COMMITTEES ON NFPA BUILDING CODE

Technical Committee on Building Systems

NFPA 5000 ROP Meeting Agenda

Monday, September 21, 2009

Embassy Suites Hotel
Cleveland - Downtown

1. Call to Order

The BLD-BSY meeting will be called to order by the chair, John A. Rickard, at 8:00 a.m. Eastern (7:00 a.m. Central) on Monday, September 21, 2009 at the Embassy Suites Hotel Cleveland – Downtown, OH.

2. Introduction of Attendees

A current committee roster is attached. (Page 2).

3. Approval of Minutes

Approve the NFPA 900 July 8, 2008 ROP Teleconference Meeting Minutes (Page 4) and the NFPA 5000 October 3, 2007 ROC Meeting Minutes (Page 6).

4. NFPA 5000 Public Comment Preparation

Review of NFPA 5000 Public Proposals. (Page 8).

5. New Business

6. Date and Location of next meeting

7. Adjournment

AF/DM
Attachments

Address List No Phone

8/31/2009
Allan Fraser
BLD-BSY

Building Systems

Building Code

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National Electrical Code Correlating Committee

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American Society of Interior Designers

Robert Van Becelaere **M** 7/20/2000
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Address List No Phone

Building Systems

Building Code

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Allan Fraser
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NFPA 900 ROP MEETING MINUTES
OF THE BUILDING CODE TECHNICAL COMMITTEE ON BUILDING SYSTEMS
July 8, 2008
1:00 pm via Conference Call

Item 1, Call to Order

The NFPA 900 ROP meeting via conference call of the Building Code Technical Committee on Building Systems was convened by the Chair, John Rickard at 1:00 p.m. on Tuesday, July 8, 2008.

Item 2, Introduction of Members and Guests

The Chair opened the meeting with welcoming remarks, and self-introductions of meeting participants and guests were conducted.

The following Technical Committee Principal and Alternate members participated:

NAME	COMPANY
John A. Rickard, Chair	Olicon, Inc.
Stanton Alexander, Principal	North American Testing Company
Phil Forner, Principal	Allendale Heating Company Inc./Representing Air Conditioning Contractors of America
Joshua Greene, Principal	The RJA Group
Raymond N. Hansen, Principal	U.S. Air Force
Shelley Siegel, Principal	Universal Design & Education Network/Representing American Society of Interior Designers
Robert Van Becelaere, Principal	Ruskin Manufacturing Division/Representing American Society of Mechanical Engineers
Shane M. Clary, Alternate to Michael Reeser	Bay Alarm Co./Representing California Automatic Fire Alarm Association Inc.
Gary Nuschler, Alternate to Brian Black	Otis Elevator Co. /Representing National Elevator Industry Inc.

The following Technical Committee Principal Members did not participate:

NAME	COMPANY
William Ambrefe, Principal	City of Beverly, MA
Dennis W. Bradshaw, Principal	Ralph Gerdes Consultants, LLC
Joshua W. Elvove, Principal	U. S. Dept. of Veterans Affairs
A. Hal Key, Principal	City of Mesa AZ Fire Department
Joseph V. McElvaney, Jr., Principal	City of Phoenix AZ
John Munroe, Principal	Earth Tech (Canada) Inc.
Jim Pauley, Principal	Square D Company/Representing National Electrical Code Correlating Committee
William A. Webb, Principal	Schirmer Engineering Corp./Representing American Society for Heating, Refrigeration & Air Conditioning Engineers Inc.

The following NFPA staff participated:

Allan Fraser

Item 3, Approval of Minutes

The Committee approved the minutes of the July 20, 2005 ROP meeting.

Item 4, Public Proposals

The committee reviewed and voted on two (2) public proposals for NFPA 900.

Item 5, Committee Proposals

The committee approved one (1) committee proposal.

Item 6, Date and Location of Next Meeting

The next meeting of the Technical Committee on Building Systems will be determined closer to the deadline for submission of public comments. Staff will send out appropriate information at that time.

Item 7, Adjournment

On Tuesday, July 8, 2008, the meeting was adjourned at 1:10 p.m. by the Chair, John A. Rickard.

Minutes prepared by Allan B. Fraser, CBI, CPCA, NFPA Staff Liaison

NFPA 5000 ROC Meeting Minutes of the Technical Committee on Building Systems October 3, 2007 Conference Call/Marriott Providence Downtown Providence, RI

Item 1, Call to Order

The meeting was called to order by Chair John A. Rickard at 9:15 am. on Wednesday, October 3, 2007 at the Marriott Providence Downtown, Providence, RI

Item 2, Introduction of Members and Guests

The Chair opened the meeting with welcoming remarks, and self-introductions of meeting participants and guests were conducted.

The following Technical Committee Principal and Alternate members participated:

NAME	COMPANY
John A. Rickard, Chair	Pi Architects
Stanton M. Alexander, Principal	North American Testing Company
Edward A. Donoghue, Principal	Edward A. Donoghue Associates, Inc./Representing National Elevator Industry Inc.
Phil Forner, Principal	Allendale Heating Company, Inc./Representing Air Conditioning Contractors of America
Raymond N. Hansen, Principal	US Department of the Air Force
Jim Pauley, Principal	Square D Company/Schneider Electric/Representing National Electrical Code Correlating Committee
Robert Van Becelaere, Principal	Ruskin Manufacturing/Representing American Society of Mechanical Engineers
Shane Clary, Alternate	California Automatic Alarm Assoc.
Gary Nuschler, Alternate	National Elevator Industry Inc.

The following principal members were absent with no alternate present:

NAME	COMPANY
William Ambrefe, Principal	City of Beverly, MA
Dennis W. Bradshaw, Principal	Ralph Gerdes Consultants, LLC
Joshua Greene, Principal	The RJA Group
A. Hal Key, Principal	City of Mesa AZ Fire Department
Joe McElvaney, Principal	Phoenix Fire Department

John E. Munroe, Principal	Earth Tech (Canada) Inc.
Shelley Siegel, Principal	Universal Design & Education Network
William A. Webb, Principal	Schirmer Engineering Corporation/Representing American Society for Heating, Refrigeration & Air Conditioning Engineers Inc.

There following Guests were in attendance:

Brian Black –National Elevator Industry, Inc.
Jim Bowman – American Forest Products Assoc.
Josh Elvove – GSA
David Frable- GSA
Todd Shearer – Simplex Grinell

The following NFPA Staff were in attendance:

Allan Fraser
Diane Matthews

Item 3, Approval of Minutes

The Committee approved the minutes of the November 6-7, 2006 ROP meeting on NFPA 5000.

Item 4, NFPA 5000 Public Comments.

The committee reviewed and acted on nine (9) public comments. No committee comments were developed.

Item 5, Date and location of next meeting.

The next meeting is tentatively scheduled for Jan/Feb of 2010 for the 2011 edition of NFPA 5000. The committee may also have one or more conference calls in the event that a TIA regarding "First Responder Elevators" is ready to be developed and moved forward when the ASME A17 task group has completed it hazard assessment work, tentatively projected to be in the spring of 2008. .

Item 6, Adjournment

On Wednesday, October 3, 2007 the meeting was adjourned at 10:40 a.m. by Chair, John A. Rickard.

Minutes prepared by Allan B. Fraser, CBI, CPCA, NFPA Staff Liaison

5000-2 Log #CP25b BLD-BSY Final Action:
(Entire Document)

Submitter: Technical Committee on Building Systems,
Recommendation: Review entire document to: 1) Update any extracted material by preparing separate proposals to do so, and 2) review and update references to other organizations documents, by preparing proposal(s) as required.
Substantiation: To conform to the NFPA Regulations Governing Committee Projects.

5000-16 Log #52b BLD-BSY Final Action:
(2.3.13)

Submitter: Steve Ferguson, ASHRAE
Recommendation: Revise text as follows:
2.3.13 ASHRAE Publications. ANSI/ASHRAE 90.2, Energy-Efficient Design of Low-Rise Residential Buildings, ~~2004~~ 2010.
(No change is proposed for the other ASHRAE publications.)
Substantiation: To update the reference standard in preparation for the 2012 edition of NFPA 5000.

5000-18 Log #55b BLD-BSY Final Action:
(2.3.13)

Submitter: Steve Ferguson, ASHRAE
Recommendation: Revise text to read as follows:
2.3.13 ASHRAE Publications
ANSI/IESNA/ASHRAE 90.1, Energy Standard for Buildings Except Low-Rise Residential, ~~2007~~, 2010 (No change is proposed for the other ASHRAE publications)
Substantiation: To update the reference standard in preparation for the 2012 edition of NFPA 5000.

5000-19 Log #73 BLD-BSY Final Action:
(2.3.25)

Submitter: Jake Pauls, Jake Pauls Consulting Services
Recommendation: Revise text to read as follows:
ICC/ANSI 117.1, *American National Standard for Accessible and Usable Buildings and Facilities*, ~~2003~~ 2009
Substantiation: The A117 Committee expects the 2009 edition to be finished by the end of 2009 and this proposal is being submitted in order to place the requirements before the committee with the understanding that the specific reference may possibly need to be modified as to edition year at the ROC phase.

5000-165 Log #75b BLD-BSY Final Action:
(22.1.7)

Submitter: Jake Pauls, Jake Pauls Consulting Services
Recommendation: 22.1.7 Accessibility ~~(No requirements.)~~

22.1.7.1 All new buildings or portions thereof used as a one- or two-family dwelling shall comply with ICC/ANSI A117.1, section 1006 Type C Units (Visitability) unless:

(1) they comply with the requirements in ICC/ANSI A117.1 for Type A or Type B units,

(2) they are a dwelling unit located above another dwelling unit or

(3) they meet the site impracticability test set out in Section 12.33.3.2.4 or the base flood elevation conditions set out in Section 12.33.3.2.5

Substantiation: Type C, visitable dwelling units have been added to the technical requirements of ICC/ANSI A117.1-2009 because of the widespread need for such dwelling units and the realization that, with the small incremental change coming from typical new dwelling unit construction, many years will pass before the supply of such units meets the demand for the minimal accessibility and usability such units provide. For this and other reasons, Type C is being scoped via this proposal for all new dwelling units unless they comply with requirements for Type A or Type B units or they are exempted for site impracticability reasons. In addition to accessibility and usability justification, there are important safety benefits from the zero-step requirement applying to one of the dwelling unit entrances that bring dwellings into line with all other new buildings regulated by this Code.

Without repeating much of the extensive justification for the minimal package of requirements for visitable dwelling units provided at the authoritative website, www.concretechange.org, the following listing outlines what limited features are actually being required—and why—for visitable dwelling units under the new ICC/ANSI A117.1-2009 requirements.

Regarding the dwelling unit entrance, at least one unit entrance shall be on a circulation path complying with requirements of A117.1 Section 1006.5 from a public street or sidewalk, a dwelling unit driveway, or a garage. In part, compliance with Section 1006.5 means a zero-step entrance, the single most beneficial aspect of visitability. Other requirements are for circulation path components consisting of one or more of the following.

· walking surfaces with slopes not steeper than 1:20 and complying with A117.1 Section 303,

· doorways with clear widths of at least 32 inches and other circulation path widths also compying with A117.1 Section 403.5,

· ramps complying ith A117.1 Section 405,

· elevators complying with A117.1 Sections 407 through 409, and

· wheelchair (platform) lifts complying with A117.1 Section 410.

The interior spaces that must be connected in accordance with A117.1 Section 1006.5 are:

· A toilet room or bathroom containing a lavatory and a water closet with reinforcement provided for the future installation of grab bars at water closets. Clearances at the water closet need to comply with A117.1 Section 1004.11.3.1.2.1, 1004.11.3.1.2.2 or 1004.11.3.1.2.3 for Type B Units, Option A bathrooms.

· One habitable space with an area 70 square feet minimum.

· Where a food preparation area is provided on the entrance level, it requires a sink, a cooking appliance, and a refrigerator with clearances between all opposing base cabinets, counter tops, appliances or walls within the food preparation area a minimum of 40 inches minimum (with an exception for spaces that do not provide a cooktop or conventional range a clearance 36 inches wide is permitted).

The final requirement, at A117.1 Section 1006.8 is for receptacle outlets and operable parts of lighting controls to be located 15 inches minimum and 48 inches maximum above the finish floor (with exceptions for receptacle outlets serving a dedicated use, controls mounted on ceiling fans and ceiling lights, floor receptacle outlets, and lighting controls and receptacle outlets over countertops).

The most fundamental reason for the visitability package of minimal requirements, as often stated by the best known proponent of the concept, Eleanor Smith of Atlanta, is “for a wheelchair user to be able to get into a dwelling unit and pee.” While these basic criteria dictate the more difficult aspects of the visitability package (related to the zero-step entrance and the minimally usable toilet room or bathroom), the A117 Committee added a few other features that it considered essential.

More-complex social (public health) justifications for visitability have been set out in recent publications, both of which can be accessed via the website, www.concretechange.org in the Resources page. They are the AARP Research Report, "Increasing home access: Designing for visitability", and a paper in the Journal of the American Planning Association. Among the “unintended social and financial costs of continuing to construct steps at all entrances and narrow interior doors in homes:

· The residents can't comfortably entertain friends and relatives who have mobility limitation.

· A non-disabled person who experiences a temporary disability such as broken bones or recuperation from surgery often must find a different place to live while recuperating.

· A resident may need to move permanently to a nursing home, while a lack of barriers would have allowed the person to stay at home for added months or years.

· Non-disabled residents strain their bodies carrying bicycles, baby carriages, heavy furniture, etc., up steps and through narrow doors and passages.

· Resale or renting the home cuts out potential customers who have mobility limitation or who want a home that welcomes disabled visitors."

It must also be noted that many countries are undergoing dramatic changes in demographics with increasing aging of the population, deteriorating fitness of people regardless of age, and obesity with all of its direct and indirect health and mobility implications. All of these changes point to the need to make our homes more accessible and usable generally.

The ConcreteChange website also provides practical information for builders as well as recently confirmed cost estimates (average for new construction: $200, with a range of $100 to $600 depending on slab or basement construction, for a zero-step entrance plus $50 average for interior doors). Also to be stressed, as noted at the website, "visitability does not demand a front entrance if a side or back entrance is the most feasible" and often the easiest and most logical entrance to make step free is from the garage.

Finally, it should be noted that the formal recommendation of the American Public Health Association on this topic appears in a newly updated public policy position being processed for final APHA approval in November 2009. The public policy position is directed specifically to model code organizations such as NFPA and ICC. (During 2009 and 2010, ICC is also processing at least one proposal for scoping visitability, in accordance with the technical requirements of ICC/ANSI A117.1-2009.)

Since the first edition of NFPA 5000, NFPA has taken the lead position, among model building code groups in the US and Canada, in adopting code change proposals that were recommended in current APHA public policy positions adopted in 1999 and 2000. Visitability is as much an important public health feature as are reasonably safe dwelling unit stairways and automatic sprinkler protection, both of which were featured in APHA policies and subsequently adopted by NFPA. With public health being everything a community does to preserve the wellbeing of its members—and with visitability being based on the combination of individual, family and community needs, the time is now right for NFPA to again take the lead with this important package of relatively modest requirements to address important social goals, goals that are becoming ever more important with the public health changes that are listed above. That this is also occurring as the US is undertaking a major reassessment of what it should be doing with health care is also important. The home building and community development fields need to do their share to make our built environment a positive feature rather than a negative feature in the physical and other aspects of our health with the demographic changes now sweeping the world. Even with the nearly 100 percent scoping called for in this proposal, it will take decades for the full benefits of visitability to be achieved and therefore the limited availability of visitable new homes will almost certainly drive efforts for the voluntary upgrading of other homes. With the costs for such upgrading being much greater than is the provision of visitability for new homes, it is imperative that the scoping for new homes be as complete as possible.

(The A117 Committee expects the 2009 edition to be finished by the end of 2009 and this proposal is being submitted in order to place the requirements before the committee with the understanding that the specific requirement may possibly need to be modified at the ROC phase. A correlative proposal has been submitted to change the current Code reference to update this standard, from the 2003 edition, to the 2009 edition, the first edition to include a technical specification for Type C, Visitable, Units.)

Procedurally, it is recommended that, in advance of its ROP meeting in late 2009, the Residential Technical Committee set up a Task Group to assist the entire Technical Committee to process this proposal. Members of the Task Group should include representatives from NFPA's Disability Access Review and Advisory Committee, DARAC, especially members who were active in the work of the A117 Committee on the visitability package in the ICC/ANSI A117.1-2009 draft. As well as advising on scoping issues, the Task Group should review this proposal justification for technical consistency with the A117.1 Type C requirements.

This is not original material; its reference/source is as follows:

The visitability requirements of ICC/ANSI A117.1-2009 (as released for public comment) are paraphrased in this proposal. Portions of the justification were taken from the most relevant website, www.concretechange.org and, where these are verbatum, quotation marks are used in the justification section of this proposal.

5000-190 Log #204b BLD-BSY Final Action:
(33.3.7 and 54.12)

Submitter: Dave Frable, U.S. General Services Administration
Recommendation: Revise text as follows:

33.3.7 ~~First Responders Use~~ Fire Service Access Elevator. In buildings over 120 ft in height, a minimum of one ~~first responders use~~ fire service access elevator shall be provided in accordance with 54.12.

54.12 ~~First Responders Use~~ Fire Service Access Elevator .

54.12.1 General. When required by 33.3.7, every floor of the building shall be served by a ~~first responders use~~ fire service access elevator. Except as modified by this section, the first responders use elevator shall be installed in accordance with Chapter 54 and ASME A17.1, *Safety Code for Elevators and Escalators*.

54.12.1.1 The ~~first responders use~~ fire service access elevators shall be sized in accordance with Section 54.3.

54.12.2 ~~First Responders Use~~ Fire Service Access Elevator Lobby.

54.12.2.1 General. The ~~first responders use~~ fire service access elevator shall open into a~~n first responder use~~ fire service access elevator lobby complying with 54.12.2.

Exception: Where a ~~first responder use~~ fire service access elevator has two entrances onto a floor, the second entrance shall not be required to open into an elevator lobby complying with 54.12.2.

54.12.2.2 Access. The ~~first responders use~~ fire service access elevator lobby shall have direct access to an exit stair enclosure.

54.12.2.3 Lobby Enclosure. The ~~first responders use~~ fire service access elevator lobby shall be enclosed with a smoke barrier having a minimum 1-hour fire resistance rating, except that lobby door assemblies shall comply with 54.12.2.4.

Exception: Enclosed ~~first responder~~ fire service access elevator lobbies are not required at the street floor.

54.12.2.4 Lobby Door Assemblies. Each ~~first responders use~~ fire service access elevator lobby door shall have a fire protection rating of not less than a 3/4 hour and shall be self closing or automatic closing.

54.12.3 Standpipe Hose Connection. Each building exit stair having direct access to the ~~first responders use~~ fire service access elevator lobby shall be provided with a standpipe hose connection in accordance with Section 55.4.

54.12.4 Two-Way Communication System.

54.12.4.1 The ~~first responders use~~ fire service access elevator and every associated ~~first responders use~~ fire service access elevator lobby shall be provided with an approved two-way communication system.

54.12.4.2 The communication system shall operate between the emergency command center complying with 34.2.5 and the ~~first responders use~~ fire service access elevator and every associated ~~first responders use~~ fire service access elevator lobby.

54.12.4.3 The two-way communication system shall be designed and installed in accordance with *NFPA 72*.

54.12.4.4 The requirements of 54.12.4.1 through 54.12.4.3 shall not apply where the first responders radio system is approved as an equivalent system.

54.12.5 Elevator System Monitoring. The ~~first responders use~~ fire service access elevator shall be continuously monitored at the emergency command center by a standard emergency service interface system meeting the requirements of *NFPA 72*.

54.12.6 Electrical Power. The following features serving each ~~first responders use~~ fire service access elevators shall be supplied by both normal power and Type 60/Class 2/ Level 1 standby power:

(1) Elevator equipment
(2) Elevator machine room ventilation and cooling equipment
(3) Elevator controller cooling equipment

54.12.7 Protection of Wiring or Cables. Wires or cables that provide normal and standby power, control signals, communication with the car, lighting, heating, air conditioning, ventilation, and fire detecting systems to fire service access elevators shall be protected by construction having a minimum 1-hour fire resistance rating or shall be circuit integrity cable having a minimum 1-hour fire resistance rating.

54.12.8 Standby Power. The ~~first responder use~~ fire service access elevator shall be provided with standby power in accordance with 34.2.4.

54.12.9 Elevator Machine Rooms and Machinery Spaces. Automatic fire sprinklers shall not be installed in ~~first responders use~~ fire service access elevator machine rooms and machinery spaces.

Substantiation: The intent of this code change is to correlate the term for first responder use elevators with the terminology used in the International Building Code. I was the original proponent for the existing provisions for first responder use elevators in NFPA 5000 as well as the original proponent for the provisions for fire service access

elevators in the International Building Code.
This is not original material; its reference/source is as follows:
International Building Code

5000-192 Log #203b BLD-BSY Final Action:
(33.3.7 and 54.12.1.1)

Submitter: Dave Frable, U.S. General Services Administration
Recommendation: Revise text as follows:

33.3.7 First Responders Use Elevator. In buildings with an occupied floor over 120 ft (36576 mm) in height above the lowest level of fire department vehicle access, a minimum of ~~one~~ two elevators having a minimum 3,500 lb capacity serving every floor within the subject building shall be provided to serve as a first responders use elevator ~~shall be provided~~ in accordance with 54.12.

Exception: One elevator having a minimum capacity of 4,000 lb shall be permitted instead of 2 elevators having a 3,500 lb capacity.

54.12.1.1 A minimum of one ~~The~~ first responders use elevator~~s~~ shall be sized in accordance with Section 54.3.

Substantiation: The intent of this code change is to provide clarification regarding the building height requirement for first responder use elevators as well as to provide a compromise that addresses the minimum number of fire service access elevators that are required in a building based on the size and capacity of the elevator and not strictly the number of elevators. The proposed text also allows for design flexibility as well as providing minimum requirements for the size and capacity of the first responder use elevators by correlating with 54.12.1.1 and 54.3.

5000-229 Log #201 BLD-BSY Final Action:
(54.6 (New))

Submitter: Dave Frable, U.S. General Services Administration
Recommendation: Add new text as follows:

54.6 Elevator identification. Each elevator shall be individually marked with an approved identification at each elevator landing and elevator control operating panel.

Substantiation: The intent of this code change is to provide a means for each elevator to be indentified consistently throughout the building.

5000-230 Log #202 BLD-BSY Final Action:
(54.8 (New))

Submitter: Dave Frable, U.S. General Services Administration
Recommendation: Add new text as follows:

54.8 Hoistway Lighting. When firefighters' emergency operation is active, the entire height of the hoistway shall be illuminated at not less than 1 foot-candle (11 lux) as measured from the top of the car of each elevator.

Substantiation: The intent of this code change is to provide illumination within elevator hoistways when firefighters emergency operation has been enabled.

5000-231 Log #51 BLD-BSY Final Action:
(54.12)

Submitter: Brian D. Black, BDBlack Codes, Inc. / Rep. National Elevator Industry, Inc.
Recommendation: Revise text as follows:

54.12 First Responders Use ~~Elevator~~ Elevators.

54.12.1 General.

54.12.1.1 ~~When~~ Where required by 33.3.7, a minimum of three elevators or all elevators, whichever is less, shall be first responders use elevators in accordance with this section.

54.12.1.2 Every ~~every~~ floor of the building shall be served by ~~a~~ the minimum number of first responders use ~~elevator~~ elevators required by 54.12.1.1.

54.12.1.3 Except as modified by this section, the first responders use ~~elevator~~ elevators shall be installed in accordance with Chapter 54 and ASME A17.1 / CSA B44, *Safety Code for Elevators and Escalators*.

54.12.1.4 ~~54.12.1.1~~ The first responders use elevators shall be sized ~~in accordance with Section 54.3~~ and arranged to accommodate a 2 ft × 6 ft 4 in. (610 mm × 1930 mm) ambulance stretcher in the horizontal, open position.

54.12.2 First Responders Use ~~Elevator~~ Elevators Lobby.

54.12.2.1 General.

54.12.2.1.1 The first responders use ~~elevator~~ elevators shall open ~~into an~~ onto one or more first ~~responder~~ responders use elevator ~~lobby~~ lobbies complying with 54.12.2, except as otherwise permitted in 54.12.2.1.2.

54.12.2.1.2 ~~Exception:~~ Where a first ~~responder~~ responders use elevator has two entrances onto a floor, the second entrance shall not be required to open ~~into~~ onto an elevator lobby complying with 54.12.2.

54.12.2.2 Access.

54.12.2.2.1 The first responders use elevator lobby shall have direct access to an exit stair enclosure.

54.12.2.2.2 The exit stair enclosure addressed in 54.12.2.2.1 shall provide an additional means of accessing the floor that is independent of travel through the elevator lobby.

54.12.2.3 Lobby Enclosure.

54.12.2.3.1 The first responders use elevator lobby shall be enclosed with a smoke barrier having a minimum 1-hour fire resistance rating, except as otherwise permitted in 54.12.2.3.2. ~~that lobby door assemblies shall comply with 54.12.2.4.~~

54.12.2.3.2 ~~Exception:~~ Enclosed first responder elevator lobbies ~~are~~ shall not be required at the ~~street floor~~ level of exit discharge.

54.12.2.3.2 Elevator lobby door assemblies shall comply with 54.12.2.4.

54.12.2.4 Lobby Door Assemblies. Each first responders use elevator lobby door shall have ~~a~~ minimum ¾ fire protection rating ~~of not less than a ¾ hour~~ and shall be self closing or automatic closing in accordance with 11.2.1.8.

54.12.3 Hoistway and Elevator Lobby Pressurization System. Hoistways for first responders use elevators and the elevator lobbies required by 54.12.2 shall be pressurized as smokeproof enclosures in accordance with 11.2.3.9.

54.12.4 Hoistway Protection from Water. The first responders use elevator hoistway shall be protected from water infiltration by one of the following methods:

(1) The hoistway perimeter walls and opening protective shall be constructed such that an accumulation of water to a depth of 2 in. (51 mm) shall be prevented from entering the hoistway.

(2) Drains shall be installed to manage the flow of two fire department hoses and three fire sprinklers concurrently discharging such that water does not enter the hoistway.

54.12.5 ~~54.12.3~~ Standpipe Hose Connection. Each building exit stair having direct access to the first responders use elevator lobby shall be provided with a standpipe hose connection in accordance with Section 55.4.

54.12.6 ~~54.12.4~~ Two-Way Communication System.

54.12.6.1 ~~54.12.4.1~~ The first responders use elevator and every associated first responders use elevator lobby shall be provided with an approved two-way communication system except as otherwise permitted in 54.12.6.4.

54.12.6.2 ~~54.12.4.2~~ The communication system shall operate between the emergency command center complying with 34.2.5 and the first responders use elevator and every associated first responders use elevator lobby except as otherwise permitted in 54.12.6.4.

54.12.6.3 ~~54.12.4.3~~ The two-way communication system shall be designed and installed in accordance with NFPA 72 except as otherwise permitted in 54.12.6.4.

54.12.6.4 ~~54.12.4.4~~ The requirements of 54.12.6.1 ~~54.12.4.1~~ through 54.12.6.3 ~~54.12.4.3~~ shall not apply where the first responders radio system is approved as an equivalent system.

54.12.7 ~~54.12.5~~ Elevator System Monitoring. The first responders use elevator shall be continuously monitored at the

emergency command center by a standard emergency service interface system meeting the requirements of NFPA 72.

54.12.8 ~~54.12.6~~ Electrical Power. The following features serving each first responders use elevators shall be supplied by both normal power and ~~Type 60/Class 2/ Level 1~~ Type 60, Class 2, Level 1 standby power:

(1) Elevator equipment

(2) Elevator machine room ventilation and cooling equipment

(3) Elevator controller cooling equipment

54.12.9 ~~54.12.7~~ Protection of Wiring or Cables.

54.12.9.1 Wires or cables that provide normal and standby power, control signals, communication with the car, lighting, heating, air conditioning, ventilation, and fire detecting systems to fire service access elevators shall be protected by construction having a minimum ~~1-hour~~ 2-hour fire resistance rating or shall be circuit integrity cable having a minimum ~~1-hour~~ 2-hour fire resistance rating except as otherwise permitted in 54.12.9.2.

54.12.9.2 Wiring or cables that provide control signals shall be exempt from the protection requirements of 54.12.9.1 provided such wiring or cables where exposed to fire will not disable Phase II Emergency In-Car Operation once such emergency operation has been activated.

~~54.12.8 Standby Power. The first responder use elevator shall be provided with standby power in accordance with 34.2.4.~~

54.12.10 Elevator Machine Rooms and Machinery Spaces. Automatic fire sprinklers shall not be installed in first responders use elevator machine rooms and machinery spaces.

Substantiation: Re: 54.12.1.1: As part of the ongoing hazard analysis being conducted by an ASME task group on the subject of emergency responder elevators, task group members surveyed firefighters from across the United States to explore the sufficiency of the current code requirement for a minimum of one first responder use elevator. Thirty-five responses were received from cities including Charlotte, Orlando, San Francisco, Houston, Los Angeles, Fort Worth, Boston and Pittsburgh, all indicating that the number of elevators used for firefighting operations varies from 2 to 6. (Only one respondent, a suburban bedroom community indicated one elevator is sufficient for firefighting.) Firefighters experienced in high-rise operations stated that the Fire Service must be able to count on at least two elevators at all times. They are necessary for 1) transporting firefighters to and from the staging area, usually located two floors below the fire floor; 2) moving firefighters to other floors for the purpose of search and rescue, fire extension, recon; hauling of equipment such as spare cylinders, exhaust fans, etc.; and, 3) transporting those with disabilities to the building lobby.

Past experience during fires of this type (high-rise), shows that on many occasions elevators are not available due to shut downs for various reasons, including problems in operation, routine maintenance, modernization programs, and EMS operations in the building prior to firefighter arrival. Without a change to require additional elevators, there will be a high chance that there will not be a First Responders Use Elevator available for the firefighters to perform critical firefighting and life-saving rescue duties.

Re: 54.12.1.2: Retains existing concept that all floors need to be served by First Responders Use Elevator, but expands number of required elevators for consistency with change to 54.12.1.1 given that there is no assurance that a single elevator will be in working order so as to be able to serve the floor.

Re: 54.12.1.3: Editorial correction of ASME A17.1 / CSA B44 designation.

Re: 54.12.1.4: The change copies the stretcher size criteria from 54.3 because reference to 54.3, alone, buys a requirement for only one elevator to be sized to accommodate the stretcher. Each First Responders Use Elevator needs to be sized to accommodate the stretcher. This can be made clear only if the stretcher accommodation requirement is wholly contained in Section 54.12.

Re: 54.12.2.1's: Editorial revisions for consistency with other changes. Retires the use of "exceptions" for agreement with NFPA style manual.

Re: 54.12.2.2.2: The additional exit stair enclosure door providing entry to the floor independent of travel through the elevator lobby provides fire service access and fire-fighting hose access (which leaves the door in the open position) onto the floor without compromising continued use of the elevator lobby.

Re: 54.12.2.3 and 54.12.2.4: Editorial revisions for consistency with other changes.

Re: 54.12.3: The First Responders Use Elevators need to be protected from smoke entering either the hoistway directly or through the lobby or stair system that adjoins the First Responders Use Elevators. The current requirements for a First Responders Use Elevators include elevator lobbies constructed as smoke barriers, however the Hazard Analysis done by the ASME Task Group on Use of Elevators by Firefighters determined that the lobby alone is insufficient due to the likelihood that the lobby or stairwell doors would be open continuously to permit fire fighting operations.

Re: 54.12.2.4: The change replicates the requirement in Annex E, E.8.6, for occupant evacuation elevators. Protection of a First Responders Use Elevator hoistway from water is just as important, stopping water from sprinklers from disabling the elevators the firefighters will use to advance upwards into the building to fight the fire and remove occupants with evacuation needs. With current building designs, water that accumulates on the floor tends to drain

through the elevator hoistways and exit stair enclosures. In order to keep the elevators operational, the electric circuits on the car and in the hoistway must be kept dry.

Re: 54.12.6 (formerly 54.12.4): Editorial revisions for consistency with other changes.

Re: 54.12.8 (formerly 54.12.6): Editorial revision for consistency with terminology of NFPA 110.

Re: 54.12.9 (formerly 54.12.7): The safety of building occupants evacuating a building is dependent upon the life safety support systems required by this section being maintained during the critical hours of evacuation. The 2-hour rating is consistent with the hoistway fire rating and fire pump feeder enclosure rating. The change has the support of the firefighting community as surveyed by members of the ASME task group. It is not unreasonable when it is considered that this small increase in time will allow for more time to ensure the full evacuation of a building.

Elevator landing fixtures such as hall call buttons and hall lanterns do not need a fire resistance rating to ensure the viability of the system and protection of firefighters using the First Responders Use Elevators. The elevator industry generally does not submit fixtures fire-resistance rating testing.

Re: existing 54.12.8: The material recommended for deletion is redundant as the subject of standby power is adequately addressed in (renumbered) 54.12.8, current 54.12.6.

5000-232 Log #206 BLD-BSY Final Action:
(54.12.2.3 Exception)

Submitter: Dave Frable, U.S. General Services Administration

Recommendation: Revise text as follows:

54.12.2.3 Lobby Enclosure. The first responders use elevator lobby shall be enclosed with a smoke barrier having a minimum 1-hour fire resistance rating, except that lobby door assemblies shall comply with 54.12.2.4.

Exception: Enclosed first responder elevator lobbies are not required at the street floor or level of exit discharge.

Substantiation: The intent of this code change proposal is to ensure the exception addresses the need for not requiring an enclosed lobby on the street floor as well as the level of exit discharge. Typically, in most buildings' the street floor is the level of exit discharge. This change will also correlate with the requirements for elevators for occupant controlled evacuation.

5000-233 Log #209 BLD-BSY Final Action:
(54.12.4)

Submitter: Dave Frable, U.S. General Services Administration

Recommendation: Delete text as follows:

~~54.12.4 Two-Way Communication System.~~

~~54.12.4.1 The first responders use elevator and every associated first responders use elevator lobby shall be provided with an approved two-way communication system.~~

~~54.12.4.2 The communication system shall operate between the emergency command center complying with 34.2.5 and the first responders use elevator and every associated first responders use elevator lobby.~~

~~54.12.4.3 The two-way communication system shall be designed and installed in accordance with *NFPA 72*.~~

~~54.12.4.4 The requirements of 54.12.4.1 through 54.12.4.3 shall not apply where the first responders radio system is approved as an equivalent system.~~

Substantiation: The intent of this code change proposal is to delete the subject provisions for the two-way communication system. The subject provisions are currently required in NFPA 101:11.8.4.2, NFPA 5000:33.3.1.2 and NFPA 1:13.7.2.27.2.2.1 and therefore do not have to be identified in this section of the Code.

5000-234 Log #207 BLD-BSY Final Action:
(54.12.4.2.5 (New))

Submitter: Dave Frable, U.S. General Services Administration
Recommendation: Add new text as follows:
54.12.4.2.5 Lobby size. Each enclosed first responders use elevator lobby shall be a minimum of 150 square feet (14m^2) in an area with a minimum dimension of 8 feet (2440 mm).
Substantiation: The intent of this code change proposal is to correlate the lobby size requirements with the International Building Code. The subject lobby size provisions ensure the access and operational capabilities of firefighters in high-rise buildings. A minimum lobby size stipulation is necessary to make sure that the space provided is adequate for firefighters during emergencies. Most Fire Departments operate with high-rise fire attack teams comprised of either 3 & 4 firefighters. The lobby should be large enough to accommodate 1 team preparing to enter the fire area (floor) and 1 team needing to withdraw from the fire area, while leaving access to the hoist-way and exit enclosure doors clear. On average this equates to 7 firefighters). To avoid long narrow lobby a minimum width provision was provided. A typical 2-team scenario needs approximately a 4 foot wide operating area, arriving at the 8 feet minimum dimension.
This is not original material; its reference/source is as follows:
International Building Code

5000-235 Log #205 BLD-BSY Final Action:
(54.12.6)

Submitter: Dave Frable, U.S. General Services Administration
Recommendation: Revise text as follows:
54.12.6 Hoistway lighting. When firefighters' emergency operation is active, the entire height of the hoistway shall be illuminated at not less than 1 foot-candle (11 lux) as measured from the top of the car of each first responder use elevator.
54.12.7 ~~6~~ Electrical Power. The following features serving each first responders use elevators shall be supplied by both normal power and Type 60/Class 2/ Level 1 standby power:
(1) Elevator equipment
(2) Elevator machine room ventilation and cooling equipment
(3) Elevator controller cooling equipment
(4) Hoistway Lighting
Substantiation: The intent of this proposal is to provide illumination in the hoistway to assist fire fighters as they to advance up into the building. If firefighters become trapped in a stopped elevator and need to self rescue through the top of car emergency exit, they need adequate light to safely escape. The illumination level specified is taken from means of egress illumination provisions of in NFPA 101. The current prescribed procedure before leaving the elevator's designated level (typically the ground floor) is to shine a light up into the hoistway to try and detect smoke, flame or water above them. They will repeat this step every 5 floors until they safely arrive at their staging floor, which is two floors below the lowest reported floor in alarm. By providing hoistway lighting, this will make their life safety maneuver much more effective.
This is not original material; its reference/source is as follows:
International Building Code

5000-236 Log #210 BLD-BSY Final Action:
(54.12.10)

Submitter: Dave Frable, U.S. General Services Administration
Recommendation: Add new text as follows:

54.12.10 First Responders Use Elevator Symbol. A pictorial symbol of a standardized design designating which elevators are first responders use elevators shall be installed on each side of the hoistway door frame on the portion of the frame at right angles to the fire service access elevator lobby. The first responders use elevator symbol shall be designed as shown in Figure 3007.8 and shall comply with the following:

1. The first responders use elevator symbol shall be a minimum of 3 inches (76 mm) in height.
2. The vertical center line of the first responders use elevator symbol shall be centered on the hoistway door frame. Each symbol shall not be less than 78 inches (1981 mm), and not more than 84 (2134 mm) inches above the finished floor at the threshold.

******Insert Figure 54.12.10 First Responders Use Elevator Symbol Here******

Substantiation: The intent of this code change proposal is to provide a means to designate which elevators in a building have been designated as first responders use elevators via a standardized pictorial symbol to be installed on each side of the door frame of each designated elevator. The subject symbol is based on the fire fighters hat referenced in ASME A17.1/CSA B44.

5000-237 Log #208 BLD-BSY Final Action:
(54.12.11)

Submitter: Dave Frable, U.S. General Services Administration
Recommendation: Add new text as follows:

54.12.11 Water protection. An *approved* method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the enclosed first responders use elevator lobby shall be provided.

Substantiation: The intent of this code change proposal is to provide performance language that will permit alternate design options to provide a means to prevent water from an operating sprinkler system from infiltrating into the hoistway enclosure. For example, such approved means could include: drains, sloping floor, etc. The subject proposed language is similar to the proposed language in the International Building Code.
This is not original material; its reference/source is as follows:
International Building Code

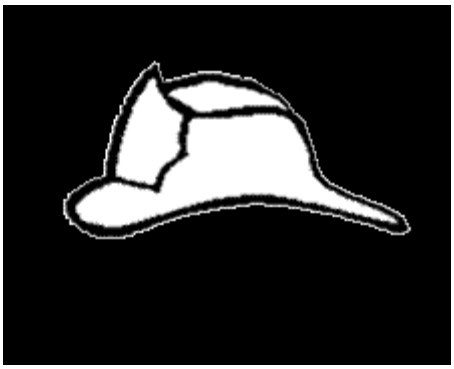

Figure 54.12.10
First Responders Use Elevator Symbol

5000-269 Log #67b BLD-BSY Final Action:
(Annex Y (New))

Submitter: Steven F. Wydeveld, Village of Homer Glen / Rep. Building Code Development Committee (BCDC)
Recommendation: Add a new Annex as follows:

Annex Y

Green Construction

This annex is not a part of the requirements of this NFPA document unless specifically adopted by the jurisdiction.

Y.1.1. Scope. This Annex provides regulations for the planning, design, construction and occupancy of buildings or structures to improve life, health, property and public welfare through methods of design and construction that will enhance and encourage a posititive environmental impact and sustainable construction.

Y.1.2 Purpose. The purpose of this Annex shall be to provide regulations to enhance and encourage a positive environmental impact and sustainable construction of buildings.

Y.2.0 Application. Buildings and sites shall comply with the minimum provisions of ANSI 01-200XP, *Green Building Assessment Protocol for Commercial Buildings*.

Y.3.0 Residential Buildings. Residential buildings shall comply with the minimum provisions of ANSI/ICC 700-2008, *National Green Building Standard.*

Substantiation: NFPA does not currently have provisions for green, sustainable construction, beyond the energy conservation provisions of NFPA 900. This proposal intends to reach beyond simple building envelope energy conservation by introducing two ANSI standard for responsible green and sustainable construction techniques. This provides guidance to NFPA users and these are the only two ANSI standards available, one for commercial buildings and one for residential buildings.

With recent attention by the federal government, green, sustainable construction will clearly have the attention of federal, state and local policy makers for years to come. With incentives to build green emanating from the legislature, the general public is becoming more interested in green construction, and the construction industry is beginning to focus on green buildings standards. This proposal attempts to meet federal mandates.

This proposal offers an annex to address this issue. The Technical Committee, however, may determine that green building standards are better suited for the body of the code.

5000-271 Log #68b BLD-BSY Final Action:
(Annex Z (New))

Submitter: Steven F. Wydeveld, Village of Homer Glen / Rep. Building Code Development Committee (BCDC)
Recommendation: Add a new Annex as follows:

Include 5000_L68_R.docx here

Substantiation: Note:
This proposal was developed by the proponent as a member of the Building Code Development Committee (BCDC) with the committee's endorsement. The NFPA code set does not contain traditional property maintenance - or as titled here Property conservation - requirements, either as a separate document or as part of another document. This provisions fill a gap in the regulations provided by jurisdictions in their communities for property maintenance - or community preservation.

These provisions for property maintenance are being submitted as an annex to NFPA 5000 because NFPA 5000 is closely related to the regulation of property maintenance. Section 1.2, Purpose, and Section 1.3, Application, both specify that NFPA 5000 addresses maintenance of buildings and structures. And Section 1.7.5.2 addresses some aspects of Maintenance of Buildings and Property. As such, these regulations are within the scope of NFPA 5000.

This is not an existing building code and does not set forth minimum requirements for existing buildings. Those provisions are already provided by NFPA 1 and NFPA 101.

This annex has been formatted to be adopted as part of the code and stand alone for enforcement by a department of code enforcement, which is sometimes separate from the building department. That is why administrative provisions have been included in the annex even though they are already in Chapter 1 of NFPA 5000. Many of the provisions in Chapter 1 of the annex are extracted from NFPA 5000, some with minor modifications to apply to a code enforcement unit.

Following the format of the administrative chapters, Chapter 2 of the annex has been left blank, as it normally applies to referenced documents. Chapter 3 of the annex contains definitions that are not found in the body of NFPA 5000 and apply to the annex

General provisions are set forth in Chapter 4 of the annex. Some of the provisions in this chapter apply to both the interior and exterior.

Chapter 5 of the annex contains requirements that apply to only the exterior. This also applies to accessory structures and buildings, swimming pools and spas. Provisions are provided that apply to the building envelope as well as structural stability.

Provisions for the interior of the building are found in Chapter 6, which focus' on infestation, interior safety and sanitary issues and maintaining the structural stability.

Chapter 7 of the annex addresses plumbing, mechanical, and electrical issues associated with safe and sanitary systems within a building. And Chapter 8 of this annex addresses fire and life safety.

Chapter 9 was developed separately to address the application to historic structures. As a separate chapter within the annex, would allow more details for historic structures in the future, if deemed necessary. But the concept behind the proposed provision, is to allow the fabric of historic structures to be preserved as outlined in the historic registration.

Annex Z
Community Preservation

This annex is not a part of the requirements of this NFPA document unless specifically adopted by the jurisdiction.

Chapter Z.1 Administration

Z.1.1 Scope. This Annex addresses maintenance, protection, building systems and occupancy features necessary to protect and preserve life, health, property and public welfare.

Z.1.2 Purpose. The purpose of this Annex shall be as follows:
(1) To provide an environment for the occupants in a building or facility and for the public near a building or facility that is reasonably safe. Minimum regulations in this Annex protect and preserve life, health, property, and public welfare and to minimize injuries by regulating and controlling the existing use, occupancy, and maintenance of all buildings and structures within the jurisdiction and certain equipment specifically regulated herein. [5000: 1.2]
(2) To safeguard fire fighters and emergency responders

Z.1.3 Application.
Z.1.3.1 Property. The provisions of this Annex shall apply to the use, occupancy and maintenance, of every property, or any appurtenances to such property within the jurisdiction when the property is considered unsafe, unsanitary, a fire hazard, or constitutes a nuisance.
Z.1.3.2. Existing Buildings and Structures. The provisions of this Annex shall apply to lawfully existing buildings and structures where the building or structure is considered damaged, unsafe, unsanitary, a fire hazard, constitutes a public nuisance, or is abandoned.
Changes in use or occupancy classification shall be addressed in accordance with the provisions of the building and fire code.
Z.1.3.3 Exemptions. This Annex does not apply to buildings under construction or demolition with a valid permit.
Z.1.4 Units.
Z.1.4.1 SI Units. Metric units in this Code are in accordance with the modernized metric system known as the International Systems of Units (SI).
Z.1.4.2 Primary Values. The inch-pound value for a measurement, and the SI value given in parentheses, shall each be acceptable for use as primary units for satisfying the requirements of this Code. [5000:1.6]
Z.1.5 Enforcement.
Z.1.5.1 Organization.

Z.1.5.1.1 Creation of Department of Community Preservation. There is hereby created in the jurisdiction a department of property maintenance that shall be under the control of the director of building and safety, who shall be the authority having jurisdiction. [5000:1.7.1.1]
Z.1.5.1.2 Delegation of Authority. The authority having jurisdiction is hereby empowered to delegate authority and assignments to subordinate employees. Such employees shall have the authority to carry out duties and assignments, as delegated by the authority having jurisdiction. [5000: 1.7.1.2]
Z.1.5.1.3 Right of Entry. Whenever it is necessary to make an inspection to enforce any of the provisions of this Annex, or whenever the authority having jurisdiction has reason to believe that there exists in any building, or upon any premises, a condition that makes such building or premises unsafe, unsanitary, a fire hazard, or a public nuisance (as specified by 1.7.5.3.1.1), the authority having jurisdiction shall be authorized to enter such building or premises at reasonable times to inspect the same, or to perform any duty imposed on the authority having jurisdiction by this Annex, under the following conditions:
(1) The authority having jurisdiction shall first present proper credentials and request entry.
(2) In the event that entry is refused, or the person authorized to grant entry is unavailable, the authority having jurisdiction shall have recourse to remedy provided by law to secure entry. [5000: 1.7.1.3]
Z.1.5.2 Approvals by Other Regulatory Agencies. The authority having jurisdiction shall have the authority to require that the laws, rules, and regulations of other regulatory agencies, having jurisdiction are met[5000:1.7.2]
Z.1.5.2.1 The authority having jurisdiction shall not be held responsible for enforcement of the regulations of other regulatory agencies having jurisdictions are met. [5000:1.7.2.2]
Z.1.6 Board of Appeals. The Board of Appeals for the Department of Community Preservation shall be the same as that for the Department of Building and Safety in section 1.7.3 of this Code.
Z.1.7 Liability. The requirements for liability of enforcement of this Annex shall be regulated by section 1.7.4 of this Code.
Z.1.8 Maintenance of Buildings and Property. The requirements in section 1.7.5.2 of this Code shall apply.
Z.1.9 Unsafe Buildings and Fire Hazards. The requirements in section 1.7.5.3 of this Code shall apply to unsafe buildings, fire hazards and public nuisances.
Z.1.10 Responsible party. The property owner and the occupant are responsible for maintaining the property in compliance with this Annex.

Chapter Z.2

Reserved.

Chapter Z.3 Definitions

Infestation. The presence of insects, rodents, vermin, and other pests.

Public nuisance. A condition or behavior that unreasonably interferes with the health, safety, peace, comfort or convenience of the general public or emergency responders.

Chapter z.4 General

Z.4.1 Responsibility. The property owner shall not occupy any property or building or allow any person to occupy any property or building which is not in a sanitary or safe condition in accordance with this Annex. The property owner and the occupants are responsible for maintaining the property or building in a safe and sanitary condition in accordance with this Annex.

Z.4.2 Public nuisance. No person shall cause or maintain a public nuisance within any building or structure or on any property within the jurisdiction.

Z.4.3 Secure against entry. No person shall fail to secure a building against entry. All buildings, including vacant, abandoned, utilized and occupied buildings, shall be secured against unwanted entry.

Z.4.4 Partially constructed. No person shall maintain a partially constructed building or structure after the building permit authorizing the construction has expired or been revoked. Partially constructed buildings or structures shall not be allowed after the building permit authorizing the construction has expired or been revoked.

Z.4.5 Rubbish, Garbage and Waste. No person shall permit waste or yard waste to accumulate upon any premises, or the interior of any building or structure. Every occupanct and/or property owner shall dispose of waste in a clean and sanitary manner by placing such in an approved waste storage container.

Z.4.6 Handrails and guards. Every interior and exterior handrail and guard shall be firmly affixed and capable of supporting all imposed loads. Handrails and guards shall be maintained in a safe condition suitable for use.

Z.4.7 Structure. All interior and exterior structural members shall be capable of safely supporting the imposed dead and live loads.

Z.4.8 Decorative features. All interior and exterior cornices, trim, wall facings and similar decorative features shall be maintained with proper anchorage and in safe condition.

Z.4.9 Overcrowding. Buildings, occupancies, dwelling units and properties shall not be overcrowded, where the maximum occupancy allowed under the building or fire codes is exceeded. No person shall use or occupy or permit the use or occupancy of any dwelling or dwelling unit that is overcrowded.

Z.4.10 Surface condition. Interior and exterior surfaces, including floors, walls, windows, doors, and ceilings shall be maintained in safe and sanitary condition. Peeling paint, chipping, flaking or abraded paint shall be removed, repainted or covered. Decayed wood, plaster which is cracked or loosened, or other defective surface conditions shall be repaired or replaced and maintained weather resistant and watertight.

Chapter Z.5 Exterior

Z.5.1 General. All properties shall be maintained in a sanitary and safe condition.
Z.5.2 Sidewalks. Exterior sidewalks, walkways, driveways, parking spaces, patios, porches, stairs and similar areas shall be kept in proper state of repair and maintained free from any conditions that are hazardous.
Z.5.3 Exterior Property Areas. All premises shall be maintained free of overgrown, dead, diseased, decaying or hazardous trees, shrubs, ground cover, or weeds that restrict or impede access to or pubic use of adjacent sidewalks and streets, obstruct traffic-control signs and devices and fire hydrants; and pose a risk of physical injury, fire or other hazards.
Z.5.4 Accessory structures. Structures accessory to the building or property, such as detached garages, sheds, fences and retaining walls, shall be structurally sound and maintained in accordance with Section 1.3.1.
Z.5.5 Swimming Pools, spas and hot tubs.
Z.5.5.1 Swimming pools, spas, and hot tubs shall be maintained in a clean and sanitary condition.
Z.5.5.2 The structure of the swimming pool, spa or hot tub and the equipment, safety barrier and appurtenance shall be maintained in good condition.
Z.5.6 Building Envelope. All exterior surfaces of structures and parts thereof including, but not limited to, doors, windows, frames, cornices, trim, porches, balconies, decks, fences and walls, shall be maintained in operating order, structurally sound, without holes, leaks or defects. Exterior wood surfaces shall be protected from the elements and decay by painting or other protective covering or treatment. All fenestrations, siding and masonry joints shall be maintained, weather resistant and watertight.
Z.5.7 Exterior Structure.
Z.5.7.1 All exterior walls shall be free from holes, breaks, and loose or rotting materials.
Z.5.7.2 Every exterior stairway, balcony, porch and deck, and any appurtenances attached thereto shall be maintained with proper anchorage and capable of supporting all imposed loads.
Z.5.8 Roofing. The roof and flashing shall be sound, tight and not have defects to admit precipitation. Roof drainage shall be adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof gutters, drains, and downspouts shall be free from obstructions and maintained in operational order. Precipitation from the roof shall not be discharged from the roof in a manner that creates a public nuisance.
Z.5.9 Address Marking. Address numbers shall be placed in a position to identify buildings legibly and visibly from the street or road fronting the property. Address numbers shall be either Arabic numerals or alphabet letters.
Z.5.10 Chimneys. All chimneys, cooling towers, smoke stacks, and similar appurtenances shall be maintained structurally safe, sound and in good repair. All exposed surfaces of metal or wood

shall be protected from the elements and against decay or rust by periodic application of weather coating materials, such as paint or similar surface treatment.

Z.5.11 Graffiti. No person shall conduct or allow defacement of property by unwanted marking, carving or graffiti. Property which has been defaced shall be repaired or reconditioned in a timely manner.

Chapter Z.6 Interior

Z.6.1 General. The interior portion of buildings shall be maintained in a sanitary and safe condition.

Z.6.2 Infestation. All buildings used for human occupancy shall be maintained free from infestation. Where infestation is found, approved processes that will not be injurious to human health shall promptly exterminate them. After extermination, proper precautions shall be taken to eliminate future infestation and prevent re-infestation.

Z.6.3 Infestation prevention.

Z.6.3.1 Screens. Where infestation is possible, every door used for ventilation, window, or other outside opening in a habitable space, food preparation area, food services area, or bulk and packaged food storage areas shall be supplied with tightly fitting screens of not less than twenty mesh per inch and every swinging screen door shall have a self-closing device in good working condition. Screen doors shall not be required where other approved means, such as air curtains or insect-repellant fans, are employed.

Z.6.3.2 Basements. Every basement hatchway or entryway shall be maintained to prevent infestation or the entrance of rain, and surface drainage water. In addition, every basement window that is capable of being opened shall be supplied with rodent shields, storm windows, or other protection against entry of rodents.

Z.6.4 Floor Surfaces. Floors surfaces shall be securely fastened and free from hazards.

Z.6.5 Windows and doors. Windows, doors and skylights shall be maintained in a weather tight condition. Window and skylight glazing shall be maintained without cracks and holes. Windows intended to be openable shall be easily openable. Window hardware shall be capable of maintaining the window in an open position.

Z.6.6 Ventilation. Every bathroom and toilet room shall have a window with a minimum sash area of three square feet unless the room is ventilated by mechanical means capable of exhausting 50 cubic feet per minute. One-half of the sash area must be openable.

Z.6.7 Equipment. Equipment requiring ventilation or exhaust shall comply with manufacturer installation instructions.

Z.6.8 Light.

Z.6.8.1 Habitable spaces. Habitable spaces in all occupancies shall be provided with artificial or natural light sufficient for safe and sanitary occupancy.

Z.6.8.2 Common hallways and stairways. The means of egress from the building, including exterior means of egress stairways, and every common hall, and stairway in residential

occupancies, other than in one and two family dwellings, shall be lighted at all times with a minimum of one foot-candle at floors, landings, and treads.

Chapter Z.7 Plumbing, Mechanical & Electrical Systems

Z.7.1 Plumbing.

Z.7.1.1 Plumbing facilities.

Z.7.1.1.1 Dwelling Units. All dwelling units shall be provided with a lavatory, water closet, bathtub or shower, and separate kitchen sink. These facilities shall be maintained in an operable, safe and sanitary condition.

Z.7.1.1.2 Hotels. At least one lavatory, water closet, bathtub or shower may be provided for each ten occupants. Access to these facilities may be from a public hallway.

Z.7.1.1.3 Employee facilities. At least one water closet, lavatory and drinking water facility shall be provided for employees in any occupancy.

Z.7.1.14 Toilet rooms and bathrooms. Floor surfaces within toilet rooms or bathrooms in other than dwelling units shall be a smooth, hard and nonabsorbent surface.

Z.7.1.2 Plumbing fixtures & systems. All plumbing fixtures, vents, drains, and water supply lines shall be properly installed, connected, and maintained in working order, shall be kept free from obstructions, and leaks.

Z.7.1.3 Water systems. Every kitchen sink, lavatory, bathtub or shower, and water closet required under the provisions hereof shall be connected to either a public or private water system.

Z.7.1.4 Water heating facilities. Water heating facilities shall be maintained in an operable and safe condition.

Z.7.1.5 Sanitary Drainage systems. Every kitchen sink, lavatory, bathtub or shower, and water closet shall be lawfully connected to either a public or private sewer system.

Z.7.2 Mechanical.

Z.7.2.1 Heating system. Every dwelling or dwelling unit shall have heating equipment and appurtenances which are installed and maintained in safe condition and are capable of safely and adequately maintaining all habitable rooms to a temperature of at least 68 degrees Fahrenheit at 36 inches above floor level.

Z.7.2.2 Mechanical equipment. All mechanical equipment and appliances, fireplaces, cooking appliances, heating equipment and cooling equipment shall be maintained in a safe and working condition.

Z.7.2.3 Elevators, escalators and dumbwaiters. Elevators, escalators and dumbwaiters shall be maintained in accordance with ASME A17.1.

Z.7.2.4 Vent systems. Vent systems provided for fuel burning equipment which is not labeled for unvented operation shall be maintained in a safe and working condition, and provided with required clearances to combustible materials.

Z.7.2.5 Combustion air. Allowances for required combustion air shall be maintained for fuel burning equipment.

Z.7.2.6 Air Duct systems. Air duct systems shall be maintained in safe, sanitary and working condition, free of obstructions. Air duct systems shall be maintained in a condition capable of delivering the required service.

Z.7.3 Electrical.

Z.7.3.1 Electrical facilities. Occupied buildings shall be provided with electrical service as determined by the size and usage of electrical appliances and equipment.

Z.7.3.2 Electrical equipment.

Z.7.3.2.1 Receptacles. Every habilable space in a dwelling shall contain at least two separate receptacle outlets remotely located. Every bathroom shall contain at least one receptacle outlet.

Z.7.3.3 Hazards. Where electrical systems constitute a hazard to the occupants or the structure, the electrical systems shall be repaired to eliminate the hazard. Extension cords shall only be used for temporary purposes, and shall not be used in lieu of permanent wiring.

Z.7.4 Alternative energy sources. When provided, alternative energy sources, including but not limited to hydrogen generators, solar systems, wind power generation systems, geothermal systems and CNG refueling facilities shall be maintained in a safe, sanitary and operable condition.

Chapter Z.8 Fire & Life Safety

Z.8.1 Fire-Resistance Rating.

Z.8.1.1 Rated Assemblies. Fire-resistance rated walls, shaft enclosures, barriers, partitions, floor-ceiling assemblies and fire stops shall be maintained with their required fire resistance fating.

Z.8.1.2 Opening protectives. Opening protectives shall be maintained in a working condition and shall be maintained with their required fire resistance rating. Required fire doors shall not be blocked, or obstructed.

Z.8.2 Smoke alarms & CO detectors. Where smoke alarms and carbon monoxide detectors are provided, they shall be installed and maintained in all residential occupancies as required by the building and fire code.

Z.8.3 Fire protection equipment and systems. Where required or provided, fire protection equipment and systems shall be maintained in an operating condition.

Z.8.4 Emergency and standby power systems. Where required or provided, emergency and standby power systems shall be maintained in an operating condition.

Z.8.6 Means of Egress.

Z.8.6.1 Obstruction. The path of travel from any point in a building to the public way shall provide a safe, continuous and unobstructed means.

Z.8.6.2 Locked doors and windows. All doors and windows providing a means of egress or escape shall be readily accessible and openable from the side of egress travel without the use of special knowledge, effort or keys, unless allowed by the building or fire code.

Chapter Z.9 Historical Structures

9.1 Historic structures. Historic structures as defined in Section 3.3 of this code, shall comply with the provisions of this annex, except as dictated by the limitations of the historic registration.

NFPA 5000-2009 Building Construction and Safety Code
54.2.2 and 54.2.3 (new)
Submitter: Technical Committee on Building Systems
Recommendation: Add new 54.2.2 and 54.2.3 as follows:
Chapter 54 Elevators and Conveying Systems.
54.2 Installation.
54.2.1 Except as modified herein, elevators, escalators, dumbwaiters, and moving walks shall be installed in accordance with the requirements of ASME A17.1/CSA B44, *Safety Code for Elevators and Escalators*.
54.2.2 Elevators in accordance with ASME A17.7/CSA B44.7, *Performance-Based Safety Code for Elevators and Escalators* shall be deemed to comply with ASME A17.1/CSA B44.
54.2.3 For other than elevators used for occupant-controlled evacuation in accordance with Annex E, the elevator corridor call station pictograph specified in 2.27.9 of ASME A17.1/CSA B44 shall be provided at each elevator landing.
Substantiation: ASME A17.7/CSA B44.7 is a new 2007 document. Elevators in accordance with this performance-based code are the equivalent of elevators in accordance with the prescriptive code ASME A17.1/CSA B44.
ASME A17.7/CSA B44.7 provides the pictograph that warns building occupants that "in case of fire, elevators are out of service, use exits." However, ASME A17.7/CSA B44.7 does so by stating "when the building code requires a sign be posted adjacent to hall call fixtures instructing occupants not to use the elevator in case of fire, the sign shown in Figure 2.27.9 shall be provided." Thus, the requirement that there be a sign needs to be in the building code. Simply referencing ASME A17.7/CSA B44.7, as done in 54.2.1, does not get the sign.
Meeting Action: Accept