Buildings Under Construction – Fire Prevention Checklist

Buildings under construction present unique fire hazards 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:

**Site Access**

Are access roads, for fire department use, at least 20-ft (6.1-m) wide and have a vertical clearance of at least 13.5 ft (4.1 m)?  
Are access roads, for fire department use, provided for buildings when any point of a building’s exterior is located more than 150 ft (45.7 m) from a roadway?  
Is the grade of access roads, not greater than 10 percent, unless otherwise approved by the local fire department?  
Are buildings, especially those located in isolated areas that are prone to lightning strikes, provided with lightning protection?  
Are buildings greater than one story provided with a minimum of one stairway that meets the requirements of NFPA 101, *Life Safety Code*, published by the National Fire Protection Association (NFPA)?  
As subsequent floors are added, are life egress stairways extended to service each additional floor?

**Incendiariism 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) around the perimeter of the property?  
Are combustible materials and trash in yard areas removed on a regular basis?

**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*?  
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?  
Are tar kettles located outside of buildings, not on roofs, and not located closer than 10 ft (30 m) from an exit path?  
Are tar kettles monitored by a trained operator who is not more than 25 ft (7.6 m) from the kettle and within the line of sight of the kettle at all times?
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?

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?

If present, are wood-fired boilers separated from all other areas by a one-hour fire-rated wall and protected by an automatic sprinkler system?

Are temporary heating devices installed and operated in accordance with the equipment listing and the manufacturer's recommended safe practices?

Are temporary heating equipment provided with tip-over protection and overheat shutoffs?

Is the use of temporary heating equipment that have exposed radiant heating wires prohibited?

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?
Storage

If compressed gases are stored on site, are they stored in a separate area, away from ignition sources, and secured to prevent tipping and damage? [ ] Yes  [ ] No  [ ] N/A
Are storage rooms containing flammable or combustible liquids segregated by fire barriers and protected by an automatic sprinkler system? [ ] Yes  [ ] No  [ ] N/A
Is the storage of Class I and Class II liquids limited to more than 227 L (60 gal) within 15 m (50 ft) of the structure? [ ] Yes  [ ] No  [ ] N/A
Is the storage of compressed gases limited to a maximum of 300 lb (136 kg) per inside storage location? [ ] Yes  [ ] No  [ ] N/A
If blasting operations are performed, are explosives stored according to recommended practices? [ ] Yes  [ ] No  [ ] N/A
Is lumber that is used for framing and forms stored in separate facilities, preferably in an outside location? [ ] Yes  [ ] No  [ ] N/A

Fire Protection

Is there a sufficient number of listed/approved portable fire extinguishers, and are they properly located and maintained, as required in NFPA 10, Standard for Portable Fire Extinguishers? [ ] Yes  [ ] No  [ ] N/A
Are employees trained in the use of portable fire extinguishers? [ ] Yes  [ ] No  [ ] N/A
Are fire alarms, detectors, and fixed fire protection, such as automatic sprinklers, installed in temporary structures? [ ] Yes  [ ] No  [ ] N/A
Is there a site fire safety plan? [ ] Yes  [ ] No  [ ] N/A

Contact

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