

## Fire Prevention for New Construction

Buildings under construction present unique fire exposures that require special attention. Fires can result in major losses and long delays in the completion of the project. Factors that should be considered in a fire prevention and protection program for buildings under construction include:

Fires can result in major losses and long delays in the completion of the project.

### 1. Site Access

- Are access roads of sufficient width and clearance for fire department use?
- Are buildings, especially those located in isolated areas that are prone to lightning strikes, provided with lightning protection?

### 2. Incendiarism and Arson

- Are all exterior areas of the property illuminated?
- Is the perimeter of the property protected by a fence?
- Are trees and vegetation cut back to provide a clear space of at least 100-ft (30.4-m) clearance around the perimeter of the property?
- Are combustible materials and trash in yard areas removed on a regular basis?

### 3. Hot Work Operations

- Is a hot-work permit system used for all cutting, welding, and soldering operations?
- Is hot-work equipment, including torches and fuel/gas cylinders, regularly inspected and serviced?
- Are portable gas cylinders used in welding and cutting operations stored and used in accordance with NFPA 55, Standard for the Storage, Use, and Handling of Compressed and Liquefied Gases in Portable Cylinders, published by the National Fire protection Association (NFPA)?
- Are gas cylinders secured to prevent them from falling or being knocked over?
- Are multi-purpose, portable fire extinguishers kept nearby whenever hot-work operations are undertaken?
- Is a fire watch provided during hot-work operations and for at least one hour after operations have been completed?

### 4. Housekeeping

- Are good housekeeping practices followed, including routine cleaning of dust over 1/8 in (3.18 mm) in depth from all surfaces?
- If smoking is allowed on the premises, is it restricted to certain areas?
- Are storage rooms, trash rooms, inside dumpsters, and similar areas separated from other areas by one-hour fire barriers or protected by automatic sprinklers?



**5. Utilities**

- Are electrical appliances that are used in areas where flammable atmospheres are present listed/approved for such use by a nationally recognized testing laboratory, such as Underwriters Laboratories Inc. (UL)?
- Are electrical systems that are installed where flammable liquids are stored or dispensed listed/approved for Class I, Division 2 locations?
- Is electrical equipment that is used in wet areas, such as restrooms and outside locations, provided with ground fault protection, including the use of isolated power supplies?
- Is gas- and oil-fired equipment maintained according to the manufacturers' recommendations?
- Are wood-fired boilers present?
- Are temporary heating devices operated in accordance with recommended safe practices?

**6. Dispensing of Fuels**

- Are flammable liquids stored in containers that are listed/approved for such use?
- Is equipment using gasoline or diesel fuel stored in a separate, detached building or in a room segregated from storage areas by firewalls or fire barriers and automatic closing fire doors?
- Are refueling operations performed by trained and designated personnel, and only in specified, well-ventilated areas?
- Is proper bonding/grounding provided before transferring flammable liquids into portable containers or equipment fuel tanks?

**7. Storage**

- Are compressed gases stored on site?
- If blasting operations are performed, are explosives stored according to recommend practices?
- Is lumber that is used for framing and forms stored in separate facilities, preferably in an outside location?
- Is lumber stored in the horizontal plane and wrapped in tight bundles?

**8. Emergency Response Planning**

- Is there an emergency action plan for the job site?
- Is an emergency response coordinator designated to develop and implement a plan for the containment and cleanup of accidental releases of hazardous materials, such as fuel oil?
- Do employees check the exit doors and exit paths on a daily basis to ensure egress during an emergency?

**9. Fire Protection**

- Is there a sufficient number of listed/approved portable fire extinguishers, and are they properly located as required in NFPA 10, Standard for Portable Fire Extinguishers?
- Are fire extinguishers properly maintained?
- Are employees trained in the use of portable fire extinguishers?
- Are fire alarms, detectors, and fixed fire protection, such as automatic sprinklers, installed in temporary structures?

The loss prevention information and advice presented in this brochure are intended only to advise our insureds and their managers of a variety of methods and strategies based on generally accepted safe practices, for controlling potentially loss producing situations commonly occurring in business premises and/or operations. They are not intended to warrant that all potential hazards or conditions have been evaluated or can be controlled. They are not intended as an offer to write insurance coverage for such conditions or exposures, or to simply that Great American Insurance Company will write such coverage. The liability of Great American Insurance Company is limited to the specific terms, limits and conditions of the insurance policies issued.

301 E. Fourth Street, Cincinnati, OH 45202 F13820-LP (08/13)

