# SAFETY PAGES

BUILDERS ASSOCIATION SOUTHERN OREGON

## February 2022
Safety Pages:



Remember if you have any safety suggestions, questions or concerns please let us know. In addition, if you have a safety topic that you would like covered in a Safety Page for training purposes let us know and we will develop one. Topics to our inventory of monthly Safety Pages are continually being added.

OHBA
OREGON HOME BUILDERS ASSOCIATION

The OHBA/SAIF Safety Pages are an ongoing series of pages, designed to provide a selection of safety topics each month to OHBA members. Please use these pages to add to (or start) either a Safety Committee file or manual for your company. Some of the Safety Pages will be on general topics and others will be for Owner/Supervisors. The Owner/Supervisor Safety Pages will be on topics based more on compliance or suggested management safety practices.

IMPORTANT NOTICE OF RESPONSIBILITY

The Oregon Home Builders Association Safety Committee's purpose is to provide safety guidelines, information and resources to help our members work more safely and reduce jobsite accidents. Full and active monthly participation in safety meetings using the OHBA Safety Committee's agendas, topics and checklists will only meet safety committee requirements. It remains your responsibility to comply with all aspects of safety rules and regulations.


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# OHBA Safety Pages: How to Safely Remove Snow from Roofs

Snow that piles up on rooftops can cause significant damage to the structure and can be a life-threatening hazard if the building collapses under the snow's weight, or the snow slides off the roof onto an unsuspecting pedestrian.

However, removing snow from roofs is also hazardous. Falls are responsible for most injuries, but workers have been injured and killed when a roof collapses while they are removing the snow. Other hazards related to snow removal include:

- Amputations and eye injuries caused by snow blowers
- Collapses or tip-overs involving aerial lifts
- Entrapment and suffocation under loose snow falling from roof
- Shock and electrocution from energized power lines and damaged extension cords
- Frostbite or hypothermia from cold and wind
- Overexertion injuries from shoveling snow

## Is snow removal a maintenance or construction activity?

Removing snow from a roof is typically considered a maintenance activity, which means Oregon OSHA's general occupational safety and health rules apply. It's important to remember that these rules require workers to be protected from falling when they are working at heights of four feet or more above a lower level. You'll find the requirement in Division 2, Subdivision D, 1910.28, Duty to have fall protection.

However, on construction sites where snow must be removed to begin or continue construction work, Oregon OSHA's construction rules apply and workers must be protected from falling when they are six feet or more above a lower level. You'll find the requirement in Division 3, Subdivision M, 437-003-1501, Fall protection.

## How to protect workers from falls

Many workers who remove snow from roofs are inexperienced and do not understand the risks of working at heights or how to protect themselves from falling. So, it's critical that employees who may be required to shovel from roofs know what to do to accomplish the work, the risks of working at heights, and how to protect themselves from falling before they get on the roof.

### Considerations for a typical snow removal project include:

- What tools and equipment are necessary to remove the snow?
- Have the workers been trained to safely remove the snow?
- If a snow blower/other heavy equipment is necessary to remove snow, how will it be moved to the roof?
- Will the roof support the weight of the workers and their equipment?
- Are there skylights or vents that workers could fall through hidden by snow?
- Are there trip hazards on the roof that need to be identified or removed?
- How will people on the ground be protected from snow removed from the roof?

## Reducing the risk of a fall

The best strategy for protecting workers from falls is to eliminate the fall risk by having them work from the ground. When they're feasible, roof rakes are the best option for removing snow from roof edges.

## Using personal fall-arrest systems

Personal fall-arrest systems are the most common type of fall protection and most workers who regularly do roofing work know how to use it. But that might not be the case for workers who do an occasional snow-removal job.

Anyone who uses a personal fall-arrest system should know:

- How to select and install a secure anchorage
- How to select and use connectors
- How to put on and use a full-body harness
- How to correctly attach and use a lanyard
- When a deceleration device is necessary
- How to use a lifeline
- The correct procedures for using retractable devices
- How to estimate fall distances
- How to avoid swing falls
- How to inspect and maintain the system
- What to do in a fall-arrest emergency

## Understanding snow load

The combined weight of snow, workers, and their equipment can cause an unstable roof to collapse. Snow load is the weight of snow, usually expressed in pounds per square foot. Although the weight of snow on a roof depends on factors such as the water content of the snow, how much snow has melted and refrozen, and the roof slope, it is possible to estimate snow load.

One way to estimate the snow load is to cut a 1-foot by 1-foot square – the full depth of the snow – from the roof, put it in a plastic bag, and then weigh the bag. The weight is a good indication of the snow load per square foot on the roof.

The amount of weight that a roof can safely support is based on local building code requirements; the roof must have the strength to support the snow, the workers, and their equipment.

One way to reduce the stress on the roof is to remove the snow uniformly and avoid making snow piles. Workers should be alert for unexpected sounds or movement that could indicate the roof is unstable or unbalanced.

## Electrical hazards

Always use extreme caution when working near power lines.

- Assume power lines, wires, and other conductors are energized, even if they appear to be insulated.
- Use snow rakes with nonconductive poles and designate a worker as a monitor to ensure that people and equipment are at least 10 feet away from a power line.
- Make sure that all electrically powered equipment is grounded and includes a ground-fault circuit interrupter (GFCI) in the circuit.

*Source: Oregon OSHA Health and Safety RESOURCE*

SAFETY PAGE MEETING GUIDE Topic: How to Safely Remove Snow from Roofs

Employer: _____ Project: _____

Date: _____ Time: _____ Shift: _____

Number in crew: _____ Number attending: _____

Safety or Health issues discussed. Include recent accident investigations and hazards involving tools, equipment, the work environment, work practices and any Safety or Health recommendations:

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Follow up on recommendations from last safety meeting:

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Record of those attending:

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Supervisor's remarks: _____

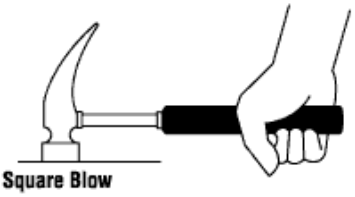
Supervisor: _____ _ _____
(Print) (Signature)

# OHBA Safety Pages: Hammer Safety

**Introduction:** Hammers and other striking tools are widely used and often abused. Hammers are made for specific purposes in various types and sizes, and with striking surfaces of varying hardness. For example, hammers are used for general carpentry, framing, nail pulling, cabinet making, assembling furniture, upholstering, finishing, riveting, bending or shaping metal, striking masonry drill and steel chisels, and so on. Hammers are designed according to the intended purpose.

**Main Message:**

- Discard any hammer with mushroomed or chipped face or with cracks in the claw or eye sections. Wear safety glasses or goggles, or a face shield (with safety glasses or goggles).
- Make sure to select the proper hammer for the job – one that is too light is just as unsafe and ineffective as one that is too heavy. When driving a nail, hold the hammer close to the end of the handle. Use a light blow at first and increase the power of the blows once the nail is set.
- Select a hammer that is comfortable for you and that is the proper size and weight for the job. Misuse can cause the striking face to chip, possibly causing a serious injury.
- Choose a hammer with a striking face diameter approximately 0.5 inches larger than the face of the tool being struck (e.g., chisels, punches, wedges, etc.).
- Choose a hammer with a cushioned handle to protect you from vibration, impact, and squeezing pressure.
- Use hammers with electrically insulated handles for work on or around exposed energized parts.
- Ensure that the head of the hammer is firmly attached to the handle.
- Replace loose, cracked or splintered handles.
- Keep the work area clear of debris.
- Discard any hammer with mushroomed or chipped face or with cracks in the claw or eye sections.
- Wear safety glasses or goggles, or a face shield (with safety glasses or goggles).
- Strike a hammer blow squarely with the striking face parallel to the surface being struck. Always avoid glancing blows and over and under strikes. (Hammers with beveled faces are less likely to chip or spall.)
- Look behind and above you before swinging the hammer. Keep enough clearance from fellow workers.
- Maintain a secure footing and keep good balance while using a hammer.

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# OHBA Safety Pages: Carbon Monoxide

Carbon monoxide is an odorless, colorless gas that often goes undetected, striking victims caught off guard or in their sleep.

More than 400 people in the U.S. die from unintentional carbon monoxide poisoning every year, according to the Centers for Disease Control and Prevention (CDC). More than 20,000 visit the emergency room, and more than 4,000 others are hospitalized.

This "invisible killer" is produced by burning fuel in cars or trucks, small engines, stoves, lanterns, grills, fireplaces, gas ranges, portable generators or furnaces. When the gas builds up in enclosed spaces, people or animals who breathe it can be poisoned. Ventilation does not guarantee safety.

## *How Can I Prevent Carbon Monoxide Poisoning?*

Winter can be a prime time for carbon monoxide poisoning as people turn on their heating systems and mistakenly warm their cars in garages. So, as the weather turns colder, it's important to take extra precautions. In construction, carbon monoxide hazards can be present all year long.

The National Safety Council recommends you install a battery-operated or battery backup carbon monoxide detector in areas where carbon monoxide poisoning can occur. Check or replace the battery when you change the time on your clocks each spring and fall and replace the detector every five years.

The CDC offers these additional tips:

- Have your gas-burning appliances serviced by a qualified technician every year
- Do not use portable flameless chemical heaters indoors
- Never use a generator inside a home, basement or garage or less than 20 feet from any window, door or vent; fatal levels of carbon monoxide can be produced in just minutes, even with open doors/windows
- Never run a gas-burning appliance or engine in a garage that is attached to a house, even with the garage door open; always open the door to a detached garage to let in fresh air

## *Symptoms of Carbon Monoxide Poisoning*

The U.S. Fire Administration has put together materials on the dangers of carbon monoxide, including a list of carbon monoxide poisoning symptoms.
Symptom severity varies depending on the level of carbon monoxide and duration of exposure. Mild symptoms sometimes are mistaken for flu.

Low to moderate carbon monoxide poisoning:

- Headache
- Fatigue
- Shortness of breath
- Nausea
- Dizziness

High-level carbon monoxide poisoning results in:

- Mental confusion
- Vomiting
- Loss of muscular coordination
- Loss of consciousness
- Death

If you think you are experiencing any of the symptoms of carbon monoxide poisoning, go outside and get fresh air immediately. You could lose consciousness and die if you stay in the location.

Source Material: NSC

SAFETY PAGE MEETING GUIDE Topic: Carbon Monoxide Poisoning

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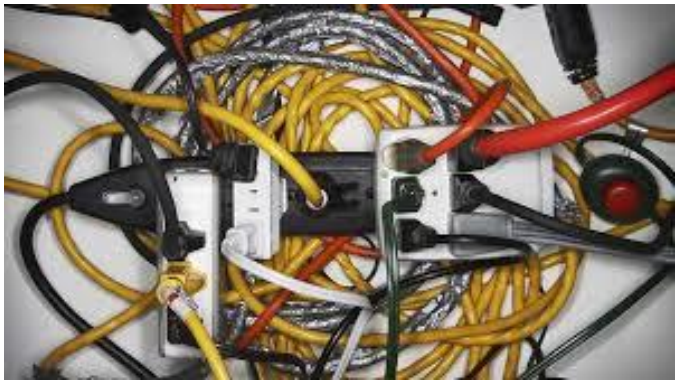
# OHBA Safety Pages: Extension Cord Safety

**Introduction:** On construction sites, flexible extension cords that power tools and equipment are everywhere. These cords are often loose and uncovered. They can cause tripping hazards. They can be damaged easily and create electrical hazards.



**Main Message:**

- Inspect all extension cords daily for damage and missing grounding prongs. Repair or replace damaged equipment.
- Use a Ground Fault Circuit Interrupter to protect against any electrical fault, especially when working outside or in wet/damp conditions.
- Keep extension cords away from foot traffic to prevent tripping and cord damage. The insulation in cords and electrical tools can become damaged. If a live wire touches exposed metal parts inside a tool, it can become energized.
- DO NOT use extension cords/flexible wiring
  - ~ where frequent inspection would be difficult
  - ~ where damage would be likely
  - ~ disconnect from the power supply by pulling or jerking the cord from the outlet
  - ~ for long-term electrical supply as a substitute for the fixed wiring of a structure
  - ~ rated for light-duty power cords on heavy load applications
  - ~ where vehicles or equipment are allowed to pass over unprotected power cords. Cords should be put into electrical conduits or protected by placing them between two pieces of lumber of suitable strength
- In addition, NEVER USE
  - ~ a metal outlet box, Romex, or nonmetallic cable as an extension cord
  - ~ staples or nails to hold cords in place
  - ~ multiple cords connected together (use one long cord instead)
  - ~ multiple cords plugged into one outlet where a circuit overload could occur

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