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Fall Protection for Bridge Contractors in 4 Easy Steps

For the third year in a row, fall protection was #1 on the Occupational Safety and Health Administration (OSHA) Top 10 list of the most cited violations, with 8,241 fall protection citations issued in 2014, according to OSHA. Now, more than ever, all bridge contractors must learn how to implement comprehensive fall protection programs.



Bridge contractors can achieve 100% fall protection by taking four

- plan
- provide
- train
- enforce/evaluate

Leading Cause of Death

Falls are the leading cause of death in construction. Falls took the lives of 345 construction workers in 2017 alone. The majority of these fatal falls (82%) were falls to a lower level. Of the lower level falls, about 29% were from 10 feet or less while 71% were from heights of 11 feet and higher (with 37% falling between 11-29 feet and 16% falling 30 feet or more).

The following fatalities illustrate the risks for workers on bridges throughout the United States.

- A 45-year old bridge worker fell 70 feet to his death from the Mount Hope Bridge in Connecticut.
- Two bridge workers, ages 53 and 63, fell 90 feet to their deaths from a bridge near Montgomery, Alabama.
- A 34-year old bridge worker fell 60 feet to his death from a bridge across Lake Washington near Seattle.

When bridge contractors implement effective fall protection programs, they increase worker safety and help prevent deaths and permanent injuries. OSHA, in partnership with the National Institute for Occupational Safety and Health (NIOSH) and National Occupational Research Agenda (NORA) - Construction Sector, has been waging a nationwide outreach campaign to raise awareness among workers and employers about common fall hazards in construction.



The campaign focuses on how falls from ladders, scaffolds, bridge structures, and bridge decks can be prevented. Lives can be saved through an important and highly effective 4-step process: plan, provide, train, and enforce/evaluate.

Step 1: Plan

A well-designed fall protection plan written by a qualified person is the first step to reducing risks and saving lives. OSHA mandates that the fall protection plan must be developed by a qualified person with relevant knowledge and training in order to successfully implement an appropriate fall protection program.

A comprehensive bridge fall protection plan developed by a qualified person should include a statement of company policy signed by the highest level of



management. The company policy must clearly state employee and supervisor responsibilities as well as enforcement measures and appropriate disciplinary actions. The bridge fall protection plan must also be site-specific, with a detailed list of fall prevention measures.

The bridge contractor should designate the competent person(s) in writing. The competent person(s) must:

- Be responsible for implementing the fall protection plan
- Have absolute authority over the fall protection plan
- Have unquestioned authority to stop work and correct fall hazards
- Oversee documented inspections where fall protection measures are utilized
- Keep fall protection equipment maintenance records, records of prompt removal of defective equipment, incident reports, accident investigations records, and employee training records
- Prepare to train employees by acquiring or developing a training program

The fall protection plan must include performing a thorough **hazard analysis** to determine the areas of risk and methods of engineering out the hazards, if possible. (A **Sample Fall Protection Plan for Bridge Work** is available from ARTBA.) Selection of fall protection systems should be made at this stage. Contingency plans and appropriate rescue equipment should be selected. Finally, a method for enforcing the plan and evaluating effectiveness should be developed.

ARTBA's Fact Sheet **Guide to Selecting Fall Protection Systems for Bridge Work** provides detailed descriptions of fall protection equipment and a flow chart to aid selection of fall protection in bridge work.

Step 2: Provide

To protect employees working at 6 feet or higher above lower levels, employers must *provide* the correct fall protection equipment for the job. To help prevent falls, employers must also *provide* the correct types of ladders, scaffolds, and safety gear.

All fall protection systems and scaffold systems must be designed and/or installed under the supervision of a **qualified person**. OSHA defines a qualified person as one who "... has proven knowledge, skills, experience, education, certification, or professional standing to solve or resolve problems related to the subject matter, the work, or the project." [29 CFR 1926.32(m)]

Step 3: Train

At a minimum, each employee who might be exposed to fall hazards must be trained by a *competent person* who is qualified in the following areas [29 CFR 1926.503(a)(2)]:

- The nature of fall hazards in the work area
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems
- The use and operation of guardrail systems, personal fall arrest systems, safety net systems, and/or other protections
- The OSHA fall protection standard

ARTBA offers training products and informational documents, including an **Employee Fall Protection Training Record**, to help bridge contractors deliver and document required fall protection training for employees.

Step 4: Enforce/Evaluate

The company fall protection program must contain mechanisms for enforcing requirements and evaluating the effectiveness of the program. Enforcement mechanisms can include discipline within the normal chain of command, for example. Evaluation can include comparison reviews of training records and policy infractions as well as analysis of any accidents that might occur.

