

DEMOLITION SAFETY TIPS

Demolition work involves many of the same hazards that arise during other construction activities. However, demolition also involves additional hazards due to a variety of other factors. Some of these include: lead-based paint, sharp or protruding objects and asbestos containing material.

- * Brace or shore up the walls and floors of structures which have been damaged and which employees must enter.
- * Inspect personal protective equipment (PPE) before use.
- * Select, wear and use appropriate PPE for the task.
- * Inspect all stairs, passageways, and ladders; illuminate all stairways.
- * Shut off or cap all electric, gas, water, steam, sewer, and other service lines; notify appropriate utility companies.
- * Guard wall openings to a height of 42 inches; cover and secure floor openings with material able to withstand the loads likely to be imposed.
- * Floor openings used for material disposal must not be more than 25% of the total floor area.
- * Use enclosed chutes with gates on the discharge end to drop demolition material to the ground or into debris containers.
- * Demolition of exterior walls and floors must begin at the top of the structure and proceed downward.
- * Structural or load-supporting members on any floor must not be cut or removed until all stories above that floor have been removed.
- * All roof cornices or other ornamental stonework must be removed prior to pulling walls down.
- * Employees must not be permitted to work where structural collapse hazards exist until they are corrected by shoring, bracing, or other effective means.

"GREEN" CONSTRUCTION WORKERS MAY FACE ADDITIONAL SAFETY RISKS

It's not easy being green – and it might not necessarily be safer for construction crews building environmentally friendly projects, either. According to new research, these workers suffer more falls than workers on traditional projects; are exposed to new, high-risk tasks; incur more lacerations, strains and sprains; and more.

The study, "Identification of Safety Risks for High Performance Sustainable Construction Projects," which appeared in the Journal of Construction Engineering and Management, examined construction projects built to achieve the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification. LEED is the largest program in the country for certifying and verifying green buildings.

For their eight case studies on the issue, researchers interviewed dozens of designers and contractors who had completed an average of 100 "traditional" construction projects as well as an average of four LEED projects. According to the results, 12 LEED credits lead to an increase in worker safety risks as compared to non-LEED work.

The study found that LEED project workers:

- Face new, high-risk tasks not found in traditional projects, such as constructing atria and installing solar panels or vegetated roofs;
- Work at height – including with electrical current, near unstable soils and near heavy equipment – for a greater period of time than workers on non-LEED projects;
- Incur a 36 percent increase in lacerations, strains and sprains from construction materials;
- Suffer a 24 percent increase in falls to lower levels during roof work, which researchers attributed to the installation of solar panels;
- Experience a 19 percent increase in eyestrain when installing reflective roof membranes; and

· Face a 14 percent increase in exposure to harmful substances when installing innovative wastewater technologies.

"It doesn't have to be this way," noted Peter Stafford, executive director of CPWR – the Center for Construction Research and Training, which supported the study. "With proper layout of the worksite, recyclables can be sorted safely and efficiently. With properly scheduled breaks for hydration, a reflective roof doesn't have to mean trips to the hospital. And with proper fall protection solar panels can reduce our dependence on fossil fuels without risking workers' lives and limbs."

According to the contractors and designers interviewed for the study, such projects could reduce injuries and better protect workers by incorporating prefabrication, effective site layout and alternative products. Using low-VOC materials also could reduce occupational health risks for workers in enclosed environments.

The study was conducted by lead author Matthew R. Hallowell, along with Katherine S. Dewlaney, Bernard R. Fortunato III, and Michael Behm.



Publisher: Building Industry
Employers of New York State
Jack Endryck, Managing Director
1.800.344.1841
Editor: Northeast Builders Ser-
vices (NEBS) 585.586.1564

MONTHLY TOOLBOX TALK

Are you prepared for the cold weather?

COLD WEATHER

COLD WEATHER SAFETY

Summer and fall are gone and the winter months are upon us. Even though it's cold outside we still have to work and get the job done. There are several things we can do to keep warm and prevent cold weather related accidents.

The first thing we want to do is to keep our body temperature at or about normal, 98.6F. This can be accomplished by wearing layers of clothing both inside and outdoors. Wear cotton or lightweight wool next to the skin and wool layers over your underwear. Keep dry by having proper rain gear available and a pair of good, waterproof boots. An extra pair of clean, dry socks can really come in handy. Don't forget to protect your neck and ears; you can lose a lot of heat from these two areas, and a good pair of gloves is essential.

Do you know the signs of frostbite? Our skin will become white and you won't have much circulation. In the worst case, blisters will form but you won't feel any pain. First aid for frostbite is as follows: NEVER rub the frozen part of the body with snow -- Add extra clothing or use a blanket to cover the frozen area -- get out of the cold and into a warm location -- the frozen area may be immersed in warm water but NEVER use hot water -- if the condition does not improve seek professional medical attention.

Another area of concern during cold weather is the use of portable heaters. If they are not maintained properly they can cause accidents. Carbon monoxide can result from defective ventilating and from incomplete fuel burn. All portable heaters should be checked by a competent person before being put into use. Locate fuel containers, regulators, piping and hose where they will not be subject to damage. LP gas containers not in use should be stored upright, in a specified outside location and protected against damage. Containers in use must be kept in an upright position and secured. Always be sure to protect the valves from physical damage.

Cold weather is here to stay for a few months -- keep your guard up against cold weather injury.