

Fall Prevention & Protection

The U.S. Department of Labor lists falls as one of the leading causes of traumatic occupational death. In 2005, falls contributed to 79,310 injuries; 767 of which resulted in fatality. For the construction industry, falls are the No. 1 cause of workplace death and account for more than 20% of the total cost of occupational injuries. Falls also ranked fourth in workers' compensation expenses, totaling \$4.6 billion, or, for another perspective, \$88 million a week.

Think prevention

When it comes to fall safety, prevention is better than protection. By engineering the hazard out of the jobsite plans and eliminating the need to perform work at heights above 6 feet, many potential fall injuries are eliminated. However, sometimes it's impossible to do that, in which case choosing the appropriate fall protection systems can limit injury by stopping a fall before it happens.

OSHA 1926.502(k) states that a fall protection plan must be maintained at the jobsite. Make sure the site manager and all other management personnel are knowledgeable of the plan and know where it can be found. Each jobsite will require different fall protection systems. Capital Safety, a Red Wing, Minn.-based manufacturer of fall protection equipment, outlines eight steps essential to any company's plan.

1. Perform a hazard analysis to determine areas of risk.
2. Wherever possible, engineer out the hazard.
3. Whenever possible, implement fall prevention systems, such as guardrails, handrails, and warning lines.
4. Select appropriate fall arrest equipment for your site and personnel.
5. Use expert analysis to determine

and install appropriate anchorages, along with any necessary horizontal and vertical equipment.

6. Determine equipment required to cover all rescue contingencies.

7. Establish a comprehensive training program on all aspects of fall protection and rescue.

8. Include in a written fall protection plan at the jobsite and available to every employee.

Protection systems

There are number of fall protection systems that can be employed depending on the project. Passive fall protection systems include guardrails, toe boards, fences and barricades, safety nets, and floor/roof opening covers. Active fall protection systems or personal fall arrest systems (PFAS)

encompass equipment that workers must activate such as a body harness.

An audit of all safety equipment and fall protection plans should be performed annually. Once equipment has been used in a fall arrest, it must be returned to the manufacturer for inspection and recertification. Damaged equipment should be replaced and, if necessary, employees should be trained.

Training matters

Because workers often resist wearing safety equipment, training and enforcement is so important when it comes to preventing falls. Employees should be knowledgeable in all safety equipment used on the jobsite, as well as know how to properly inspect the gear each time they use it. Management should also be accountable for how safety procedures are followed, immediately rectifying equipment misuse or disregard for safety entirely.

Invest now, save later

Bottom line, the time invested in fall prevention and a fall protection plan can save lives and save you money in the end. Over 60% of senior financial executives report that for every dollar invested in injury prevention, a company sees double or more in returns. For more information and additional resources on fall prevention, go to www.concrete-construction.net and click "Current Issue" under "The Magazine" where you can find even more resources to help you safely plan for your next jobsite.



This shows both a vertical guardrail netting and a perimeter netting system in place on a commercial building construction site. Photo: Capital Safety