code that slots are not permitted in hazardous areas	A.19.3.6.5.1 It is not the intent of 19.3.6.5.1 to permit mail slots or pass-through openings in doors or walls of rooms designated as a hazardous area.	Annex section added							

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
24	Fireplaces	19.5.2.3	Criteria for fireplace use expanded with new provisions in (2) and (3)	<p>(2) Direct-vent gas fireplaces, as defined in NFPA 54, National Fuel Gas Code, shall be permitted inside of smoke compartments containing patient sleeping areas, provided that all of the following criteria are met:</p> <p>(a) All such devices shall be installed, maintained, and used in accordance with 9.2.2.</p> <p>(b) No such device shall be located inside of a patient sleeping room.</p> <p>(c) The smoke compartment in which the direct-vent gas fireplace is located shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1) with listed quick response or listed residential sprinklers.</p> <p>(d)*The direct-vent fireplace shall include a sealed glass front with a wire mesh panel or screen.</p> <p>(e)*The controls for the direct-vent gas fireplace shall be locked or located in a restricted location.</p> <p>(f) Electrically supervised carbon monoxide detection in accordance with Section 9.8 shall be provided in the room where the fireplace is located.</p> <p>(3) Solid fuel-burning fireplaces shall be permitted and used only in areas other than patient sleeping areas, provided that all of the following criteria are met:</p> <p>(a) Such areas are separated from patient sleeping spaces by construction having not less than a 1-hour fire resistance rating.</p> <p>(b) The fireplace complies with the provisions of 9.2.2.</p> <p>(c) The fireplace is equipped with a fireplace enclosure guaranteed against breakage up to a temperature of 650°F (343°C) and constructed of heat-tempered glass or other approved material.</p> <p>(d) Electrically supervised carbon monoxide detection in accordance with Section 9.8 is provided in the room where the fireplace is located.</p>		Annual 2011 - ROC	101 - 228	Comment on Proposal 101 - 293	Bonnie Kantor, Pioneer Network	<p>This comment was generated on behalf of the Pioneer Network with assistance from a Task Group of the Technical Committee on Health Care Occupancies consisting of the following individuals: Skip Gregory (chair), George Stevens, Pete Larrimer and Gary Furdell. This comment revises the original proposal by relocating it to a new section under 18 & 19.5.2.3, and adding additional safety requirements. These additional safety requirements include the use of only a "direct vent fireplace" that takes all combustion air from outdoors and meets all the requirements of NFPA 54, the installation of a wire mesh or screen over the sealed glass front to protect patients and residents from accidental burns, the requirement to restrict the fireplace controls for staff use only, and the requirement for sprinklering the smoke compartment in which the device is located with QRS or residential sprinklers. With these added safety requirements, the use of a direct vent gas fireplace inside the smoke compartment of patient/resident sleeping rooms will provide ample safety features for this device, while enhancing the environment to increase its home like atmosphere.</p>	Accept in Principle	The Committee Action does what the submitter requested but additionally requires carbon monoxide detection in the room where the fireplace is present in order to complete the protection package to assure occupant safety.
25	Laundry Chutes	19.5.4.5	New provision	<p>19.5.4.5 Existing laundry chutes shall be permitted to discharge into the same room as rubbish discharge chutes, provided that the room is protected by automatic sprinklers in accordance with 19.3.5.9 or 19.3.5.7.</p>		Annual 2011 - ROP	101 - 318	Log # 302	Joshua W. Elvove, Aurora, CO	<p>Trash (rubbish) and laundry (linen) chutes rooms are required by 19.3.2.1 to be protected as hazardous areas and the chutes are required to be sprinklered per 19.5.4.3. In addition, the chutes are required to be separately enclosed by fire rated construction. Operationally, the Joint Commission expects collection rooms to be normally closed to prevent unauthorized access into these rooms. These safeguards, in conjunction with the virtual elimination of smoking in health care occupancies makes the risk in a trash (or linen) chute fire very low. Finally, there doesn't seem to be any recent loss history indicating that chute fires are likely. Therefore, there seems to be no reason to isolate trash chutes from linen chutes in both new and existing occupancies. Though I believe this argument can be made to justify this same exception for new health care occupancies, my issue is strictly with existing health care occupancies that were constructed many years ago with parallel chute systems collecting in a single room. These facilities should not have to expend monies to construct new chutes, create new access configurations or disband their operations completely because of a fairly non-existent risk.</p>	Accept in Principle	The committee action revises the wording for clarity. This should meet the submitter's intent.

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Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
26	Draperies	19.7.5.1	Item (4) is new	(4) Such draperies and curtains shall not include draperies and curtains in other rooms or areas where the draperies and curtains comply with all of the following: (a) Individual drapery or curtain panel area does not exceed 48 ft ² (4.5 m ²). (b) Total area of drapery and curtain panels per room or area does not exceed 20 percent of the aggregate area of the wall on which they are located. (c) Smoke compartment in which draperies or curtains are located is sprinklered in accordance with 19.3.5.								
27	Combustible Decorations	19.7.5.6	New provisions added to make clearer amount of decorations permitted	19.7.5.6 Combustible decorations shall be prohibited in any health care occupancy, unless one of the following criteria is met: (1) They are flame-retardant or are treated with approved fire-retardant coating that is listed and labeled for application to the material to which it is applied. (2) The decorations meet the requirements of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films. (3) The decorations exhibit a heat release rate not exceeding 100 kW when tested in accordance with NFPA 289, Standard Method of Fire Test for Individual Fuel Packages, using the 20 kW ignition source. (4)*The decorations, such as photographs, paintings, and other art, are attached directly to the walls, ceiling, and non-fire-rated doors in accordance with the following: (a) Decorations on non-fire-rated doors do not interfere with the operation or any required latching of the door and do not exceed the area limitations of 19.7.5.6(b), (c), or (d). (b) Decorations do not exceed 20 percent of the wall, ceiling, and door areas inside any room or space of a smoke compartment that is not protected throughout by an approved automatic sprinkler system in accordance with Section 9.7. (c) Decorations do not exceed 30 percent of the wall, ceiling, and door areas inside any room or space of a smoke compartment that is protected throughout by an approved supervised automatic sprinkler system in accordance with Section 9.7. (d) Decorations do not exceed 50 percent of the wall, ceiling, and door areas inside patient sleeping rooms, having a capacity not exceeding four persons, in a smoke compartment that is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.		Annual 2011 - ROC	101 - 235 Comment on Proposal 101 - 305	Log # 119	Amy Carpenter, Rep. Pioneer Network and National Long-term Care Life Safety Task Force	Revisions to above text were based on Committee concerns and feedback. Much of the substantive information remains the same as the prior proposals. Bonnie Kantor was involved in the drafting of this comment. While a great number of long-term facilities already allow personal and seasonal decorations to be hung from the walls, ceilings and doors, there has not been a consistent means of regulating or permitting this to occur without incurring a citation. It is not practical or feasible to require listed, tested flammability statistics on all decorations that are introduced to the facility. The limitations given in this proposal are in line with what is already permitted in day care centers. Specific changes include the clarification that decorations may not interfere with operation of life safety equipment, and reordering of the limitations for better flow. In addition, a statement about specifically when decorations may be permitted inside of stair towers - a movement that we are seeing in many healthcare settings to encourage more physical fitness among staff and visitors. This was a suggested addition by the SAF-HEA committee. Chapter 19 numbering was changed in order to match numbers of Chapter 18 yet retain language that would allow existing conditions to remain and not make the Code more stringent.	Accept in Part	The Committee Action accepts all of what the submitter recommended except the allowance for decorations to be installed inside exit stair enclosures. The exit enclosure is required to be an area that is sterile with respect to combustibles. If exit stair enclosures need to be decorated, murals can be painted on walls so as not to increase the combustible loading. The action also edits the material for compliance with Manual of Style so that the numbered subitems of 18/19.7.5.6 are parallel in construction.
28	Soiled Linen and Trash	19.7.5.7.2	New provision	19.7.5.7.2* Containers used solely for recycling clean waste or for patient records awaiting destruction shall be permitted to be excluded from the requirements of 19.7.5.7.1 where all the following conditions are met: (1) Each container shall be limited to a maximum capacity of 96 gal (363 L), except as permitted by 19.7.5.7.2(2) or (3). (2)*Containers with capacities greater than 96 gal (363 L) shall be located in a room protected as a hazardous area when not attended. (3) Container size shall not be limited in hazardous areas. (4) Containers for combustibles shall be labeled and listed as meeting the requirements of FMApproval Standard 6921, Containers for Combustible Waste; however, such testing, listing, and labeling shall not be limited to FM Approvals.		Annual 2011 - ROC	101 - 237 Comment on Proposal 101 - 305a	Log # 137	James K. Lathrop, Koffel Associates, Inc. / Rep. Loss Prevention	Current wording is very problematic for "HIPPA" containers which tend to be over the 32 gallon limit. Also with several different types of recycling containers adjacent to each other (glass, cans, paper, etc) the 32 gallon per 64 sq ft rule affects recycling efforts. This is basically "clean" waste and does not contain materials that spontaneously combust. This is similar to the different way the code addresses clean linen and soiled linen. The FM 6921 standard assures that a fire in the container will be contained where it is intended that the container contain combustibles. This cannot be used for soiled linen and general trash.	Accept in Principle	The Committee Action does what the submitter but with revised wording that the submitter worked with the committee to draft at the ROC meeting.

2012 - NFPA 101

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
29		19.7.5.7.3	New provision	19.7.5.7.3 The provisions of 10.3.9, applicable to containers for rubbish, waste, or linen, shall not apply.	New provision							



REPORT FOR VALIDATION OF THE
FIRE SAFETY EVALUATION SYSTEM (FSES)

ROLF JENSEN & ASSOCIATES, INC.

C63105 - Page 13
August 25, 2014

ATTACHMENT B

SPREADSHEET OF CHANGES TO THE FSES BY EDITION

Changes to NFPA FSES - Health Care Facilities

1985 - NFPA 101 Appendix C

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1		Safety Parameters (Table C-4) 4. Corridor Partitions/Walls	Complete change of section	<p>Corridor Partitions shall be graded as "none or incomplete" if they do not meet the requirements of 12-3.6 or 13-3.6 as appropriate, including applicable Exceptions. In existing buildings, partitions may be graded as "< 1/3 hour" if the ceiling within the fire/smoke zone is of a design and construction to resist the passage of smoke and the partition either extends through or terminates at the underside of the ceiling with a smoketight joint.</p> <p>Corridor partitions shall be graded as "≥ 1/3 < 1.0 hour" or "≥ 1.0 hour" only when the partitions extend to the underside of the floor or roof construction above in accordance with 12-3.6 or 13-3.6, as appropriate.</p>	<p>Walls shall be considered as incomplete if they have unprotected openings (louvers, gaps, transfer grills) between the floor and the ceiling, or have ordinary glass lights. 1 If openings exist above the ceiling level (or even if the partitions stop at the ceiling level), the walls shall be considered as complete if the ceiling within the fire/smoke zone is of monolithic construction designed to resist the passage of smoke and there is a smoke tight joint between the top of the partition and the bottom of the ceiling. The fire resistance rating in this parameter shall be based on the lowest fire resistance level involved in the corridor partition or the monolithic ceiling. In such cases, the ceiling and the corridor walls jointly perform the fire and smoke barrier functions normally expected of a corridor wall which extends from the floor slab to the underside of the floor or roof slabs above.</p> <p>Walls shall be considered to have less than a one-third hour fire resistance rating if they are not equivalent to ½-inch (1.27-cm) gypsum wall board on both sides of studs (even if they extend at least from floor to ceiling) or if they are not continuous above the ceiling to the underside of the floor or roof (or floor or roof assembly) above, through any concealed space such as above a suspended ceiling and through interstitial structure and mechanical spaces. Partitions shall also be rated at less than one-third hour if they are not incomplete but other defects are involved, or if the criteria in 12-3.6 and 13-3.6 are not met.</p> <p>Fire-resistive partitions shall be considered as between one-third and 1 hour if they meet all the criteria for continuity of construction and the criteria of 12-3.6 and 13-3.6 and have a fire resistance of between 20 minutes and 1 hour.</p>	Annual 1984 TCR	101 - 839		Subcommittee on Health Care Occupancies	This section has proven to be the most confusing and misinterpreted part of the FSES. The revisions should improve the use of this parameter	Accept	
2		Safety Parameters (Table C-4) 10. Emergency Movement Routes. (d) Horizontal Exit	Added sentence,	<p>To receive credit for horizontal exits, the zone credited must conform to the requirements of 5-5.1.2 with the zone served considered a separate portion of the building.</p> <p>Also to receive credit for horizontal exits, each patient sleeping room in the zone must be within 150 ft (45 m) travel of a horizontal exit or exit to grade.</p>	<p>Added sentence.</p>	Annual 1984 TCR	101 - 838		Subcommittee on Health Care Occupancies	Past usage of the FSES has shown the horizontal exit credit to be excessive and often misused.	Accept	
3		Safety Parameter Values (Table C-4) 10. Emergency Movement Routes.	The Safety Parameter Value for Horizontal Exits is changed from 3 to 1.	The Safety Parameter Value for Horizontal Exits is 1.	The Safety Parameter Value for Horizontal Exits is 3.	Annual 1984 TCR	101 - 838		Subcommittee on Health Care Occupancies	Past usage of the FSES has shown the horizontal exit credit to be excessive and often misused.	Accept	
4		Mandatory Safety Requirement s (Table C-6)	Table added row for high-rise buildings over 75 ft (23 m) in height	Revise Table 7 to require new buildings over 75 ft in height to meet scores of 14 for Sa, 18 for Sb, and 10 for Sc.	No row for high-rise buildings.	Annual 1984 TCR	101 - 1113		Committee on Safety to Life	The change is necessary to go along with the proposed change that all buildings over 75 ft in height be sprinklered	Accept	

Changes to NFPA FSES - Health Care Facilities

1988 - NFPA 101M

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Description and Intent	New: Chapter 3 Previous Appendix C	Change to description and intent of FSES.	The Fire Safety Evaluation System is a measuring system. It compares the level of safety provided by an arrangement of safeguards that differ from those provided in NFPA 101, Life Safety Code, to the level of safety provided in a building that exactly conforms with the details of that code.	The Appendix describes a system for determining the relative level of safety for new or existing health care facilities as compared to explicit conformance with the applicable requirements of Chapters 1 through 31. This system considers mixes and arrangements of safeguards most of which are described in detail in Chapters 1 through 31.	Fall 1987 TCR	101 - 1039	Log # 999	Subcommittee on Health Care Occupancies	To clarify the intent of Appendix C	Accept	
2		Fire/Smoke Zone	Addition of sentence	Every zone of a floor that is subdivided into two or more zones shall have exit routes in accordance with 12-2.4.3 or 13-2.4.3 (NFPA 101). Compartments not meeting these requirements shall be evaluated as part of an adjacent zone.	Addition of sentence	Fall 1987 TCR	101 - 1042	Log # 926	Subcommittee on Health Care Occupancies	This new requirement would not permit a "dead ended" smoke zone to be evaluated as a separate zone using the FSES.	Accept	
3		Fire/Smoke Zone	Addition of Note (c)	(c) or nonsleeping rooms or suites exceeding 2,500 sq ft (230 sq in.)	Addition of Note (c)	Fall 1987 TCR	101 - 1043	Log # 519	Subcommittee on Health Care Occupancies	To update the FSES to current Code requirements and to provide more adequate guidance on how to address a room or suite exceeding size limitations.	Accept	
4		Selection of Zones to Be Evaluated	Addition of Item 3	3. Evaluation of unoccupied floor(s) located above the higher floor used for health care occupancy is not required as long as the unoccupied floor(s) meets the construction requirements of 12-1.6 (NFPA 101) for new buildings, 13-1.6 (NFPA 101) for existing buildings, or the unoccupied floor(s) is protected by automatic sprinklers.	Addition of Item 3	Fall 1987 TCR	101 - 1044	Log # 251	Alfred J. Longhitano, Gage-Babcock & Associates, Inc.	There are many multi-story, wood frame, fully sprinklered facilities in which all floors above the 2nd have been vacated. When applying the FSES to upper floors, the penalty for wood construction forces improvements to exits, compartmentation, smoke detection, and fire alarms even though there are no patients or staff in the zone to benefit from these costly features.	Accept in Principle	The Committee agrees with the Submitter but has added the appropriate references for both new and existing buildings.
5		Safety Parameters (Table 3-4). 5. Doors to Corridor – Clause (a)	Addition of clause: "Hold open devices that release when the door is pushed or pulled (such as friction catches or magnetic catches) shall be permitted and the door shall be classified under 5(b), (c), and (d)."	(a) No Door. A room shall be considered as not having a door if there is no door in the opening or if there is some other mechanism which prevents closing of the door or otherwise leaves a significant opening between the patient room and corridor. Doors with louvers or ordinary glass lights ¹ shall be classified as "no door." Doors which have been blocked open by door stops, chocks, tie backs, or other devices which require manual unlatching or releasing action to close the door shall be classified as "no door." Hold open devices that release when the door is pushed or pulled (such as friction catches or magnetic catches) shall be permitted and the door shall be classified under 5(b), (c), and (d). Also, doors that are not provided with a latch suitable for keeping the door tightly closed shall be classified as "no door."	(a) No Door. A room shall be considered as not having a door if there is no door in the opening or if there is some other mechanism which prevents closing of the door or otherwise leaves a significant opening between the patient room and corridor. Doors with louvers or ordinary glass lights ¹ shall be classified as "no door." Doors which have been blocked open by door stops, chocks, tie backs, or other devices which require manual unlatching or releasing action to close the door shall be classified as "no door." Also, doors that are not provided with a latch suitable for keeping the door tightly closed shall be classified as "no door."	Fall 1987 TCR	101 - 1045	Log # 252	Alfred J. Longhitano, Gage-Babcock & Associates, Inc.	The objective of preventing wedges or tie-backs is to allow the staff to get the doors closed quickly without the delay superimposed by having to remove or otherwise release a hold-open device. Roller catches or magnetic catches could be used effectively to keep doors open, while not impeding closing of the door with a simple push or pull. In psychiatric hospitals in particular, many doors are equipped only with a key operated dead bolt. This keeps the door tightly closed, but slows the door closing process dramatically. It appears that the committee intended a self-latching device such as a roller latch or a spring loaded latch.	Accept in Principle	The Committee concurs with the Submitter and has added material to clarify how to classify such door.
6		Safety Parameters (Table 3-4). 6. Zone Dimensions	Added clause "Zones in which the total width plus length does not exceed 300 ft (91 m) and provided that the total distance from a room to a smoke barrier door or horizontal exit is no more than 150 ft (45 m) shall be treated as having a zone length of 100 ft – 150 ft (30.5 m – 45 m)."	Zone length is the greatest straight line dimension of the fire/smoke zone. (See 12-3.7.1 or 13-3.7.1 of NFPA 101). Zones in which the total width plus length does not exceed 300 ft (91 m) and provided that the total distance from a room to a smoke barrier door or horizontal exit is no more than 150 ft (45 m) shall be treated as having a zone length of 100 ft – 150 ft (30.5 m – 45 m).	Zone length is the greatest straight line dimension of the fire/smoke zone. (See 12-3.7.1 or 13-3.7.1)	Fall 1987 TCR	101 - 1046	Log # 213	William E. Koffel, American Health Care Association.	Coordination with Exception No. 2 to 12-3.7.1 and 13-3.7.1.	Accept	
7		Safety Parameters (Table 3-4). 7. Vertical Openings	Added clause "where the unprotected opening occurs."	A vertical opening shall be considered open for greater than three floors if there is unprotected penetration of four or more floors on the same shaft without an intervening slab or other cutoff. (See also same area as an unprotected penetration covered in the discussion of Item 13, Automatic Sprinklers.) If a shaft is enclosed at all floors but one and this results in an unprotected opening between the shaft, and one and only one fire/smoke zone, the parameter value assigned for that shaft opening in the fire/smoke zone where the unprotected opening occurs shall be "0."	A vertical opening shall be considered open for greater than three floors if there is unprotected penetration of four or more floors on the same shaft without an intervening slab or other cutoff. (See also same area as an unprotected penetration covered in the discussion of Item 13, Automatic Sprinklers.) If a shaft is enclosed at all floors but one and this results in an unprotected opening between the shaft, and one and only one fire/smoke zone, the parameter value assigned for that shaft opening in the fire/smoke zone shall be "0."	Fall 1987 TCR	101 - 1047	Log # 520	Subcommittee on Health Care Occupancies	Clarification of intent.	Accept	

1988 - NFPA 101M

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
8		10. Emergency Movement Routes.	Added clause "in capacity" and "Exit routes shall be considered deficient if the capacity of the exits serving the floor containing the zone being evaluated is insufficient for the calculated occupancy load of the floor." Change reference to NFPA 101 sections.	... Exit routes shall also be considered deficient if they are not provided 13-2.8.1 (NFPA 101), or if beds for health care use are not easily moveable as defined by 31-4.1.2 (NFPA 101), or the route does not otherwise conform to the requirements of 5-1 through 5-2.8 (NFPA 101) but the routes have been or are acceptable to the authority having jurisdiction. Exit routes shall be considered deficient if the capacity of the exits serving the floor containing the zone being evaluated is insufficient for the calculated occupancy load of the floor.	... Exit routes shall also be considered deficient in capacity if they are not provided with emergency lighting in accordance with 12-2.8.1 or 13-2.8.1 (NFPA 101), or if beds for health care use are not easily moveable as defined by 31-4.1.2 (NFPA 101), or the route does not otherwise conform to the requirements of 5-2.2 through 5-2.8 (NFPA 101) but the routes have been or are acceptable to the authority having jurisdiction.	Fall 1987 TCR	101 - 1048	Log # 927	Subcommittee on Health Care Occupancies	The words "in capacity" are inappropriate in this sentence. The new sentence is needed to address insufficient exit capacity within the FSES.	Accept	
9		10. Emergency Movement Routes.	Revise last sentence of Note (c) by replacing the reference to "5-2.2" to "5-1."	...or the route does not otherwise conform to the requirements of 5-1 through 5-2.8 (NFPA 101) but the routes have been or are acceptable to the authority having jurisdiction.	... or the route does not otherwise conform to the requirements of 5-2.2 through 5-2.8 (NFPA 101) but the routes have been or are acceptable to the authority having jurisdiction.	Fall 1987 TCR	101 - 1049	Log # 521	Subcommittee on Health Care Occupancies	To clarify that Section 5-1 addressing vertical openings and interior finishes, is to be included in determining deficient emergency movement routes. Section 5-1 is currently in the definition of deficient exits by reference in 5-2.2 through 5-2.8, and this change clarifies the Committees intent.	Accept	
10		Table 3-4. Safety Parameter Values	Note (f) added to "Interior Finish Corridors & Exits" and "Interior Finish Rooms" for Class C and B interior finish.	(f) Use (0) if the area of Class B or C interior finish in the corridor and exit or room is protected by automatic sprinklers and item 13 is 0.	Added note	Fall 1987 TCR	101 - 1050	Log # 247	Alfred J. Longhitano, Gage-Babcock & Associates, Inc.	Class C interior finishes are allowed in sprinklered buildings. In the case of a "spot-sprinklered" building in which sprinklers are provided in the few rooms which have Class C finishes, the 3-point penalty must be assessed, but usually there are not sufficient sprinklers provided to obtain compensating credit for sprinklers under parameter 13.		The Committee encourages the use of sprinklers and desires to give credit for sprinklers wherever possible. The Subcommittee modification avoids double credit for sprinklers and recognizes existing Code requirements.
11		Table 3-6 Mandatory Safety Requirements	Divided mandatory safety requirements into two tables for sprinklered/nonsprinklered.	Table 3-6A Mandatory Safety Requirements (For Use in Any Hospital Or Nursing Home) Table 3-6B Mandatory Safety Requirements (For Use Only in Sprinkler Protected Hospitals or Nursing Homes)	Table C-6. Mandatory Safety Requirements					Not discussed		

Changes to NFPA FSES - Health Care Facilities

1992 - NFPA 101M

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1			In the Chapter 3 Health Care Occupancy FSES, Procedures for Determining Equivalency, in the notes that follow the text associated with "Fire/Smoke Zone," change the parenthetical equivalencies from sq in. to sq m, in three places.			Annual 1991 TCR	101M - 10		Life Safety Committee on Alternative Approaches	Editorial correction	Accept	
2		3-5.4.2 Patient-Attendant Factor	Add "but attendants are available within one floor of all patient floors."	The evaluation system assesses a charge of 4.0 to this risk factor in any case where there are periods when there are no attendants immediately available to a zone that houses patients but attendants are available within one floor of all patient floors.	The evaluation system assesses a charge of 4.0 to this risk factor in any case where there are periods when there are no attendants immediately available to a zone that houses patients.	Annual 1991 TCR	101M - 12	8	William N. Brooks, Columbia, MD	It is possible for an unstaffed facility to pass an FSES analysis. This was not intended by the Code since a basic assumption has always been that staff is essential to aid evacuation in patient care areas. In the future with more remote monitoring and less professional staff this possibility (of no staff) may come to be a reality in some cases. It may be possible to monitor a large number of patients without direct staff presence through closed circuit TV, etc., but NFPA 101 will need to be rethought if this trend comes to pass. Until then we need to clarify the FSES to reflect current 101 assumptions.	Accept in Principle	The above committee action clarifies the intent that staff needs to be present but in some facilities they may be on some other floor.
3		3-6.5.1 No Door	Revise the text associated with Parameter 5, Doors to Corridor, Page 101M-19 - the last sentence of subpart (a)	Also, doors that are not provided with a latch in accordance with 12-3.6.3.2 or 13-3.6.3.2 of NFPA 101 Life Safety Code, shall be classified as "no door".	Also, doors that are not provided with a latch suitable for keeping the door tightly closed shall be classified as "no door."	Annual 1991 TCR	101M - 13		Life Safety Committee on Alternative Approaches	Coordination with changes made to Chapters 12 and 13 of NFPA 101 with respect to the subject of patient room door latching.	Accept	
4		3-6.6 Zone Dimensions	Replace the first paragraph of the text associated with Parameter 6 Zone-Dimensions, from 101M-20 In the third paragraph of the text associated with Parameter 6, Zone Dimensions revise the second sentence to limit dead ends not more than 100 ft.	"Zone dimension shall be as calculated per 12-3.7.1 or 13-3.7.1 of NFPA 101, Life Safety Code" "For example, if one or more dead ends in excess of 50 ft (15 m) but not more than 100 ft. (30 m) exist, the charge for deadends (-4) shall be applied regardless of the actual corridor "lengths"	Zone length is the greatest straight line dimension of the fire/smoke zone. (See 12-3.7.1 or 13-3.7.1 of NFPA 101.) Zones in which the total width plus length does not exceed 300 ft (91 m) and provided that the total distance from a room to a smoke barrier door or horizontal exit is no more than 150 ft (45 m) shall be treated as having a zone length of 100 ft - 150 ft (30.5 m - 45 m) "For example, if one or more dead ends in excess of 50 ft (15 m) exist, the charge for dead ends (-4) shall be applied regardless of the actual corridor "lengths"	Annual 1991 TCR	101M - 14		Life Safety Committee on Alternative Approaches	Coordination with the changes made to Chapter 12 of NFPA 101. Also clarification that dead ends in excess of 50 ft." cannot be more than 100 ft. in length.	Accept	
6	Smoke Control	3-6.9 Smoke Control	Revise the section to require a smoke control system as opposed to a smoke exhaust or controlled fans.	Mechanically assisted smoke control on a zone basis must include a smoke barrier, as in (b) above, supported by a tested and accepted smoke control system that will obstruct the leakage of smoke between zones. One method of judging acceptance of smoke controls systems in contained in NFPA 92A, Recommended Practice for Smoke Control Systems.	Mechanically assisted smoke control on a zone basis must include a smoke barrier, as in (b) above, supported by a mechanism of automatic controlled fans, smoke vent shafts, or a combination thereof to provide a pressure differential that will assist in confining the smoke to the zone of origin. The fans involved may be special smoke control fans, or special adjustment of the normal building air movement fans may be made	Annual 1991 TCR	101M - 17		William N. Brooks, Columbia, MD	Until this year there was no consensus document which discussed the subject of smoke control NFPA 92A contains some valuable information which now needs to be incorporated into the Health Care requirements. As long as engineered smoke control systems are used as a trade off in Chapter 12 we need to bemoire specific on what is acceptable system performance. This criteria is also to Be used for the evaluation of existing system if it is used to gain points in an FSES analysis.	Accept in Principle	A tested and accepted smoke control system involves more than just the ability to create the design pressure difference. The wording, as. revised by the committee, stresses that the entire smoke control system must be accepted. Reference is then made to the information contained in NFPA 92A, as opposed to just that on one particular subject. The committee action should meet the submitter's intent.
7	Exit Routes	3-6.10.3.2 Emergency Movement	Clarify section - specify reference to NFPA 101	"Exit routes shall also be considered deficient if they fail to meet the requirements of 12-2.1 through 12-2.7 or 13-2.1 through 13-2.7 of NFPA 101, Life Safety Code, for the egress route involved."	Exit routes shall also be considered deficient if any of the dimensional details are less than that required by NFPA 101, Life Safety Code, for the egress route involved.	Annual 1991 TCR	101M - 18	4	Edward M. Shedlock, Gainesville, FL	This is for clarification. I believe this is the intent of the FSES, but it is not clearly stated. This proposed change leaves no doubt.	Accept in Principle	Clarification of intent. The revised wording should meet the submitter's intent.
8	Exit Routes	3-6.10.3.2 Emergency Movement	Strengthen requirement for emergency lighting by removing text from Parameter 10 and including it in Table 3-8.	Delete section from Parameter 10 text. Add to Table 3-8, Facility Firesafety Requirements Work Sheet, an additional lettered line item as follows: "Emergency Lighting is, provided in accordance with 12-2.8.1 or 13-2.8.1."	"if they are not provided with emergency lighting in accordance with 12-2.8.1 or 13-2.8.1 (NFPA 101), or" from Parameter 10 text.	Annual 1991 TCR	101M - 19	11	William N. Brooks, Columbia, MD	Removing this factor from the emergency movement route parameter now leaves only those items associated with the physical movement through the egress system. It now elevates the importance of emergency lighting to a pass/fail status. It seems that if a relatively unimportant item such as exit signs can be pass/fail, surely the emergency lighting deserves this status.	Accept in Principle	The above represents an editorial adjustment which should meet the submitter's intent.
9	Exit Routes	3-6.10.3.2 Emergency Movement	Delete text for beds not easily moved	Delete clause	"Or if beds for health care use are not easily movable as defined by 31-4.1.2 (NFPA 101)."	Annual 1991 TCR	101M - 20		Life Safety Committee on Alternative Approaches	Updating of requirements based on deletion of 31-4.1.2 dealing with movable beds from NFPA 101.	Accept in Principle	

1992 - NFPA 101M

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
10	Automatic Sprinklers	3-6.13.4.3 Entire Building	Add credit for quick response sprinklers.	"Whenever quick response automatic sprinklers are provided for zones as part of the entire building sprinkler system, additional credit may be taken under Parameter 12, Smoke Detection and Alarm."	Addition to section.	Annual 1991 TCR	101M - 22	5	Life Safety Committee on Alternative Approaches	Coordination with the change being made to Chapter 12 of NFPA 101 so as to require quick response sprinklers in patient zones. The proposed wording provides a cross reference to a similar note being added to Parameter 12.	Accept	
11			In Table 3-4, Safety Parameters Values, Page 101M-26, Parameter 12 Smoke Detection and Alarm, add a new footnote G as follows and tie it to the value of 3 for the entry titled "Corridor Only":	G. Even if room detection is not provided, use this value in addition to the Parameter 13 Automatic Sprinklers value, if the entire zone is protected with quick response automatic sprinklers.		Annual 1991 TCR	101M - 25		Life Safety Committee on Alternative Approaches		Accept	
12	Smoke Detection and Alarm	3-6.12 Smoke Detection and Alarm		A detection system as used herein is one based on the use of automatic smoke detectors installed in accordance with Section 7-6 of NFPA 101, Life Safety Code. Notification shall be in accordance with 12-3.4.3.1 or 13-3.4.3.1 of NFPA 101, Life Safety Code. No recognition is given for thermal detectors. The detection system categories are as follows: (a) None. (No change) (b) Room Only. Smoke detectors are installed throughout the rooms of the zone involved. (c) Rooms Only. Smoke detectors shall be considered as meeting this requirement when there is at least one smoke detector in each room occupied or used by patients. Detectors are not required in restrooms or closets. Credit for "corridor only detection shall be taken whether or not automatic smoke detectors are provided, if the zone being evaluated is protected by quick response automatic sprinklers. See Parameter 13, Automatic Sprinklers. (d) Corridor and Habitable Spaces (no changes). (e) Total Spaces in Zone -no changes).		Annual 1991 TCR	101M - 25		Life Safety Committee on Alternative Approaches	The major change suggested above is that the "3" Value associated with having a room smoke detection system can be awarded even if such detection is not present if the zone being evaluated is protected by quick response automatic sprinklers. It is the committee's belief that such sprinkler protection in the entire zone provided by quick response automatic sprinklers will provide alarm notification as quickly as that provided by smoke detectors located only in the room. Other changes proposed above are for clarification and coordination with requirements of NFPA 101 Life Safety Code Chapter's 7, 12, and 13.	Accept	
13		Table 3-6-A	Revise Table 3-6-A (New 3-6) Delete Table 3-6B. Provisions of this table have been incorporated into the new 3-6 Table.	Table 3-6 Mandatory Safety Requirements (For Use in Hospitals or Nursing Homes)	In Any Hospital or Nursing Home) Table 3-6B Mandatory Safety Requirements (For Use Only in Sprinkler Protected Hospitals or Nursing Homes)	Annual 1991 TCR	101M - 27		Life Safety Committee on Alternative Approaches		Accept	
14	Interior Finish	3-6.3	Reword to address Class C interior finish.	"Where Class C interior finish occurs only in individual rooms having four or fewer occupants and the building is fully sprinklered, this parameter is to be evaluated per 12-3.3.1 Exception I of the NFPA 101 Life Safety Code."	The same classification of interior finish applies to rooms as applies to corridors and exits. The specific definitions are given in Section 6-5 (NFPA 101). The flame spread rate classification shall be based on the most combustible surface after deleting trim. No consideration is included in the safety parameter values for Class D or E interior finishes. It is not anticipated that such material will be used in health care facilities. In the rare case such high flame spread interior finish material is involved, an individual appraisal outside of the capability of this evaluation system will be required.	Annual 1991 TCR	101M - 27		Life Safety Committee on Alternative Approaches	Proposed changes for the 1991 Edition of the Life Safety Code address direct exists, and a modified definition of Heat & Smoke Vents.	Accept	
15	Automatic Sprinklers	3-6.13.4.3	Add to allowance for quick response sprinklers	"This credit is also given when a smoke zone is renovated to install quick response or residential sprinklers in accordance with 12-1.1.4.5 of NFPA 101, Life Safety Code."	No previous section.	Annual 1991 TCR	101M - 27		Life Safety Committee on Alternative Approaches		Accept	

Changes to NFPA FSES - Health Care Facilities

1995 - NFPA 101M

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	TCR Date	TCR Item #	TCR Log #	Submitter	Substantiation	Committee Action	Committee Comment
1	Fire/Smoke Zone	3-3.2 Selection of Zones	Change the word "should" to an instruction.	For a complete evaluation, evaluate individually every zone in the health care facility	For a complete evaluation, every zone in the health care facility should be evaluated individually.	Fall 1994 TCR	101M - 2	24	Phillip R Jose, Albany, NY	All zones in the facility must be evaluated if all deficiencies are to be identified. Therefore, file evaluation of each and every zone is not optional.	Accept in Principle	The proposed revision takes the sentence and formats it as an instruction. This should meet file submitter's intent.
2	Interior Finish	3-6.2 and 3-6.3 Interior Finish	Revise sections to reduce confusion.	3-6.2 Interior Finish (Corridor and Exit). The classification of flame spread is in accordance with Section 6-5 (NFPA 101). The flame spread ... will be required. 3-6.3 Interior Finish (Rooms). See 3-6.2.	3-6.2 Interior Finish (Corridor and Exit). The classification of flame spread for corridor and exits is in accordance with the categories specified in Section 6-5 (NFPA 101). The flame spread ... will be required. 3-6.3 Interior Finish (Rooms) Where Class C interior finish occurs only in individual rooms having four or fewer occupants and the building is fully sprinklered, this parameter is to be evaluated per 12-3.3.1 Exception 1 of the NFPA 101 Life Safety Code.	Fall 1994 TCR	101M - 4	CP32	Technical Committee on Alternative Approaches to Life Safety	The proposed changes will reduce file current confusion by properly accounting for the procedure directed by Note f to Table 3-4.	Accept	
3	Doors to Corridor	3-6.5 Doors to Corridor	Add sentence for spaces that do not contain flammable or combustible materials	Doors which do not latch or have louvers opening to toilet rooms, bathrooms, shower rooms, sink closets and similar auxiliary spaces that do not contain flammable or combustible materials shall not be considered in classifying doors to corridors.	Addition to code.	Fall 1994 TCR	101M - 6	19	Joseph M. DeRosier, Department of Veterans Affairs	Doors which do not latch and/or have louvers to toilet rooms, bathrooms, shower rooms, sink closets and similar auxiliary spaces that do not contain flammable or combustible materials meet 13-3.6.3.2 Exception No. 2 and 13-3.6.4 Exception. Zones containing doors meeting these exceptions should not be penalized. Classifying tile door under 3-6.5.3 assigns a value of "1" to these doors which reflects code compliance and clarifies the point value which should be assigned.	Accept in Principle	The above committee action accomplishes that which the submitter requested but does so by placing the material directly in 3-6.5. This should meet the submitter's intent.
4		3-6.8 Hazardous Areas	Revise section to clarify intent	"The term "outside zone" as used in the evaluation form means any place within the building other than the fire/smoke zone being measured and not separated by 2-hour fire resistance rated construction."	The term "outside zone" as used in the evaluation form means any place within the building other than the fire/smoke zone being measured.	Fall 1994 TCR	101M - 7	18	Kenneth J. Schwartz, Rolf Jensen & Associates, Inc.	The proposed revision will help clarify that a double deficiency in an outside zone that is separated by 2-hour fire resistive rated construction would not be penalized with a negative score. This is acceptable because 2-hour fire rated construction, as permitted by NFPA 101, is used to separate buildings. Thus, a hazardous area with a double deficiency separated by 2-hour fire rated construction could be considered as not being within the building.	Accept in Principle	The editorial improvement made in the above committee action should meet the submitter's intent.
5		3-6.8.3	Delete last two paragraphs from Section 3-6.8.3.	Deleted paragraphs	The term "adjacent zone" as used in the evaluation form means any zone, either on the same floor or on the floor immediately below, that physically abuts the zone being evaluated and is not separated by 2-hour fire-resistance rated construction. The term "outside zone" as used in the evaluation form means any place within the building other than the fire/smoke zone being measured.	Fall 1994 TCR	101M - 8	9	Kenneth J. Schwartz, Rolf Jensen & Associates, Inc.	These two paragraphs are redundant with Section 3-6.8.	Accept	
6	Exit Routes	3-6.10.1 Less than Two Routes	Revise the end of the first sentence	The means of emergency movement from a zone is classified as fewer than two routes if there are not at least two remote movement routes serving the zones.	The term "adjacent zone" as used in the evaluation form means any zone, either on the same floor or on the floor immediately below, that physically abuts the zone being evaluated and is not separated by 2-hour fire-resistance rated construction. The means of emergency movement from a zone is classified as fewer than two routes if there are not two or more movement routes serving it.	Fall 1994 TCR	101M - 9	23	Phillip R Jose, Albany, NY	As currently written, a condition such as the one shown on the following sketch does not fall within either criteria, "less than two routes" or "multiple routes". The addition of the word remote, as proposed, will clarify that this condition should be classified "less than two routes" and a negative 8 point value assigned.	Accept in Principle - One Negative	The above committee action adds the word "remote" that was requested by the submitter; and editorially improves the wording. This should meet the submitter's intent. Negative: CARSON: This is a significant change in the philosophy of the FSES. This change will result in a double penalty for the situation shown in the sketch - one in item 6 for dead end and one in item 10 - that this change would include. The installation of sprinklers would not be sufficient to overcome these deficiencies.
7	Exit Routes	3-6.10.3.1 Deficient	Reduce deficient exit from 34 inches to 32 inches in existing buildings, and from 44 inches to 41.5 inches in new buildings	Any emergency movement route of a type described by 12-2.2 or 13-2.2 (NFPA 101) is deficient if the door to a patient room or passage through a smoke barrier is less than 32 in. (81cm) [41.5 in. (105 cm) in new buildings] in clear width ...	Any emergency movement route of a type described by 12-2.2 or 13-2.2 (NFPA 101) is deficient if the door to a patient room or passage through a smoke barrier is less than 34 in. (86 cm) [44 in. (112 cm) in new buildings] in clear width ...	Fall 1994 TCR	101M - 10	CP1	Technical Committee on Alternative Approaches to Life Safety	Correlation with changes made in Chapters 12 and 13 of NFPA 101-1994 Life Safety Code.	Accept	

1995 - NFPA 101M

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	TCR Date	TCR Item #	TCR Log #	Submitter	Substantiation	Committee Action	Committee Comment
8	Smoke Detection and Alarm	3-6.12 Smoke Detection and Alarm	Elaborate and allow for credit when using quick response sprinklers.	No recognition is given for thermal detectors; however, credit is given for tile use of quick response sprinklers per Note g of Table 3-4.	No recognition is given for thermal detectors.	Fall 1994 TCR	101M - 11	12	Kenneth J. Schwartz, Roif Jensen & Associates, Inc.	Section 3-6.12 makes no reference to Note G of Table 3-4 which allows credit to be taken if quick response sprinklers are provided in tile zone.	Accept in Part	The above action implements most of the changes suggested by the submitter. However, it does not make reference to 3-6.13.4.3 because it is Note g that provides the needed information. This should satisfy most of the submitter's intent.
9	Automatic Sprinklers	3-6.13.4.3	Editing	Total space automatic sprinkler protection is to be credited only if the entire structure is protected by automatic sprinklers in accordance with 12.3.5 or 13.3.5 (NFPA 101). This credit also is given where a smoke zone is renovated to install quick-respo	This section was removed in the 1992 Edition.	Fall 1994 TCR	101M - 13	16	Kenneth J. Schwartz, Roif Jensen & Associates, Inc.	This paragraph appears in the 1988 edition of NFPA 101M but appears to have been accidentally deleted from the 1992 edition.	Accept in Principle	The above committee action adds the wording recommended by the submitter but replaces the reference to Section 7-7 with the specific paragraphs in NFPA 101 Chapters 12 and 13 which address sprinkledng. Had Section 7-7 been referenced, the exceptions which are part of 12 3.5 and 15-3.5 would not have been permitted to be used.
10	Mandatory Safety Requirements	Step 6: Determine Mandatory Safety Requirements	New section to address basements	"C. The Mandatory Safety Requirements Values for basements are based on the distance of the basement level from the closest level of discharge, (Also see Section 3-6.1.2 and 3-6.1.3.)	New section	Fall 1994 TCR	101M - 17	10	Kenneth J. Schwartz, Roif Jensen & Associates, Inc.	No guidance is currently given for determining the Mandatory Safety Requirements Values if the zone is a basement. The proposal uses the same philosophy as described in Section 5-6.1.	Accept in Principle	The committee action does what the submitter requested, but changes the words "shall be based" to "are based" in order to keep the style consistent within the manual. This should meet the submitter's intent.
11		Table 3-8 Facility Fire Safety Requirements	From Table 3-8, delete item K which addresses windows. Reletter the subsequent items as necessary.	Delete item K	K. In new facilities without mechanically assisted smoke control systems, each patient room has an openable outside window or door as described by 12-3.8.1.	Fall 1994 TCR	101M - 19	CP18	Technical Committee on Alternative Approaches to Life Safety	Correlation with changes made to NFPA 101-1994.	Accept	
12		Table 3-8 Facility Fire Safety Requirements	Add item in Table 308 for standpipes in high rise buildings.	To the right of the new item M in Table §-8, allow for any of the three columns to be checked.	L. Standpipes are provided in all new high rise buildings as required by 124.2 of the Life Safety Code.	Fall 1994 TCR	101M - 20	CP17	Technical Committee on Alternative Approaches to Life Safety	Correlation with changes made to NFPA 101-1994.	Accept	
13		Table 3-4. Safety Parameter Values	Adding exception for enclosure of vertical openings.	Heating and air conditioning systems conform with the air conditioning, heating, and ventilating systems requirements within Section 7-2.	Heating and air conditioning systems ... within Section 7-2 except for enclosure of vertical openings which have been considered in the evaluation of vertical openings in Parameter 7 of Table 3-4.	Fall 1994 ROC	101M - 2	CC5	Technical Committee on Alternative Approaches to Life Safety	If a heating, ventilating, and air conditioning system has unprotected openings in its vertical shafts, and accepts the assigned point values associated with the parameter for vertical openings, it should not be doubly penalized in the Facility Firesafety Requirements Worksheet for not meeting the requirements applicable to air conditioning, heating and ventilating systems per Section 7-2 of NFPA 101 which references NFPA 90A. The above wording changes will correct the problem.	Accept	
14		Table 3-6	Implement change outlined in NFPA 101M Errata published in 1992. Changed Mandatory Safety Requirements for Extinguishment (Sb) for Existing structures from 4/8/8 to 4/6/6. Added elaboration for note b.	B. For a 2nd story zone location in a sprinklered EXISTING facility, as an alternative to the mandatory safety requirements values set specified in the table, the following mandatory values set shall be permitted to be used: Sa = 7 and Sb = 10 and Sc = 7. B. Sprinklered facilities, 2nd floor only		Fall 1994 ROC	101M - 1	CC1	Technical Committee on Alternative Approaches to Life Safety	The corrections printed in an Errata that was issued May 12, 1992 need to be implemented for the 1995 edition of NFPA 101M.	Accept	

Changes to NFPA FSES - Health Care Facilities

1998 - NFPA 101A

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment																	
1		3-6.4.1 and 3-6.4.2 Table 3-4 Corridor Partitions/Wall	Change "1/3" to "1/2" in the following locations: 3-6.4.1, 3-6.4.2, and in two places in Parameter 4 of Table 3-4.	Graded as < 1/2 hour	Graded as < 1/3 hour	Fall 1997 ROP	101A - 1	CP8	Technical Committee on Alternative Approaches to Life Safety	NFPA 101 has been revised to delete reference to 20 minute or 1/3 hour fire resistance rating. Rather, the term "1/2 hour" is used. This change is done for correlation.	Accept																		
2		3-6.8.1 Hazardous Areas	Addition to section describing hazard severity.	<p>"Figure 3-6.8.1 provides a matrix to be used to determine degree of deficiency to be assessed."</p> <table border="1"> <thead> <tr> <th rowspan="2">PROTECTION</th> <th colspan="2">HAZARD</th> </tr> <tr> <th>SEVERE</th> <th>NOT SEVERE</th> </tr> </thead> <tbody> <tr> <td>NONE</td> <td>double</td> <td>single</td> </tr> <tr> <td>FIRE RESIST ENCL</td> <td>single</td> <td>none</td> </tr> <tr> <td>AUTO SPRINKLERS</td> <td>single</td> <td>none</td> </tr> <tr> <td>BOTH</td> <td>none</td> <td>none</td> </tr> </tbody> </table> <p>Figure 3-6.8.1 Hazardous Areas Deficiencies</p>	PROTECTION	HAZARD		SEVERE	NOT SEVERE	NONE	double	single	FIRE RESIST ENCL	single	none	AUTO SPRINKLERS	single	none	BOTH	none	none	Addition to section.	Fall 1997 ROP	101A - 2	CP3	Technical Committee on Alternative Approaches to Life Safety	The proposed table clarifies the wording of this paragraph. As such, it is a helpful improvement.	Accept	
PROTECTION	HAZARD																												
	SEVERE	NOT SEVERE																											
NONE	double	single																											
FIRE RESIST ENCL	single	none																											
AUTO SPRINKLERS	single	none																											
BOTH	none	none																											
3		Table 3-4. Safety Parameter Values	Add reference to Note c in Table 3-4 to not penalize existing health care occupancies for zone lengths.	In Table 3-4, Parameter 6, in the column for > 150', to the right of the current value -2, add "(c)".	Note c was not referenced in this Parameter	Fall 1997 ROP	101A - 3	CP1	Technical Committee on Alternative Approaches to Life Safety	As done elsewhere in the table, note C needs to be referenced to reflect current code requirement and not penalize existing health care occupancies with respect to the choice of parameter value.	Accept																		
4		Table 3-8 Facility Fire Safety Requirements	Revise Table 3-8 Item H. for draperies.	H. Draperies, upholstered furniture, mattresses, furnishings, and decorations combustibility is limited in accordance with 31-4.5. Editorially replace "31-4.5" with the appropriate Chapter 12 and 13 references given that NFPA 101 Chapter 31 is being deleted. Make similar editorial changes throughout NFPA 101A, as necessary.	H. Combustible draperies, furnishings, and decorations are prohibited in accordance with 31-4.5.	Fall 1997 ROP	101A - 2	CP2	Technical Committee on Alternative Approaches to Life Safety	Upholstered furniture and mattresses combustibility is limited by the Life Safety Code. This needs to be reflected in Table 3-8.	Accept																		

Changes to NFPA FSES - Health Care Facilities

2001 - NFPA 101A

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1		4.3.2 Selection of Zones to Be Evaluated. Item 4, Subsection b.	Revise section; no technical change	If the zone is separated by 2-hour fire-rated construction from all patient use zones (including any members that bear the load of a patient use zone) and if any communicating openings through the 2-hour fire rated construction are protected by 1 1/2-hour fire protection- rated fire doors, the zone shall be permitted to be excluded from evaluation.	If the zone is separated from all patient use zones by 2-hour fire-rated construction (including any members that bear the load of a patient zone and with 1 1/2-hour fire-protection-rated fire doors on any communicating openings), it shall be permitted to be excluded from evaluation.	November 2000 ROP	101A - 5	3	David P. Klein, U.S. Dept. of Veterans Affairs	This proposal is to editorially clarify the intent of the existing paragraph. In the current wording, the first part of the text within the parantheses refers to patient use zones while the second part of the text refers to 2-hour fire-rated construction	Accept	
2		4.6.1.1 (c)	Revise section; no technical change	The lower safety parameter point score involved if neither (a) nor (b) above apply.	The lower safety parameter point score involved if such a separation does not exist neither.	November 2000 ROP	101A - 6	4	David P. Klein, U.S. Dept. of Veterans Affairs	This proposal is to editorially clarify the intent of the existing paragraph. The present wording is confusing because the phrase "if such a separation does not exist" seems to refer to the last part of paragraph (b) which immediately precedes paragraph (c). However, paragraph (b) may be met even if a separation is not provided.	Accept	
3		4.6.5 Doors to Corridor	Revise section; no technical change	The classification of doors to the corridor shall be based on the minimum quality of any door in the zone, and the classification shall be determined in accordance with NFPA 252, Standard Methods of Fire Tests of Door Assemblies. Doors for protection of vertical openings and hazardous areas that are covered separately in 4.6.7 and 4.6.8 are not included in this evaluation. Doors that do not latch and doors that have louvers shall not be considered in classifying doors to corridors if those doors open to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces that do not contain flammable or combustible materials.	The classification of doors to the corridor shall be based on the minimum quality of any door in the zone, and the classification shall be determined in accordance with NFPA 252, Standard Methods of Fire Tests of Door Assemblies. Doors for protection of vertical openings and hazardous areas that are covered separately in 3-6.7 and 3-6.8 are not included in this evaluation. Doors that do not latch or have louvers opening to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces that do not contain flammable or combustible materials shall not be considered in classifying doors to corridors.	November 2000 ROP	101A - 7	5	David P. Klein, U.S. Dept. of Veterans Affairs	This proposal is to editorially clarify the intent of the existing paragraph. The present wording could be misinterpreted. The phrase "doors that do not latch or have louvers" could be interpreted to mean "doors that do not latch and doors that do not have louvers." The proposed wording rearranges the sentence to make it easier to understand.	Accept	
4		Worksheet, Table 4-4 Note e	Revise reference; no technical change	(columns marked "000" or "200")	(columns marked "U")	November 2000 ROP	101A - 8	CP5	Technical Committee on Alternative Approaches to Life Safety	The old reference to "U" (unprotected) construction needs clarification for application to Parameter 1's use of the NFPA 220 construction types.	Accept	
		Table 4-4, Note f	Change the Note f at the bottom of the table 3-4	"Use () if the area of Class B or C interior finish in the corridor and exit or room is protected by automatic sprinklers and Parameter 13 is 0 and use () for rooms of Class C interior finish where Safety Parameter 4 is greater than or equal to 1."	"Use () if the area of Class B or C interior finish in the corridor and exit or room is protected by automatic sprinklers and Parameter 13 is 0."	November 2000 ROP	101A - 9	1	Peter A. Larrimer, Dept. of Veterans Affairs	The old reference to "U" (unprotected) construction needs clarification for application to Parameter 1's use of the NFPA 220 construction types.	Accept	The action accomplishes what the submitter requested and more accurately captures that the provision applies only to existing Class C interior finish in rooms. Also, the revised wording restates that Parameter 13 must equal zero so that double credit for sprinkler protection is not taken.

Changes to NFPA FSES - Health Care Facilities

2004 - NFPA 101A

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1		Worksheet 4.7.8 Mandatory Safety Requirements	Worksheet 4.7.8 makes a distinction for major rehabilitation in nonsprinklered existing buildings. The 2001 Edition included the same safety requirements for all hospitals and nursing homes.	Worksheet 4.7.8A - Mandatory Safety Requirements - Hospitals or Nursing Homes Worksheet 4.7.8B - Mandatory Safety Requirements - Major Rehabilitation in Nonsprinklered Existing Buildings	Worksheet 4.7.8 - Mandatory Safety Requirements (For Use in Hospitals or Nursing Homes)	November 2003 ROP	101A - 3	CP5	Technical Committee on Alternative Approaches to Life Safety	NFPA 101 Chapter 18 has been revised for the 2003 edition to define major and minor rehabilitation. A new subsection 18.4.3 has been added to codify in one place the requirements applicable to the rehabilitation of nonsprinklered existing smoke compartments. The changes proposed to NFPA 101A by this proposal reflect the changes made in NFPA 101.	Accept	
2		4.7 Step 6	Added subpart	(2) Use the mandatory safety requirements values for existing facilities of Worksheet 4.7.8A for minor rehabilitation of a smoke compartment. Use the mandatory safety requirements values of Worksheet 4.7.8B for major rehabilitation of a smoke compartment.	Added subpart	November 2003 ROP	101A - 3	CP5	Technical Committee on Alternative Approaches to Life Safety		Accept	
3		4.6.10.3.4	Specify capacity factor for buildings not protected by sprinklers.	Exit routes shall be considered deficient if the capacity of the exits serving the floor containing the zone being evaluated is insufficient for the calculated occupant load of the floor. For buildings not protected throughout by automatic sprinklers, use the capacity factor of 15 mm per person (0.6 in. per person) for stairs.	Exit routes shall be considered deficient if the capacity of the exits serving the floor containing the zone being evaluated is insufficient for the calculated occupant load of the floor.	November 2003 ROP	101A - 3	CP5	Technical Committee on Alternative Approaches to Life Safety		Accept	
4		4.6.13.4.3 Entire Building	Add "however, the mandatory safety requirements values of Table 4.7.8B for nonsprinklered existing buildings must be used."	credited only if the entire structure is protected by automatic sprinklers in accordance with 18.3.5 or 19.3.5 (NFPA 101). This credit also is given where a smoke zone is renovated to install quick-response or residential sprinklers in accordance with 18.1.1.4.6 (NFPA 101), however, the mandatory safety requirements values of Worksheet 4.7.8B for nonsprinklered existing buildings must be used. Wherever quick-response automatic sprinklers are provided for zones as part of the entire building sprinkler system, additional credit shall be permitted to be taken under Safety Parameter 12, "Smoke Detection and Alarm." (See 4.6.12 and Worksheet 4.7.6.)	Total space automatic sprinkler protection is to be credited only if the entire structure is protected by automatic sprinklers in accordance with 18.3.5 or 19.3.5 (NFPA 101). This credit also is given where a smoke zone is renovated to install quick-response or residential sprinklers in accordance with 18.1.1.4.5 (NFPA 101). Wherever quick-response automatic sprinklers are provided for zones as part of the entire building sprinkler system, additional credit shall be permitted to be taken under Safety Parameter 12, "Smoke Detection and Alarm." (See 4.6.12 and Worksheet 4.7.6.)	November 2003 ROP	101A - 3	CP5	Technical Committee on Alternative Approaches to Life Safety	Accept		
5		4.6.2 Interior Finish (Corridor and Exits)	Add reference to NFPA 265 and 286 for interior finish material tests as permitted by Section 10.2 of NFPA 101.	The classification of flame spread is in accordance with Section 10.2 (NFPA101). The flame spread classification shall be based on the most combustible surface after deleting trim. No allowance is made in the safety parameter values for Class D or Class E interior finishes. It is not anticipated that such material will be used in health care facilities. In the rare case that such high flame spread interior finish material is involved, an individual appraisal outside the capability of this evaluation system will be required. Interior wall and ceiling finish materials tested in accordance with NFPA 265, Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Coverings on Full Height Panels and Walls, or NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth, as permitted by Section 10.2 (NFPA101), and meeting the criteria established in Section 10.2 (NFPA 101) for those test standards, shall be scored as Class A interior finish materials (flame spread ≤25).	The classification of flame spread is in accordance with Section 10.2 (NFPA 101). The flame spread classification shall be based on the most combustible surface after deleting trim. No allowance is made in the safety parameter values for Class D or Class E interior finishes. It is not anticipated that such material will be used in health care facilities. In the rare case that such high flame spread interior finish material is involved, an individual appraisal outside the capability of this evaluation system will be required.							
6		Worksheet 4.7.6 Notes e and f	Adjust note reference - no technical change	e Use (0) where Parameter 1 is based on first floor zone or on an unprotected type of construction (columns marked "000" or "200") f Use () if the area of Class B or C interior finish in the corridor and exit or room is protected by automatic sprinklers and Parameter 13 is 0; use () if the room with existing Class C interior finish is protected by automatic sprinklers, Parameter 4 is greater than or equal to 1, and Parameter 13 is 0.	(e) Use (0) where Parameter 1 is based on first floor zone or on an unprotected type of construction (columns marked "000" or "200") (f) Use () if the area of Class B or C interior finish in the corridor and exit or room is protected by automatic sprinklers and Parameter 13 is 0 and use () for rooms of Class C interior finish where Safety Parameter 4 is greater than or equal to 1.				Technical Committee on Alternative Approaches to Life Safety	During preparation of the 2001 edition, the notes got intermixed. This corrects an editorial error		

Changes to NFPA FSES - Health Care Facilities

2007 - NFPA 101A

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1		Table 4.6.8.1 Hazardous Areas Deficiencies	Makes the distinction between fire-resistance rated enclosures and smoke partitions.	Table 4.6.8.1 Hazardous Areas Deficiencies	Table 4.6.8.1 Hazardous Areas Deficiencies	Annual 2006 ROP	101A - 2	CP3	Technical Committee on Alternative Approaches to Life Safety		Accept	
2		4.6.8.2	Makes the distinction for smoke partitions.	Where the hazard is not severe, the maximum deficiency that can occur is a single deficiency, which shall be permitted to be countered by either of the following means: (1) A fire resistance-rated enclosure (2) Automatic extinguishing equipment and enclosure by smoke partitions	Where the hazard is not severe, the maximum deficiency that can occur is a single deficiency, which shall be permitted to be countered by either a fire-rated enclosure or automatic extinguishing equipment.	Annual 2006 ROP	101A - 2	CP3	Technical Committee on Alternative Approaches to Life Safety	NFPA 101-2006 will require enclosure by smoke partitions where a hazardous area is protected by sprinklers for existing health care occupancies. The same is currently required for new health care occupancies. The proposed changes to Table 4.6.8.1, and to the text of 4.6.8.2 and 4.6.8.3, reflect this requirement.	Accept	
3		4.6.8.3	Makes the distinction for smoke partitions.	A single deficiency situation also is considered to exist where a severe hazard is protected by either of the following means, but not by both: (1) A fire resistance-rated enclosure (2) Automatic extinguishing equipment and enclosure by smoke partitions	A single deficiency situation also is considered to exist where a severe hazard is protected either by automatic extinguishing systems or by a fire resistance-rated enclosure, but not by both.	Annual 2006 ROP	101A - 2	CP3	Technical Committee on Alternative Approaches to Life Safety		Accept	
4		4.6.13.4.3 Entire Building	Clarify that this section applies to a renovated smoke zone within an existing hospital. Reference to NFPA 101 section changes, and Worksheet 4.7.8B becomes Worksheet 4.7.8C.	Entire Building. Total space automatic sprinkler protection is to be credited only if the entire structure is protected by automatic sprinklers in accordance with 18.3.5 or 19.3.5 (NFPA 101). This credit also is given where a smoke zone in an existing hospital is renovated to install quick-response or residential sprinklers in accordance with 18.1.1.4.3 (NFPA 101); however, the mandatory safety requirements values of Worksheet 4.7.8C for nonsprinklered existing hospitals must be used. Wherever quick-response automatic sprinklers are provided for zones as part of the entire building sprinkler system, additional credit shall be permitted to be taken under Safety Parameter 12, "Smoke Detection and Alarm." (See 4.6.12 and Worksheet 4.7.6.)	Total space automatic sprinkler protection is to be credited only if the entire structure is protected by automatic sprinklers in accordance with 18.3.5 or 19.3.5 (NFPA 101). This credit also is given where a smoke zone is renovated to install quick-response or residential sprinklers in accordance with 18.1.1.4.6 (NFPA 101), however, the mandatory safety requirements values of Worksheet 4.7.8B for nonsprinklered existing buildings must be used. Wherever quick-response automatic sprinklers are provided for zones as part of the entire building sprinkler system, additional credit shall be permitted to be taken under Safety Parameter 12, "Smoke Detection and Alarm." (See 4.6.12 and Worksheet 4.7.6.)	Annual 2006 ROP	101A - 3	CP5	Technical Committee on Alternative Approaches to Life Safety	NFPA 101-2006 will require existing nursing homes to be sprinklered. The FSES has been recalibrated to reflect the mandatory sprinklers, and the resulting changes needed to the mandatory safety requirements are shown above in the recommendation.	Accept	
5		Worksheet 4.7.8B	Worksheet 4.7.8 is subdivided into Worksheet 4.7.8A, B, and C. Existing Nursing Homes (4.7.8B) becomes a separate worksheet.	New Hospitals, Existing Hospitals, or New Nursing Homes Worksheet 4.7.8B - Mandatory Safety Requirements - Existing Nursing Homes Worksheet 4.7.8C - Mandatory Safety Requirements - Major Rehabilitation in Nonsprinklered Existing Hospitals	Worksheet 4.7.8A - Mandatory Safety Requirements - Hospitals or Nursing Homes Worksheet 4.7.8B - Mandatory Safety Requirements - Major Rehabilitation in Nonsprinklered Existing Buildings	Annual 2006 ROP	101A - 3	CP5	Technical Committee on Alternative Approaches to Life Safety	NFPA 101-2006 will require existing nursing homes to be sprinklered. The FSES has been recalibrated to reflect the mandatory sprinklers, and the resulting changes needed to the mandatory safety requirements are shown above in the recommendation.	Accept	

Changes to NFPA FSES - Health Care Facilities

2010 - NFPA 101A

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1		4.6.1.2	Clarify meaning of floor or zone.	The floor level used to determine the parameter value is the floor of the fire zone being evaluated. The floor or zone is specified relative to, and beginning with, the level of exit discharge as defined by 3.3.77.1(NFPA 101).	The floor level used to determine the parameter value is the floor of the fire zone being evaluated. The floor of zone is the story height above the floor of the primary level of exit discharge as defined by 18.1.6.2 and 19.1.6.2 (NFPA 101).	Annual 2009 ROP						
2		4.6.1.3	Clarify section for floors below level of exit discharge.	Where the zone is on a floor below the level of exit discharge, the construction value shall be based on the distance of that floor from the level of exit discharge (i.e., one floor below the level of exit discharge equals "second"; two floors below the level of exit discharge equals "third"; three or more floors below the level of exit discharge equals "fourth and above").	Where the zone is on a floor below the floor of lowest discharge, the construction value shall be based on the distance of that floor from the closest level of discharge (i.e., one floor below discharge equals "second"; two floors below discharge equals "third"; three or more floors below discharge equals "fourth and above").	Annual 2009 ROP						
3		4.6.6.4	Added section	Zone length applies to the greater dimension of length or width of the zone.	Added section	Annual 2009 ROP	101A - 5	CP8	Technical Committee on Alternative Approaches to Life Safety	Safety Parameter 6 Zone Dimensions is being updated to reflect that NFPA 101 18.19.3.7 include criteria other than just maximum zone length, width, and area. The criteria are expressed in terms maximum travel distance to a door in the smoke barrier and zone area. The proposed change corrects this deficiency in NFPA 101A. The new 4.6.6.4 clarifies that where the term zone length is used it is meant to be the greater of the length or width of the zone.	Accept	
4		Worksheet 4.7.6 Safety Parameter Values	In Worksheet 4.7.6, Safety Parameter 1 Construction, change the construction label Type I(433) to I(442).	Construction label Type I(442)	Construction label Type I(443)	Annual 2009 ROP	101A - 6	CP9	Technical Committee on Alternative Approaches to Life Safety	Editorial correction as the source documents for building construction type, NFPA 220 and NFPA 5000, have been revised to use the term Type I(442).	Accept	
5		Worksheet 4.7.6 Safety Parameter Values	Added Note h and reference in Worksheet.	(h) Use (0) where zone area $\leq 22,500$ ft ² and distance from any point to reach a door in smoke barrier ≤ 200 ft	Added Note	Annual 2009 ROP		CP8	Technical Committee on Alternative Approaches to Life Safety	Safety Parameter 6 Zone Dimensions is being updated to reflect that NFPA 101 18.19.3.7 include criteria other than just maximum zone length, width, and area. The criteria are expressed in terms maximum travel distance to a door in the smoke barrier and zone area. The proposed change corrects this deficiency in NFPA 101A. The new 4.6.6.4 clarifies that where the term zone length is used it is meant to be the greater of the length or width of the zone.	Accept	
5		Worksheet 4.7.8 A Mandatory Safety Requirements	Added row for "High rise" buildings.			Annual 2009 ROP	101A - 7	CP1	Technical Committee on Alternative Approaches to Life Safety	NFPA 101 is being revised for the 2009 edition to require all existing high-rise buildings containing health care occupancies to be sprinklered. The mandatory safety requirements values in Worksheet 4.7.8A are being revised to accurately reflect the sprinkler requirement.	Accept	

Changes to NFPA FSES - Health Care Facilities

2013 - NFPA 101A

Item #	General Category	Code Section	Description of Change/Recommendation	New Code Text	Previous Code Text	Reference Date	Reference Item #	Reference Log #	Submitter	Substantiation	Committee Action	Committee Comment
1		4.3.2 Selection of Zones to Be Evaluated (4)	Add clause: "customary access for four or more inpatients simultaneously who are incapable of self-preservation"	(4) Zones not involving housing, treatment, or customary access for four or more inpatients simultaneously who are incapable of self-preservation; such zones should be evaluated as follows:	(4) Zones not involving housing, treatment, or customary access for patients; such zones should be evaluated as follows:	Annual 2012 ROP	101A - 6	CP8	Technical Committee on Alternative Approaches to Life Safety	The change in text proposed for 4.3.2(4) reflects changes being made to NFPA 101 for the 2012 edition. If the NFPA 101A technical committee needs to tweak the wording further for agreement with NFPA 101, it can do so during the ROC-preparation stage which will occur once the language of NFPA 101-2012 is finalized.	Accept	
2		4.3.2 Selection of Zones to Be Evaluated (5)(d)	Added note to section.	(d) A patient sleeping suite exceeding the 10,000 ft2 (930m2) limitation of 18.2.5.7.2.3(C) or 19.2.5.7.2.3(C) (NFPA 101) should be evaluated as a separate zone.	Addition to code.	Annual 2012 ROC	101A - 1	CC1	Technical Committee on Alternative Approaches to Life Safety			
3		4.7.9 Step 9	Rewording	The equivalency covered by Worksheets 4.7.2 through 4.7.9 includes the majority of the considerations covered by the Life Safety Code. Some considerations are not evaluated by this method and must be considered separately. These additional considerations are covered in Worksheet 4.7.10, Facility Fire Safety Requirements Worksheet. Complete one copy of this separate worksheet for each facility.	The equivalency covered by Worksheets 4.7.2 through 4.7.9 includes the majority of the considerations covered by the Life Safety Code. Some considerations not evaluated by this method must be considered separately. These additional considerations are covered in Worksheet 4.7.10, Facility Fire Safety Requirements Worksheet. Complete one copy of this separate worksheet for each facility.	Annual 2012 ROC	101A - 1	CC1	Technical Committee on Alternative Approaches to Life Safety	The actions taken in the recommendation field are those promised by the Committee Action on ROP Proposal 101A-2. NFPA 101-2012, Life Safety Code, was released in time to permit this comment to be developed during the ROC phase for the revision of NFPA 101A. NFPA 101-2012 correctly notes that NFPA 92A and NFPA 92B have been withdrawn and replaced by a new document NFPA 92, Standard for Smoke-Control Systems.		
4		4.7.10 Step 10	Rewording	Conclude whether the level of life safety is at least equivalent to that prescribed by the Life Safety Code using Worksheet 4.7.11, Conclusions. Worksheet 4.7.11 combines the zone fire safety equivalency evaluation of Worksheet 4.7.9 and the additional considerations of Worksheet 4.7.10.	Worksheet 4.7.11, Conclusions, combines the zone fire safety equivalency evaluation of Worksheet 4.7.9 and the additional considerations of Worksheet 4.7.10.	Annual 2012 ROC	101A - 1	CC1	Technical Committee on Alternative Approaches to Life Safety			
5		4.7.11 Conclusions	Revise Worksheet 4.7.11 Conclusions (for health care) to read the same as Worksheet 9.6.7 Conclusions (for educational) - but change the Chapter 9 references to Chapter 4 references.	<p>1. All of the checks in Worksheet 4.7.9 are in the "Yes" column and all applicable considerations in Worksheet 4.7.10 are identified as "Met". The level of fire safety is at least equivalent to that prescribed by NFPA 101, Life Safety Code, for health care occupancies.</p> <p>2. All of the checks in Worksheet 4.7.9 are in the "Yes" column and all considerations identified in Worksheet 4.7.10 as "Not Met" have been evaluated and mitigated to the satisfaction of the AHJ. The level of fire safety is at least equivalent to that prescribed by NFPA 101, Life Safety Code, for health care occupancies.</p> <p>3. One or more of the checks in Worksheet 4.7.9 are in the "No" column or any consideration identified in Worksheet 4.7.10 as "Not Met" has NOT been evaluated and mitigated to the satisfaction of the AHJ. The level of fire safety is not shown by this system to be equivalent to that prescribed by NFPA 101, Life Safety Code, for health care occupancies.</p>	<p>1. All of the checks in Worksheet 4.7.9 are in the "Yes" column. The level of fire safety is at least equivalent to that prescribed by the Life Safety Code.*</p> <p>2. One or more of the checks in Worksheet 4.7.9 are in the "No" column. The level of fire safety is not shown by this system to be equivalent to that prescribed by the Life Safety Code.*</p> <p>* The equivalency covered by this worksheet includes the majority of considerations covered by the Life Safety Code. There are some considerations that are not evaluated by this method. These must be considered separately. These additional considerations are covered in Worksheet 4.7.10, the Facility Fire Safety Requirements Worksheet. One copy of this separate worksheet is to be completed for each facility.</p>	Annual 2012 ROP	101A - 5		The Chapter 9 FSES for educational occupancies is the newest of the FSES chapters. It explains what to do with the results of the Facility Fire Safety Requirements Worksheet which covers considerations not otherwise evaluated by the FSES. The Conclusions worksheets of Chapters 4, 5, 6 and 7 do not tell the user what to do if items are Not Met in the Facility Fire Safety Requirements Worksheet. The wording of the Conclusions worksheet in Chapters 4, 5, 6 and 7 tell the AHJ that equivalency has been achieved based solely on getting all Yes entries in the Equivalency Evaluation worksheet. A footnote states that the considerations in the Facility Fire Safety Requirements Worksheet must be considered separately but doesn't tell the AHJ not to accept the equivalency or how to consider those items separately. If the Chapter 9 approach is not correct, it needs to be adjusted. In any case, the language in Chapters 4, 5, 6 and 7 needs revision to clarify what effect the results of the Facility Fire Safety Requirements Worksheet need to have on the overall equivalency determination. The NFPA 101A technical committee has formed a task group to study the issue and report back at the ROC-preparation meeting.	Accept		