

BUILDING CONSTRUCTION AND RENOVATIONS

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NFPA 101, 2000ED

Life Safety Code

CONSTRUCTION, REPAIR OR IMPROVEMENT OPERATIONS

- **4.6.10.1*** Buildings or portions of buildings shall be permitted to be occupied during construction, repair, alterations, or additions only where required means of egress and required fire protection features are in place and continuously maintained for the portion occupied or where alternative life safety measures acceptable to the authority having jurisdiction are in place.
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CONSTRUCTION, REPAIR OR IMPROVEMENT OPERATIONS

- **4.6.10.2*** In buildings under construction, adequate escape facilities shall be maintained at all times for the use of construction workers. Escape facilities shall consist of doors, walkways, stairs, ramps, fire escapes, ladders, or other approved means or devices arranged in accordance with the general principles of the *Code* insofar as they can reasonably be applied to buildings under construction.

FIRE WATCH

- **9.6.1.8*** Where a required fire alarm system is out of service for more than 4 hours in a 24-hour period, the authority having jurisdiction shall be notified, and the building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service.
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FIRE WATCH

- **9.7.6.1** Where a required automatic sprinkler system is out of service for more than 4 hours in a 24-hour period, the authority having jurisdiction shall be notified, and the building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the sprinkler system has been returned to service.
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OFFICIAL INTERPRETATION

- An approved firewatch is required or the building must be evacuated until the impaired system is functional. The approved firewatch shall contain the following:
 - 1. The authority having jurisdiction and the local fire department shall be notified immediately,
 - 2. The individual(s) conducting the firewatch shall have no other assigned duties,
 - 3. The individual(s) conducting the firewatch shall be trained to recognize fire hazards, know the procedures for occupant and fire department notification and occupant evacuation,
 - 4. The individual(s) conducting the firewatch has access to all portions of the building,
 - 5. The individual(s) conducting the firewatch shall walk through the affected area(s) at intervals not exceeding 30 minutes, (this may be altered depending on the size of the building AND with the approval of the authority having jurisdiction)

<http://www.sfm.nebraska.gov/programs-services/plans/interpretations/05-01.pdf>

NFPA 241, 2000ED

Standard for Safeguarding Construction,
Alteration, and Demolition Operations

SCOPE

- This standard shall apply to structures in the course of construction, alteration, or demolition, including those in underground locations.
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PURPOSE

- This standard is intended to prescribe minimum safeguards for construction, alteration, and demolition operations in order to provide reasonable safety to life and property from fire during such operations.
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APPLICATION

- 1.3.1* This standard provides measures for preventing or minimizing fire damage during construction, alteration, and demolition operations.
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APPLICATION

- 1.3.2* The public fire department and other fire protection authorities also shall be consulted for guidance.
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APPLICATION

- 1.3.4 A fire safety program shall be included in all construction, alteration, or demolition contracts, and the right of the owner to administer and enforce this program shall be established, even if the building is entirely under the jurisdiction of the contractor.
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TEMPORARY ENCLOSURES

- 4.2.1 Only noncombustible panels, flame-resistant tarpaulins, or approved materials of equivalent fire-retardant characteristics shall be used.
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FIRE EXTINGUISHERS

- 4.2.4.1 Temporary enclosures shall be equipped with a minimum of one fire extinguisher suitable for all classes of fires that are expected inside the enclosure.
 - 4.2.4.2 Fire extinguishers shall be located so that travel distance to a fire extinguisher does not exceed 50 ft (15 m).
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FIRE WATCH

- **5.1.3.1** Fire watches shall be assigned no other duties.
 - **5.1.3.2** A fire watch shall be posted for the duration of the work and for 60 minutes thereafter for torch-applied roofing operations.
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TEMPORARY WIRING

- 6.1.1 All construction-operation electrical wiring and equipment for light, heat, or power purposes shall be in accordance with the applicable provisions of NFPA 70, *National Electrical Code*®.
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TEMPORARY WIRING

- 6.1.3.6 Temporary wiring shall be removed immediately upon the completion of the construction or purpose for which the wiring was installed.
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FIRE SAFETY PROGRAM

- 7.2.1* The owner shall designate a person who shall be responsible for the fire prevention program and who shall ensure that it is carried out to completion.
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FIRE SAFETY PROGRAM

- 7.2.1.1 This fire prevention program manager shall have the authority to enforce the provisions of this and other applicable fire protection standards.
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FIRE SAFETY PROGRAM

- 7.2.4.4 A weekly self-inspection program shall be implemented with records maintained and made available.
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FIRE SAFETY PROGRAM

- 7.2.4.5* Impairments to the fire protection systems or fire alarm, detection, or communications systems shall be authorized only by the fire prevention program manager.
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FIRE SAFETY PROGRAM

- 7.2.4.6 Temporary protective coverings used on fire protection devices during renovations, such as painting, shall be removed promptly when work has been completed in the area.
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FIRE WALLS

- 8.6.1.1 Fire walls and exit stairways, where required for the completed building, shall be given construction priority for installation.
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FIRE WALLS

- 8.6.1.2 Fire doors with approved closing devices and hardware shall be installed as soon as is practicable and preferably before combustible material is introduced.
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FIRE WALLS

- 8.6.1.3 Fire doors, after installation in accordance with NFPA 80, *Standard for Fire Doors and Fire Windows*, shall not be obstructed from closing. (and latching)
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TEMPORARY SEPARATION

- 8.6.2.1 Protection shall be provided to separate an occupied portion of the structure from a portion of the structure undergoing alteration, construction, or demolition operations when such operations are considered as having a higher level of hazard than the occupied portion of the building.
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TEMPORARY SEPARATION

- 8.6.2.2 Walls shall have at least a 1-hour fire resistance rating.
 - 8.6.2.3 Opening protectives shall have at least a 45-minute fire protection rating.
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TEMPORARY SEPARATION

- 8.6.2.4* Nonrated walls and opening protectives shall be permitted when an approved automatic sprinkler system is installed.
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STANDPIPE SYSTEMS

- **8.7.4.2 Standpipe Installations in Buildings Under Construction.** Where required by the authority having jurisdiction, in buildings under construction, a standpipe system, either temporary or permanent in nature, shall be installed in accordance with 8.7.4.2.1 through 8.7.4.2.9.
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STANDPIPE SYSTEMS

- 8.7.4.2.1 The standpipes shall be provided with conspicuously marked and readily accessible fire department connections on the outside of the building at the street level and shall have at least one standard hose outlet at each floor.
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STANDPIPE SYSTEMS

- 8.7.4.2.7* The standpipes shall be extended up with each floor and shall be securely capped at the top.
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STANDPIPE SYSTEMS

- 8.7.4.2.8 Top hose outlets shall be not more than one floor below the highest forms, staging, and similar combustibles at all times.
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STANDPIPE SYSTEMS

- 8.7.4.2.9 Temporary standpipes shall remain in service until the permanent standpipe installation is complete.
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