

Fire Safety In Buildings Under Construction

The risk of fire in buildings under construction is greater than that of completed buildings. Inherent hazards are numerous, while designs and protective systems to minimize fire losses are usually not completed until late in the construction schedule.

A fire protection plan should be implemented to prevent/control fire losses.

Fire Prevention Coordinator — A competent individual with proper authority should be assigned the responsibility for fire prevention/security.

Specific responsibilities should include:

- Establish and train an emergency organization of employees in basic firefighting procedures.
- Establish a program of scheduled fire safety inspections (See pages 3–4 for self inspection form).
- Arrange for the proper placement and maintenance of adequate fire protection equipment.
- Administer a program to assure that all hazardous operations are conducted in a safe manner.
- Supervise and manage watchman and guard service.
- Coordinate with the local fire department to make them aware of construction hazards and available fire protection systems and equipment at the building site.
- Maintain fire department access to all areas of the building site during working and nonworking hours.

Fire protection plan features

Fire walls and exit stairways, if required for the completed building, should be installed as early as possible. Fire doors should be hung on openings as soon as practicable and before combustible material is introduced.

In buildings over one story in height, at least one stairway should be provided for fire fighting purposes. The stairway should be extended as each new floor is completed.

Adequate water supplies, for sprinklers and fire fighting, should be accessible for all areas of the job site.

Fire hydrants should be clearly identified and unobstructed.

Standpipe and automatic sprinkler systems, if required for completed buildings, should be placed in service on each floor as construction proceeds.

Temporary automatic sprinkler systems should be provided in areas where hazards warrant.

A fire protection plan should be implemented to prevent/control fire losses.



Fire extinguishers, antifreeze type if necessary, should be provided in all office sheds, tool sheds, etc., and on each completed floor of the building.

Watchmen service should be provided during idle hours. The watchmen should patrol the entire site regularly and record rounds on a watch-clock. Particular attention should be paid to areas where welding or cutting has recently taken place.

Watchmen specifications should include:

- Reliable, honest, and concerned.
- Physically capable to perform job responsibilities.
- Trained on job duties.
- Equipped with walkie-talkie radio to assure prompt notification of an emergency.

A public fire alarm box or telephones, temporary installations if necessary, should be available to transmit fire alarms to the local fire department.

The entire job site should have properly installed flood lighting.

See pages 3–4 for self inspection form.

Name of Building Site: _____ Location: _____

Inspected By: _____ Date: _____

**To be completed at least weekly by management and/or supervisory personnel.
Corrective action should be taken on all items checked "NO".**

Building Features	Yes	No
1. At least one stairwell progressing with construction?	<input type="checkbox"/>	<input type="checkbox"/>
2. Doors installed on openings to stairwell?	<input type="checkbox"/>	<input type="checkbox"/>
3. Fire exits unobstructed and marked?	<input type="checkbox"/>	<input type="checkbox"/>
4. Combustible building supplies/materials including plastic insulation stored off premises?	<input type="checkbox"/>	<input type="checkbox"/>
5. Tarpaulins and plastic enclosures flame resistant, away from ignition sources and tightly secured?	<input type="checkbox"/>	<input type="checkbox"/>
Fire/Security Protection	Yes	No
Extinguishers/Standpipes		
6. Adequate number and type extinguishers?	<input type="checkbox"/>	<input type="checkbox"/>
7. Standpipe installed and in service up to the highest level of construction?	<input type="checkbox"/>	<input type="checkbox"/>
8. Pumper connections clearly marked?	<input type="checkbox"/>	<input type="checkbox"/>
9. Equipment clearly marked and unobstructed?	<input type="checkbox"/>	<input type="checkbox"/>
10. Equipment protected from freezing?	<input type="checkbox"/>	<input type="checkbox"/>
11. Selected personnel trained to operate extinguishers and small hose?	<input type="checkbox"/>	<input type="checkbox"/>
Sprinkler Protection		
12. Sprinkler installation progressing with construction?	<input type="checkbox"/>	<input type="checkbox"/>
13. Sprinkler control valves accessible, labeled and open?	<input type="checkbox"/>	<input type="checkbox"/>
14. Systems adequately protected against freezing?	<input type="checkbox"/>	<input type="checkbox"/>
15. Sprinkler alarms in service?	<input type="checkbox"/>	<input type="checkbox"/>
16. Sprinkler system pumper connections clearly marked and accessible to the public fire department?	<input type="checkbox"/>	<input type="checkbox"/>
17. Fire department familiar with the sprinkler installation?	<input type="checkbox"/>	<input type="checkbox"/>
Watchmen - Guards		
18. Watch service provided during all nonoperating hours?	<input type="checkbox"/>	<input type="checkbox"/>
19. Service covers the entire project site?	<input type="checkbox"/>	<input type="checkbox"/>
20. Watchmen - guards instructed in the fire reporting procedure?	<input type="checkbox"/>	<input type="checkbox"/>
Public Protection		
21. Watch service provided during all nonoperating hours?	<input type="checkbox"/>	<input type="checkbox"/>
22. Audible alarm in operation to alert workers?	<input type="checkbox"/>	<input type="checkbox"/>
23. Public fire alarm box or telephones available?	<input type="checkbox"/>	<input type="checkbox"/>
24. Has fire department visited site in past month?	<input type="checkbox"/>	<input type="checkbox"/>
Hydrants		
25. Hydrants unobstructed and accessible to the public fire dept.?	<input type="checkbox"/>	<input type="checkbox"/>
26. Hydrants in good operating condition?	<input type="checkbox"/>	<input type="checkbox"/>
27. Water supplies in service and adequate?	<input type="checkbox"/>	<input type="checkbox"/>
Construction Offices, Trailers, Sheds	Yes	No
28. Combustible offices, trailers and sheds located at least 30 ft. away from major buildings and materials storage?	<input type="checkbox"/>	<input type="checkbox"/>
29. Heating devices in offices, trailers, and sheds of "approved" type?	<input type="checkbox"/>	<input type="checkbox"/>
30. Heating devices properly installed and vented?	<input type="checkbox"/>	<input type="checkbox"/>
31. Fuel cylinders and fuel lines for heating devices protected against vehicular damage?	<input type="checkbox"/>	<input type="checkbox"/>

Common Hazards

Yes No

Housekeeping

- | | | |
|--|--------------------------|--------------------------|
| 32. Combustible offices, trailers and sheds located at least 30 ft. away from major buildings and materials storage? | <input type="checkbox"/> | <input type="checkbox"/> |
| 33. Heating devices in offices, trailers, and sheds of "approved" type? | <input type="checkbox"/> | <input type="checkbox"/> |
| 34. Heating devices properly installed and vented? | <input type="checkbox"/> | <input type="checkbox"/> |
| 35. Fuel cylinders and fuel lines for heating devices protected against vehicular damage? | <input type="checkbox"/> | <input type="checkbox"/> |

Temporary Heaters

- | | | |
|--|--------------------------|--------------------------|
| 36. Temporary heaters in use of "approved" type? | <input type="checkbox"/> | <input type="checkbox"/> |
| 37. Sufficient clearance maintained between heaters and combustible materials? | <input type="checkbox"/> | <input type="checkbox"/> |
| 38. A competent person assigned responsible for temporary heating operations? | <input type="checkbox"/> | <input type="checkbox"/> |
| 39. Fuel storage and refueling arrangements satisfactory? | <input type="checkbox"/> | <input type="checkbox"/> |

Electrical

- | | | |
|---|--------------------------|--------------------------|
| 40. Temporary wiring installed according to the provisions of the National Electrical Code? | <input type="checkbox"/> | <input type="checkbox"/> |
| 41. Wiring, including connections to junction boxes, panels and equipment, in good condition? | <input type="checkbox"/> | <input type="checkbox"/> |
| 42. Overcurrent protective devices (fuses, circuit breakers) in good operating condition? | <input type="checkbox"/> | <input type="checkbox"/> |
| 43. Ground fault circuit interrupters (GFCI) provided where required? | <input type="checkbox"/> | <input type="checkbox"/> |
| 44. Electricity turned off when building is idle? | <input type="checkbox"/> | <input type="checkbox"/> |

Smoking

- | | | |
|---|--------------------------|--------------------------|
| 45. NO SMOKING signs posted in hazardous areas? | <input type="checkbox"/> | <input type="checkbox"/> |
| 46. NO SMOKING regulations enforced? | <input type="checkbox"/> | <input type="checkbox"/> |

Special Hazards

Yes No

Flammable - Combustible Liquids

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|---|--------------------------|--------------------------|
| 47. Flammable - combustible liquids stored and dispensed in a satisfactory manner? | <input type="checkbox"/> | <input type="checkbox"/> |
| 48. Adequate ventilation provided where flammable adhesives, paints, solvents, and other chemicals, are in use? | <input type="checkbox"/> | <input type="checkbox"/> |
| 49. Approved safety containers used? | <input type="checkbox"/> | <input type="checkbox"/> |
| 50. Flammable liquids held to one days supply in the building? | <input type="checkbox"/> | <input type="checkbox"/> |
| 51. Roofing operations involving tar kettles supervised by a competent person? | <input type="checkbox"/> | <input type="checkbox"/> |
| 52. Tar kettles clear of combustibles? | <input type="checkbox"/> | <input type="checkbox"/> |
| 53. Kettles equipped with metal covers? | <input type="checkbox"/> | <input type="checkbox"/> |

Welding and Cutting

Yes No

- | | | |
|---|--------------------------|--------------------------|
| 54. Flammable - combustible liquids stored and dispensed in a satisfactory manner? | <input type="checkbox"/> | <input type="checkbox"/> |
| 55. Adequate ventilation provided where flammable adhesives, paints, solvents, and other chemicals, are in use? | <input type="checkbox"/> | <input type="checkbox"/> |
| 56. Approved safety containers used? | <input type="checkbox"/> | <input type="checkbox"/> |
| 57. Flammable liquids held to one days supply in the building? | <input type="checkbox"/> | <input type="checkbox"/> |
| 58. Roofing operations involving tar kettles supervised by a competent person? | <input type="checkbox"/> | <input type="checkbox"/> |

Liquefied Petroleum Gas (LPG)

- | | | |
|---|--------------------------|--------------------------|
| 59. Kettles equipped with metal covers? | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|

The information presented in this publication is intended to provide guidance and is not intended as a legal interpretation of any federal, state or local laws, rules or regulations applicable to your business. The loss prevention information provided is intended only to assist policyholders in the management of potential loss producing conditions involving their premises and/or operations based on generally accepted safe practices. In providing such information, Great American does not warrant that all potential hazards or conditions have been evaluated or can be controlled. It is not intended as an offer to write insurance for such conditions or exposures. The liability of Great American Insurance Company and its affiliated insurers is limited to the terms, limits and conditions of the insurance policies underwritten by any of them.

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