

Construction Fire Hazards

Fire Prevention Program

Does your construction company have a fire prevention program? If so, how long has it been since you have updated your program? OSHA requires employers to develop a site-specific fire prevention program to incorporate actions taken at all phases of construction, repair, alteration, or demolition work. A generic fire prevention program may be used with separate addendums to reference site specific conditions found at each jobsite. OSHA 1926 Subpart F Fire Protection and Prevention details the requirements for the availability of fire protection and suppression equipment as well as preventative actions needed such as eliminating ignition sources and providing appropriate storage of combustible materials; refer to www.osha.gov.

A fire prevention program should address the following elements.

- Flammable or combustible liquid storage areas
- Bulk storage of chemicals
- Accumulations of combustible waste materials
- Housekeeping
- Smoking policy
- Temporary heating devices (i.e. electric, propane, natural gas, kerosene, fuel oil, coal oil, solid fuel)
- Electrical wiring and equipment
- Welding operations, especially overhead welding and cutting
- Internal combustion engines, including exhaust sparks and fuel supplies
- Fire protection equipment and systems (extinguishers, fire hoses, sprinklers, standpipes)
- Alarm systems
- Fire cutoff devices (i.e. automatic door closing devices)

Combustible Materials

When buildings under construction approach completion of the shell erection, the specialty trade contractors come in. With them come the packaging, finishes, and services, causing increased fuel loading. Here are some things to watch for.

- Housekeeping is critical. Remove debris on a daily basis.
- Do not store materials or equipment within exit or egress areas.
- Establish a “No Smoking/Open Flame” policy, and enforce it. Post “No Smoking or Open Flame” signs.
- Provide a specific eating area with waste receptacles.

LOSS CONTROL FELLOWSHIP

- Provide metal containers with self-closing lids for disposal of oily or solvent-soaked rags and similar materials. Never allow oily rags or solvent-soaked to accumulate, especially in unventilated areas.
- Never store slaked lime where it can become moist; when damp, it becomes a fire hazard.

The risk of fire on the construction site will vary with the type of construction. During shell erection, a structural steel building with non-combustible curtain walls will have a lower fuel load than a wood frame building. For example, during shell erection, a frame building becomes a vertical kindling pile before the gypsum board goes in; the potential for fire must be considered accordingly. Work to identify problem areas and develop a simple and effective program for fire prevention.

Inspections

In order to ensure that the company's fire prevention program is effective in reducing the risk of fire, worksite inspections should be conducted on a regular basis and documented in writing. Superintendents, foremen, and /or safety committee members are usually assigned the task of inspecting the worksite. The fire prevention plan should identify responsibilities for the inspection, maintenance, and testing of fire protection equipment and employee alarm systems.

Training

All employees working on the jobsite should be trained in the following.

- A review of the company's fire prevention program
- Potential fire hazards in their work area
- Control devices or equipment in their work area
- Potential ignition sources and controls in place

Training should be provided for newly hired employees, whenever new fire hazards or ignition sources are introduced, whenever the layout or design of the site changes, and at least annually.

For more information, contact your local Hartford agent or your Hartford Loss Control Consultant. Visit The Hartford's Loss Control web site at <http://www.thehartford.com/corporate/losscontrol/>

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