



High Rise Building Safety Advisory Committee (HRBSAC)

CHARTER

Purpose

The High Rise Building Safety Advisory Committee (HRBSAC) shall be a standing advisory group, reporting directly to the NFPA Standards Council. The HRBSAC shall be charged with:

- Identifying existing needs and emerging issues within the high rise building environment.
- Providing recommendations to the Standards Council as to how NFPA can provide leadership on such issues.
- Working to ensure that NFPA's code and standard development process includes proposals and comments that reflect the latest thinking on high rise building safety issues, high rise emerging technology provisions and other matters which impact those who work, live or have to operate high rise buildings.

Composition

The committee shall be composed of up to 12 members, with regularly scheduled meetings at least once in each calendar year. The committee also may arrange to have non-scheduled conference calls and/or establish task groups, as necessary, from its membership base to further study specific issues and provide recommendations. Regularly scheduled meetings shall be open to the public. The HRBSAC may also arrange conference calls or meetings to review and address specific code-related reviews, proposals, or comments.

The HRBSAC's inaugural members shall be nominated by the NFPA Standards Council and appointed by the Secretary of the NFPA Standards Council. All members are subject to annual review and reappointment. Absence from more than two regularly scheduled meetings during a two-year period without a medical excuse may result in a committee member being ineligible for re-appointment.

Criteria for Selection

The HRBSAC shall have an international focus and a membership base that is, to the extent possible, representative and knowledgeable of the practices of many geographic regions of the world.

All members should be nominated using the criteria below:

- Members will demonstrate a knowledge of and commitment to high rise safety issues.

- Members must demonstrate a commitment to the mission and purpose of the HRBSAC, as well as to the mission of NFPA.
- Members should represent a balance of interests including members of the first responder community, consumers, engineering, research and public safety interests as they relate to high rise buildings.

Nominations for new members will be reviewed and committee members officially appointed or re-appointed by the NFPA Standards Council before January 1 of each calendar year.

Staffing

One NFPA staff member will be assigned to the committee as a staff liaison. The staff liaison shall facilitate the committee's work; arrange agendas, keep minutes, process proposals and comments, organize meeting logistics, and provide supporting information.

Committee Responsibilities

- Issue an annual report each October to advise the Standards Council on leadership opportunities for NFPA on issues of importance to the high rise community.
- Provide ongoing suggestions for improving the relevance and quality of NFPA's codes and standards, as well as the association's support services, research, training, and public education initiatives.
- Review NFPA codes and standards, focusing primarily on NFPA 101, *Life Safety Code*[™] and NFPA 5000®, *Building Construction and Safety Code*®, to provide input regarding the high rise community.
- Review and evaluate high rise-related suggestions submitted by other individuals and groups.
- Task groups may be formed, based on the vote of the HRBSAC, to take up any specific, time-intensive efforts. Task groups may hold bi-monthly meetings via conference call, and may call upon the assistance of the NFPA staff liaison when needed.
- Task groups' recommendations and/or proposals will be submitted to the chairperson of the HRBSAC in written form for discussion by the full committee. The committee may then discuss, amend, and vote on the task groups' findings before they are published as official HRBSAC findings or recommendations.
- Potential items for consideration may be placed on the next HRBSAC's meeting agenda by a majority vote of any duly designated task group, or by majority vote of HRBSAC members in attendance at the most recent HRBSAC meeting or conference call. Any individual HRBSAC member may propose items for consideration, and any individual HRBSAC member may propose to table consideration of such items. If those proposals receive a second, they may be voted on by the HRBSAC members in attendance.
- Review, evaluate and be prepared to introduce recommendations from the NIST *Federal Building and Fire Investigation of the WTC* disaster into the NFPA codes and standards process or other NFPA program areas as appropriate.
- Subjects for consideration by the HRBSAC, include but are not limited to the items shown in Charter Attachment A.

Operating Procedures

- The chairperson will recommend meeting locations and dates, with input from all committee members. NFPA's staff liaison shall make the final determination on a meeting location and a hotel selection.
- The chairperson may attend NFPA Technical Committee meetings as needed, should they wish to lend their voice to a proposal or comment generated by the HRBSAC.
- The chairperson shall appoint members of the task groups from the members of the HRBSAC.
- The HRBSAC shall operate under parliamentary procedure as set forth in Robert's Rules of Order.
- A quorum of the full HRBSAC shall consist of a majority of members. If a quorum does not exist when the committee is fully constituted, then no final actions shall take place and any recommendation shall not be considered formal unless confirmed by a letter ballot.
- Voting at the meeting shall be by a majority vote of the voting members present.
- All formal recommendations and actions of the committee are to be confirmed by letter ballot.
- Actions and recommendations to be confirmed by a letter ballot require a 2/3-majority vote.
- The staff liaison shall maintain a record of all activities conducted by the committee, along with a roster of committee members.
- On 30 September of each year, the chairperson shall file a report to the NFPA Standards Council highlighting the major activities of the committee including:
 - Issues engaged, resolved or unresolved.
 - Code-related proposals and comments and their status.
 - Recommendations for NFPA action and next steps.

Reimbursement

NFPA will reimburse committee members for expenses incurred in modest business travel, including airfare or mileage (at a rate determined by NFPA), meals, and hotel accommodations. In order to be reimbursed, such arrangements must be made through Colpitts Travel, NFPA's official travel agent. Incidental expenses, such as movies, laundry, and rental cars are not reimbursable.

In certain cases, an extra night's stay will be reimbursed if a Saturday stay-over airfare rate is less expensive. However, all of those reservations must be coordinated in advance through Colpitts Travel and receive the approval of the staff liaison.

All receipts and a written report of travel expenses shall be submitted to the staff liaison on the appropriate reimbursement form within 30 days of the completion of travel.

CHARTER ATTACHMENT A HRBSAC TOPICAL AREAS

Subjects of Interest to the Advisory Committee: The advisory committee intends to consider the following subjects. The list is presented alphabetically and not otherwise rank ordered.

1. At-risk Populations
 - a. Disabled occupants
 - b. Very young occupants
 - c. Elderly occupants
 - d. Accessibility issues
 - e. Design features
 - f. Procedures

2. Building Categories
 - a. Height
 - b. Number of Stories
 - c. Super/mega high-rise concept
 - d. Existing buildings

3. Egress devices
 - a. Secondary egress and escape devices (chutes, controlled descent devices)
 - b. Smoke masks / self-contained breathing apparatus and kits
 - c. Stair descent devices

4. Elevators
 - a. Protection and use of lobbies
 - b. Elevator use by emergency responders

 - c. Elevator use for egress by building occupants

5. Fire-resistance
 - a. Reductions for sprinkler protection
 - b. Fire test standards and ratings
 - c. Traditional time-temperature curve (NFPA 251 / ASTM E 119)
 - d. Ultra-fast fire curve (as used in petroleum industry – ASTM E 1529)
 - e. Consideration of design fires

6. Evacuation /Relocation strategies and procedures
 - a. Role of fire safety directors
 - b. Training for occupants
 - c. Evacuation drills
 - d. Egress process/management under various emergency conditions
 - e. Staged evacuation/relocation
 - f. Total evacuation
 - g. Horizontal exit concept
 - h. Refuge floors (a.k.a. panic floors)

- i. Notification and communication with building occupants
 - j. People movement studies
 - k. Decision making of occupants under emergency conditions
 - l. Relocation to upper floors
 - m. Occupant's situational awareness
7. Security / special security issues
- a. Placement of turnstiles
8. Stairs
- a. Width
 - b. Location / remoteness
 - c. Design / protection against external events / impact resistance
 - d. Photo luminescent exit signage
 - e. Transfer corridors between stairs
 - f. Smokeproof towers
 - g. Discharge onto public ways
 - h. Discharge through lobbies
 - i. Other design features
9. Design Process
- a. Design professional in charge
 - b. Inter-professional relationships (contractors)
 - c. Code jurisdictions
 - d. Incentives to go beyond minimum building code requirements
 - e. Urban and site design context issues
 - f. Ground level considerations
 - g. Impact of adjacent properties
 - h. Multi-building interaction
 - i. Design documentation / information to be documented
 - j. Retention of records
 - k. Information to be documented
 - l. Retrofit schedules/ordinances
 - m. Life safety evaluations (similar to NFPA 101 requirements for Assembly Occupancies)
 - n. Performance-based design
10. Building Construction/Collapse
- a. Blast and fire containment
 - b. Double façade construction
 - c. Collapse detection
 - d. Structural failure warnings
 - e. Progressive collapse
11. Building Systems
- a. Water supplies / redundancy for sprinkler and standpipe systems
 - b. HVAC and smoke management / movement of smoke
 - c. SCBA on site air replenishment systems

- d. Emergency and stand-by power
 - e. Hard wired fire fighter communication equipment
 - f. Radio equipment for fire fighter use
 - g. Detection/alarm/notification
12. Identification of Risk / Hazard / Threats / Level of Safety
- a. Single points of failure
 - b. Quantification of Risk/Hazard/Threat
 - c. Redundancy versus defend in depth (compartmentation versus sprinkler systems)
 - d. Consideration of extreme events / normal design events
 - e. Identification/quantification of goals / objectives
 - f. Cost effective solutions
 - g. Ensure solutions address the specified hazard
13. First Responder / Fire Fighter Issues
- a. Incident operations / procedures / protocols
 - b. Fire ground accountability
 - c. Resident population
 - d. Communications among fire fighters, first responders, building occupants, general public, 911 operators (radio & hard wired)
 - e. Communication equipment
 - f. Communication protocols
 - g. Command post location and set-ups
 - h. Protection of command centers
 - i. Disaster management at large scale events
 - j. Back-up of command center information
 - k. Portability/mobility of command center equipment
 - l. Building information card
 - m. Pre-incident planning
 - n. Critical / immediate decisions about building evacuation
 - o. Deployment of equipment, i.e. defibrillators
14. On going Building Operations
- a. Building inspections
 - b. Annual reviews
 - c. Emergency action plans (EAP's)
 - d. Assess knowledge base of building occupants re. safety
15. Means to implement recommendations
- a. How high rise proposals are addressed and by what TC
 - b. Identify research topics
 - c. NIST study
 - d. Development of code changes
 - e. Establish better technical basis for building regulations
16. Public awareness
- a. Use of mass media during events

- b. Education
- c. Change public perception of evacuation drills

17. Helicopters

- a. Use as a means of rescue
- b. Use as an observation and information gathering tool
- c. Use as a means of lighting

18. Consideration of accessory building uses

- a. Parking structures
- b. Flammable liquids storage
- c. Loading docks
- d. Transportation centers – rail/subway stations /bus depots