



SAFETY
SOLUTIONS &
SUPPLY



Best Safety Practices for Roofers

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INTRODUCTION

Roof repair is not an easy task. The roofing industry faces many challenges that others do not. Roofers have a tough job, one that often comes with many dangers and risks. In addition to state and federal safety laws that regulate industry compliance, many roof contractors are now improving the way they do business to boost their workplace safety.

STAYING SAFE ON THE JOB

One of the most important things a roofer can do is train their staff. Having inexperienced or unlicensed employees can leave the company open to unnecessary safety hazards and even lawsuits.

While commercial roofers have mandatory training requirements for employees, many residential roofing companies do not. It is advised that all roofers participate in and complete a minimum of 10 hours in an OSHA (Occupational Safety and Health Administration) certified training. Further, lead contractors or on-site supervisors should carry at least a 30-hour OSHA safety certificate when monitoring the work of others.

Innovations in industry equipment have also developed new tools for roofers looking for safety equipment. Most roof contractors use roof jacks and toe boards when working on steep or variable sloped roofs. However, personal fall arrest systems have become recommended by OSHA and are being used more than in years past.

WHAT IS ROOF SAFETY?

Roof safety is a system of preventive and safety measures when performing work and repairs on rooftops. Roof safety should be practiced while on the job to avoid personal injuries and structural damage.



Performing roof work exposes workers to risks such as falls, which are the leading cause of death in the construction industry.



The Occupational Safety and Health Administration (OSHA) cites that falls from roofs account for 34% of all fall deaths.

WHY ROOFING SAFETY MEASURES ARE SO IMPORTANT

Roofers have to take special care while on the job to avoid personal injury and damage to a client's buildings. This is why it's important to develop, implement, and maintain effective safety measures while a roof is being worked on. Roofs by themselves are dangerous simply because of how high they often are, their slope, and the uncertainty of your footing. Gravel rooftops can be uneven and provide unsteady footing, and so professional roofers have learned to exercise great caution when attempting repairs or inspections, especially on commercial roofs.

COMMON ROOFING DANGERS

Roofs aren't specifically designed for consistent foot traffic yet repairs and inspections require roofers to tread lightly across roof metal panels and membranes. Several roof accidents involve falls and trips from heights, which resulted in numerous deaths annually.

Below are some of the most common roofing threats faced by roofers:

01

Slippery Conditions. Walking across roofs can be hazardous, especially during snow and heavy rain. However, accidents are more likely to occur if there are unusual steep roofs or perhaps a flat roof with gravel. That is why proper footwear is extremely important when accessing a roof.

02

Extreme Heat. Roofers are not only working under the sun for several hours, but they are consistently surrounded by reflected heat. Thus, roofers are exposed to risks of heatstroke or dehydration. Being mindful of these things and one's health should be prioritized.

03

Vents & Ductwork. Exposed ductwork, vents, and other obstructions bulging from the roof can block the roofer's view. It is essential to identify these issues early and fix them right away. Roof inspection tasks are scheduled accordingly using construction software such as Buildertrend.

04

Loose Debris, Wires, and Trees. Hazards such as electrical wires extending across roofs or branches of trees obscuring the view can cause roofing professionals to fall or trip and in turn sustain some serious injuries.

05

Ladders. When ladders are improperly used, it can lead roofers to a severe fall and sudden demise. There are buildings that do not provide roof access from the inside so roofers don't have any option but to use ladders to get straight up to the roofs.

06

Skylights. While they are great for natural light, this type of fixture can give way at anytime. Fixtures give way when there is too much weight placed on them. Workers have to make sure they aren't stepping on it; instead, they should step directly on the edges.

07

Parapet Walls. There are tall buildings that have no barrier situated on the roof ledges. If that is the case, it poses an immediate threat to the roofers. Some buildings have too short of walls to prevent a worker from tumbling over.

08

Electrical. Workers need to be more aware of their designated roofing tasks. Being near power lines are usually something that the roofers overlook. Dangerous sections like solar panels, conduits, and HVAC equipment should be avoided.

09

Chemical Exposure. Roofing professionals may touch or breath in toxins such as lead and asbestos. Other biological materials like bird and rodent droppings are also present, which will be extremely harmful to workers.

HOW DO ROOFERS STAY SAFE?

Roofers are safest when they're properly trained in how to use their tools and equipment. This not only makes them safer but also more efficient. Roofers have access to a wide range of tools that vary depending on the job, including everything from hammers and tin snips to nail guns and circular saws—learning how to master these tools will allow roofers to also use them more safely in several different environments and weather conditions.

There are also national safety standards in place to help educate and protect workers while on the job. These standards, such as those outlined by the National Roofing Contractors Association (NRCA) and OSHA, outline rules and regulations roofers should apply to their conduct and actions.

Besides understanding how to handle the equipment and navigate working on sloped or uneven surfaces, safety comes down to the best practices roofers and companies implement.

PERSONAL PROTECTIVE EQUIPMENT FOR WORKING ON A ROOF

Employers must protect workers from recognized hazards. Depending on the associated hazards, some of the PPE that may be required for working on a roof can include, **but not limited to:**

- ▶ Non-slip footwear
- ▶ Hard hat
- ▶ Gloves
- ▶ Eye protection like safety glasses and visors
- ▶ Hearing protection like earplugs and muffs
- ▶ Fall protection like safety harnesses and lanyards
- ▶ Respiratory protection
- ▶ Wet weather gear

ROOF SAFETY SIGNS AND THEIR MEANING

According to OSHA, safety signs are generally categorized into danger signs, warning signs, and caution signs. When working on rooftops, roofers will usually encounter the **following examples of roof safety signs and what they should do:**

 DANGER	 WARNING	CAUTION
<p>Danger Sign. When there is a roof safety danger sign, there are immediate hazardous conditions that will lead to serious injury and death if not avoided. Upon seeing this sign before any roofing work, avoid the danger at all costs.</p>	<p>Warning Sign. There are existing life-threatening hazards that can lead to serious injury or death when there is a roof safety warning sign. Accessing roofs by permit means that only authorized personnel or trained employees can be on them. Warning signs represent a hazard level between danger and caution, needing specific precautionary measures to be taken.</p>	<p>Caution Sign. There are minor hazard situations where a non-immediate or potential hazard or unsafe practice presents a lesser threat of employee injury when there is a roof safety caution sign. Roofers should be mindful of caution signs and apply necessary control measures in any roofing work.</p>

TOP 10 ROOFING SAFETY TIPS

01

Always begin with your Pre-Start Talk. Ensure you always conduct a 5–10-minute pre-start talk with all workers before commencing work on a rooftop. Discuss common hazards present (as listed above), assess the condition of the work area, confirm that proper permits have been secured, and encourage the team to verbalize the safety tips to follow. Using a pre-start toolbox talk template can help your team communicate and record their daily safety conversations.

02

Work only during good weather conditions and avoid extreme heat/cold. Not only does extreme weather cause slips and falls, but it can also hinder proper execution of roofing work (roof shingles not sealing down). A wet roof is also a huge risk for slips and falls. Better side with caution and always wait for ideal weather before you begin roofing work.

03

Ladders should be stable and properly secured or tied off. Always make sure that there are enough ladders for the job and that they're all safe to use. Check your ladders for safety, as some may need repair or replacement to prevent fatal accidents or injuries.

04

Wear proper PPE. Wearing proper PPE such as helmets, shoes with traction, and fall protection harnesses can help save you when slips and falls occur. Perform regular PPE checks to ensure your team is properly equipped.

05

Carefully position ropes and extension cords, so they're not underfoot. When not properly handled, ropes and cords hinder workers' movements and cause fatal accidents. Always follow proper use of ropes, cords, and safety harnesses.

06

Sweep the roof before and after work and make sure it is clear of dirt and debris. One random nail can cause a slip, while snow or leaves can hide areas of the roof that should be visible to workers. Always keep the roof clean and free of items that can cause accidents or materials that can hinder the roof's visibility.

07

Use guardrails whenever possible. Guardrails serve as a visual and physical barrier that protects workers from falls. It reduces the risk of injury and death from working on roofs.

08

Skylights should be guarded appropriately. Skylights and other openings on roofs should be properly covered and labeled with visible warning signs to prevent workers from leaning on or falling into them.

09

Be careful of slate and tile roofs. Slate and tile roofing is a major slip hazard. Make sure that workers are properly trained and have enough experience working on slate and tile roofs.

10

Signage should be visible in your work area. People around the work area should always be aware of roofing work in the vicinity by using visible warning signs to prevent injury or accidents with staff working on-site or from falling debris.

WHAT HAPPENS IF A ROOFER GETS HURT ON THE JOB?

Often it seems as if disastrous accidents are lurking around the corner, waiting for a potential opportunity. This could be true for roofers who have a demanding and hazardous job due to the inherent job risks of falling and electrocution. When engaged in roofing activities, the dangers present should be recognized by employers and given the utmost safety priority regarding safety. A roofing company needs to carry liability and worker's compensation insurance, so if an employee is injured while performing their job, a compensation claim can be filed.



Construction Accidents. The common effect of a roofing construction injury is the inability to perform the required job duties, which causes loss of income for that worker. This vocation carries with it a high risk of experiencing a falling accident caused by slipping or tripping. Inexperience and negligence in using guardrails, scaffolding, or personal protective equipment are thought to be the primary reason these injuries occur. Therefore, all employees must take full responsibility in implementing suitable and practical safety measures to avoid such a potentially hazardous occurrence!

Suppose these warnings are not taken seriously by not following proper safety protocol. In that case, construction-related injuries such as broken legs, pelvis, punctured eyeballs, fractured ribs, and skull could cause a worker to lose a significant amount of earning capacity while recovering from related physical problems.



Workers Compensation. The specific insurance coverage for employee injuries is workers' compensation. It protects the interests of the employees and covers various costs such as medical expenses, rehabilitation, and loss of income related to an injury or illness resulting from an incident occurring at work. This coverage also provides compensation to surviving spouses and dependent children.

Worker's compensation insurance varies from one state to another. State and court decisions decide many factors, including how the claim is handled, impairment assessment, the number of benefits an employee can receive, and dispute resolution. Many states now have 'no-fault' workers compensation insurance which prohibits a lawsuit from being filed against an employer if the no-fault benefits have been elected and are being received.



Liability Insurance. This particular insurance is primarily designed to protect those other than workers for damage to property or personal injury resulting from any responsible act of an employee of the covered company. It is possible in some states for an employee to sue an employer if the injury resulted from a negligent accident of that employer. It must be pointed out that not all states allow an injured worker to collect both Workers Compensation benefits and still sue an employer. Again, liability insurance is carried to protect other people and property, not the employee.

If an employee is injured on the job, employers are obligated to carry Workers Compensation insurance to provide for the consequences to employees when they are injured at work. Not only are medical bills relating to the injury completely covered, compensation to make up for lost income is also paid. Should the injury result in a fatality, it also provides benefits for a surviving spouse. Liability insurance seldom comes into play except for those few states that allow for claims using both types of insurance. So, workers can be taken care of should an injury occur on the job!

ROOF FALL PROTECTION

Federal guidelines have been requiring roofing companies to protect workers from roof falls. That is why using specific fall protection systems and equipment has been implemented from the start. Additionally, these guidelines also mandate employers to give extensive training on the systems and certain rescue and first aid techniques. Doing so will provide the entire team the knowledge to protect not just themselves but also their coworkers.

The fall protection system includes several basic components:



Guardrail Systems. Guardrails are usually installed around the roof's perimeter at steep and lower slope sites. It can be either temporary or permanent, yet there are requirements for composition, height, and location involved in the process. Hence, roofing professionals have to be familiar with this list of items before selecting the right guardrail system. Furthermore, being knowledgeable in using any of the latest construction trends like the task scheduler software is also perceived as a crucial thing.



Safety Nets. A safety net refers to a mesh or webbed system made from either synthetic or natural fibers. Nets for safety are suspended below a skylight or roof site to stop a falling worker. There are federal regulations around what safety nets must be made or how often it needs to be tested.



Personal Fall Arrest. PFA refers to body harnesses that every roofer has to wear. It is usually attached to the anchor by a lanyard. Most of the components are capable of holding any heavy-weight and will also fit in specific ways. Roofers have to make sure that the PFA they used is certified and it also works in good condition.



Warning Line Systems. It is a chain barrier, wire, or rope that will prevent roofers from entering unsafe areas. Take note that these are heavy-duty warning systems capable of enduring 500 lbs. of pressure. This system can be deployed on low-slope roofs and is preferably combined with guardrails or safety monitoring systems. It is not a part of the mandatory protection for steep roof work.



Safety Monitoring Systems. A system for safety monitoring is also being used for roof fall protection with a lower slope. It isn't just a piece of equipment, but it is more like a technique roofers used on roof sites. A person will be trained to familiarize further with fall hazards (monitor). This particular option is utilized with a warning line system.



Traction-Based. There's still no strategy on how to walk barefoot on water. However, there's the best way to walk on a roof safely. Good thing that traction-based shoes are available because having the right shoes will prevent the likelihood of falls and slips.

WORKING IN A FAST-PACED & CHANGING ROOFING INDUSTRY

Roofing designs continuously evolve and change as consumers and architects keep up with new trends, styles, and changing preferences. For instance, green building standards are pointing out more installed green roofs and solar panels. In addition, the rooftop garden has continued to progress in popularity. Thus, features no one has ever seen from the past. So, what does it mean for the roofers?

The more features added to the roof, the more traffic can be expected on them – whether for maintenance staff, occupants, or builders to enjoy leisure spaces. But the truth is, the more people who will occupy the space, the greater the risks for falls. It only means one thing – closer attention should be imposed for roof fall protection measures for the entire construction phase and application.

SAFE ROOFING PRACTICES

Roofing can be dangerous work. Therefore, anyone who is considering repairing or replacing a roof should follow safe roofing practices. For those who prefer to hire a roofing contractor to do the work, it is important to verify that they have a safety plan.

Ladders are necessary to gain access to the roof. Workers should make sure that the ladder stands on level ground at an adequate distance from the side of the building. Some stabilization should be applied to keep the ladder in place. Rope or screws can be used to secure the ladder to the roof. Roofers should, at the very least, have someone stand at the bottom of the ladder and keep it stable.

Shingles, nails, and tools should never be carried up the ladder as they could unbalance the person carrying them and cause a fall. Such items should be placed in a bucket with a rope attached to its handle. The bucket can then be hauled up to where it is needed.

Walking boards should be installed when roofing to provide workers with safe walking surfaces. Nail down pieces of spare lumber. If the roof is steep, a lift should be used to lessen the risk of slipping.

Because walking directly on the roof cannot always be avoided, one strict safety rule is never to walk on a roof when rain is falling. A wet roof is extremely slippery. Roofs should also be kept clear of debris. Sawdust, loose bits of shingle, screws, or nails must be swept up immediately to prevent accidents. And if it is necessary to walk on the roof, proper footwear is essential. Shoes or boots with rubber soles are the best choices to avoid slipping.

Safety harnesses are a good idea for any roofer. The harness should fit properly and should be checked for defects before being put to use. Safety ropes should be attached to the harness, and they, too, should be checked for any damage. Competent roofing contractors will ensure that all safety harnesses are in good working order.

Everyone on any roofing site should wear safety glasses. Even the smallest sliver of wood or a piece of asphalt broken off a shingle can cause severe damage if it strikes a person's eye. Today's safety glasses are comfortable and provide excellent vision, so there is no reason for roofers to refuse to wear them.

A hardhat is another safety item that should be worn by anyone roofing, whether they are on the roof or the ground. A falling hammer can crack a skull but will bounce off a well-made hardhat. Roofing contractors should require hardhats for every worker.

Nail guns are convenient tools, but they can be dangerous, even deadly. Like any other tool, they should be used per manufacturer recommendations. Anyone doing roofing should make sure nail guns are correctly loaded and then treat these tools as if they are loaded guns.

Following best safety practices does not only save broken bones and lives but also saves money. Companies with good safety techniques have fewer accidents, allowing them to keep insurance and workers' compensation costs low.

CONCLUSION

Roofing safety relies on the workers awareness of working at height while on the roof, their self-balance, and their ability to multi-task. Relying on agility alone is not advisable because it treacherously plays the probability of slipping. That is why roofing companies should prioritize their employee's knowledge and understanding of the importance of safety.

ABOUT SAFETY SOLUTIONS & SUPPLY

Safety Solutions and Supply specializes in the development and support of safety-management systems, provides accredited instructional safety programs to employees, and assists with the selection and sales for a wide range of protective equipment.

SOURCES

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