

**U.S. Army Corps of Engineers
Fort Worth District
Safety & Occupational Health Office**

Lessons Learned

ACCIDENT: Fall from roof edge.

Date: 17 June 2005

WHAT HAPPENED

The worker was connected to a horizontal life line with a rope grab. As the worker was relocating a roofing panel near the edge of the roof, she stepped into a pile of Styrofoam shavings. The material caused her to slip, lose her balance and slide the roof. As part of the fall the worker came in contact with the outer edge of a scaffold and continued to fall approximately 20 feet to the ground.

The worker was wearing the proper fall arrest safety harness with a shock absorbing lanyard. She connected to the fall arrest system without inspecting it. The rope grab system was an inertia/ cam locking. It was setup by another worker; the device had been connected upside down to the rope leading from the horizontal lifeline. The device failed to grab the rope during the fall. There were no other workers that observed the fall and an undetermined period of time had passed before the worker was discovered lying on the ground behind the building. Emergency services were notified and the worker was transported to the hospital.

CONTRIBUTING FACTORS:

- Improper setup of equipment.
- Failure to inspect equipment prior to use.
- Accumulation of Styrofoam shaving allowed to build up on roof surface.
- Competent person not located at the jobsite.
- Lack of job specific fall protection plan

RESULTS:

The worker suffered severe injuries to both ankles and will be restricted to a wheel chair for approximately six months.

LESSON LEARNED:

Reference-EM 385-1-1, 3 September 1996, USACE SAFETY & HEALTH Requirements Manual

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- **Ensure that equipment is used in accordance with manufactures recommendations and that employees are trained in the proper use and inspection of fall protection equipment.**

21. C.06 The manufacturer's recommendations shall be followed in the fitting, adjustment, use, inspection, testing, replacement, and care of personal fall protection equipment. Before an employee uses personal fall protection equipment, he /she shall receive instruction in these recommendations and the potential fall hazards of the activity.

21. C.07 Personal fall protection equipment shall be inspected before use each day to determine that it is safe working condition; defective equipment shall be immediately replaced.

21.C.08(c) Horizontal lifelines shall be designed, installed, and used under the supervision of a qualified person as part of a complete fall arrest system which maintains a safety factor of at least two.

ACTIONS TAKEN:

Immediately conduct a safety briefing and inspection of all fall protection systems used at the jobsite. Submittal of a Fall Protection Plan in accordance with EM 385-1-1 section 21 and OSHA 1926.502 by the contractor and ensure that it identifies the competent person, their qualifications, training, the equipment to be used, emergency contact, rescue, etc. This plan shall be reviewed and concurred/non-concurred with as part of the Accident Prevention Plan.