Canadian Wood Council / Conseil canadien du bois

QUICK FACTS - INSURANCE AND CONSTRUCTION SERIES 3

Course of Construction - Site Risk Control Guidelines

The implementation of a site risk management program by a site superintendent that is aware of all the insurance warranty requirements will help to control hazards on construction sites. This should lead to better risk control and a reduction in accidental losses.[1] The following guidelines should be considered when developing a site risk management program.* Using these guidelines, a checklist can be created to perform daily or weekly inspections, to monitor and control hazards on a project site.

- ❑ Portable heaters – note the type, minimum clearances required from combustibles, and whether secured in place (open-flame "salamander" heaters are a major source of fires on construction sites - outside use, to warm brickwork for example, is acceptable, but they should not be brought into the building).
- ❑ Site security – watchman/patrol service during dormant times (alternatives can be used in certain circumstances, e.g. motion-activated camera systems); fencing with access controls; and, well-lit and secured site at night.
- ❑ "Hot work" – a "permit and tag system" should be in place for any activity that produces flames or sparks, e.g. cutting, welding, torch-on roofing and roof tarring.[2]
- ❑ Road access – access roads must remain unobstructed to allow fire trucks to enter and access the entire site.
- ❑ Fire hydrants and water mains – when present, they should be operational, with no closed valves, marked and easily accessed.
- ❑ Fire extinguishers – an adequate number should be readily accessible, and workers trained in using them.
- ❑ Waste and debris – it should be removed regularly from the building(s) (i.e. daily); use of steel waste bins is encouraged, stored at a safe distance from building(s), and their contents emptied and removed from the site on a regular basis.
- ❑ Storage of combustible building materials – structural framing members (e.g. floor joists, roof trusses), bundles of sheathing (plywood, oriented strandboard), lifts of lumber, and blocks of foam insulation contribute to the fire load on a project, and should be stored correctly and safely.
- ❑ Burning of refuse – none should be permitted on site.
- ❑ Storage of fuels – highly flammable gasoline, kerosene, diesel fuel, and other flammable liquids should be stored in a fenced compound; 'No Smoking' signs should be posted in the area and tanks should be grounded.[3]
- ❑ Electrical installations – a qualified electrician should inspect and approve all installations, including temporary services.

*Beyond these guidelines, any controls or safety measures must take into consideration any local or provincial regulations regarding safety of construction sites.

Did you know...

...after arson, the remainder of fires on construction sites are mostly caused by cutting/welding too close to combustible waste materials, inadequate control of open fire, and discarded smoking materials?*

** U.S. Fire Administration 2002 ("Topical Fire Research Series – Construction Site Fires")*

There can be other hazards that exist or controls that can be put into place that are specific to a particular project. A checklist should include such items.

Completed daily or weekly checklists can be kept for future review during insurance-related inspections. Such inspections will complement the risk management practices followed on the project site, and help identify any weaknesses or omissions related to insurance warranty requirements.

FOR MORE INFORMATION

The Canadian Wood Council offers building professionals free technical support services throughout Canada. New information regarding insurance-related issues continues to be collected. Please visit the Canadian Wood Council's web site at www.cwc.ca for more information.

1. See companion Quick Facts No. 2 in Insurance and Construction Series, "Course of Construction Risk Control".
2. For more information, see: (1) "Safe Work Permits", Workplace Health and Safety Bulletin SH013 – General Safety, the Government of Alberta Ministry of Human Resources and Employment, www3.gov.ab.ca/hre/whs/publications/; (2) "NFPA Standard 51B Fire Prevention in the use of Cutting and Welding Processes", National Fire Protection Association, www.nfpa.org; and, (3) Factory Mutual Engineering Corp., "How to Avoid Getting Burned by Hot Work – Preventing losses and insuring safety", The Record – The Magazine of Property Conservation, Volume 75, No. 1, July 2001.
3. For more information, see "Procedure for the Handling of Fuel on Construction Sites", from the Construction Safety Association of Ontario, available at www.csao.org.