Roofing Fall Prevention (Single-unit Roof Coverings) Meeting Kit

WHAT’S AT STAKE

IMPORTANCE OF ROOFING FALL PREVENTION

Even with strict fall prevention laws and inspection programs in place, year after year, construction workers continue to get hurt, and even die, when working at height. Unfortunately, falls from height (including roofs) continue to be a leading cause.

WHAT’S THE DANGER

HAZARDS/DANGERS OF ROOFTOP WORK

Many rooftops fall accidents and injuries occur not on the roof itself, but when accessing it. Points of failure can occur around even stabilized equipment, so the roof itself must be inspected and safe before attempting to reach it. Access-point injuries can also occur on the way down, if employees do not make sure that they are properly secured while descending.

AVOID ROOFTOP FALLS BY IDENTIFYING THE MOST COMMON SAFETY HAZARDS

- Low parapets
- Unprotected roof edges
- Skylights
- Roof holes
- Loose debris
- Unsecured or misplaced ladders
- Unsecured roof safety equipment
- Unpredictable weather
- Power tools
- Electrical cables and equipment

- Hazardous substances

HOW TO PROTECT YOURSELF

FALL PREVENTITIVE MEASURES AND ROOF SAFETY EQUIPMENT

Guardrail Systems. A guardrail system is installed around a roof perimeter to prevent accidental falls. They can be permanent or temporary. OSHA provides guidelines for a guardrail's height, composition and location for various buildings. These are commonly used on steep roofs with unprotected sides at least six feet or higher off the ground and are often used in combination with safety nets or personal fall arrest systems.

Personal Fall Arrest (PFA) Systems, A personal fall arrest (PFA) system consists of an anchor, connectors and a body harness. Workers are attached to the roof by a lanyard that is of sufficient strength to hold a certain weight. Every PFA system must be certified by OSHA and tested regularly for wear or damage.

Safety Nets. A safety net is a webbed or mesh net made from strong fibers that is suspended just below the roof edge or skylight. It is intended to be a fallback measure if a PFA or guardrail system fails. OSHA regulations also prescribe the materials safety nets are to be made from, their tensile strength, where and how they are to be hung and how often they should be tested for damage.

Warning Line Systems. Warning line systems differ from guardrail systems in that they are simply a wire, rope or chain barrier that prevents contractors from entering unprotected areas. While this heavy-duty warning system is able to withstand up to 500 pounds of pressure, they are typically used on low-sloped roofs where maintaining footing is easier. They can also be combined with a guardrail system, PFA or a safety net.

MAKE A FALL PREVENTION PLAN – THREE GUIDELINES FOR EVERY PROJECT

Plan – Prior to every project, a project manager or superintendent should inspect the building/surrounding area to plan accordingly. Tasks to complete the job should be outlined and communicated so

no grey areas exist.

Provide – A key to roofing fall protection, is having every project site inspected in order to have the proper safety equipment supplied (ie. ladders, PFA (personal fall-arrest system), safety-nets, and guardrail systems).

Train – Proper training means demonstrating the correct safety guidelines and use of equipment on the job. Training is also required for EVERYONE regardless of experience or seniority. Employees must be trained at high levels.

TRAIN, RETRAIN…THEN TRAIN AGAIN

There's no such thing as over-training when injuries can be prevented. Roofing fall protection & prevention training should be mandated for all employees to make sure everyone is held accountable. Ensure repetitive training, weekly safety meetings are enforced along with regular updates to the Safety Manual.

INSPECT, INSPECT, INSPECT

When on the job site, nothing prevents falls more than keeping eyes out for hazards. A project superintendent's focus should always be to maintain a safe and healthy work environment free of hazards. Employees must be trained to spot and report hazards immediately to management. Regular safety inspections and audits are also performed on job sites to ensure the site is always meeting safety standards.

BEST ROOFING FALL SAFETY STEPS

1. **Be aware of all roof damage.** Soft spots on the roof where it's been damaged by bad weather or leaking can pose a major hazard for roofers. Review the results of the initial roof inspection with your crew before the project begins. Make sure they know where all the danger zones are before they even climb the ladder.
2. **Secure your roofing tools.** Trying to catch bumped tools as they slide down the roof also poses a huge threat to roofers' safety. This can easily be eliminated by using rope

or bungee cords to secure the tools to the roof and keep them out of the way.

3. **Keep extension ladders and other roofing tools inside when not in use.** Even when roofers are using the most gripping and durable shoes, slippery extension ladders and scaffolding will increase the chance of losing their balance. Storing this equipment out of the elements will prevent dew or frost from forming on the rungs, better protecting your crew members when they use the equipment on the next job.
4. **Protection On Tall Ladders.** Stepladders and extension ladders are the two most common ladders used in commercial roofing. When ladders are over 24 feet in height, they must have safety mechanisms, such as cages, ladder protection systems, wells, etc. The cages and wells need to withstand a force similar to that of guard rails, and the side rails should extend three feet above the area the worker is trying to access.

FINAL WORD

Emphasizing roof safety and training workers on common rooftop hazards and how to use the proper fall protection equipment can save lives and limit injuries.