Kentucky Fatality Assessment and Control Evaluation (FACE) Program

Incident Number: 09KY034
Release Date: November 24, 2009
Subject: Immigrant Granite Installer Killed After Falling with Homemade Construction Box

This is a summary. The entire KY FACE report is available on our website at: www.kiprc.uky.edu

Summary

On a summer day in 2009, a 50-year-old granite installer and his two sons were working alone at a construction site when the granite installer fell out of a second story window and was killed. The three granite installers worked for a subcontractor hired to install granite vanity tops and sinks in a newly constructed hotel. Work had commenced at 7:00 AM that morning. They were installing the second set of ten vanities for the day. All ten vanities, with back and side splash pieces, had been loaded onto a homemade three-sided construction box and lifted via a forklift to a second story window. The loaded construction box was not secured to the forklift. While the father unloaded the granite pieces from the construction box into the second story room, Son 1 was on the second floor working in another room, and Son 2 was on the third floor taking measurements. To reach the last vanity top, the granite installer climbed out the window and onto the construction box which then fell off the forklift onto the ground. Son 1 heard the noise, went to the room where his father was working and found his father on the ground outside of the hotel. He yelled for Son 2, and the sons went outside and found their father unresponsive. Emergency medical services were called and performed cardio-pulmonary resuscitation, and transported the father to the hospital where he was declared dead.

To prevent future occurrences of similar incidents, the following recommendations have been made:

Recommendation No. 1: Slab carts should be used to transport finished granite slabs.

There was a slab cart on site for the employees to transport the granite around the job site. It was located on the second floor when the incident occurred and should have been used to transport the granite from the trimming area to the second floor via the elevator. The weight of the 10 vanities being transported was approximately 2,000 pounds. Slab carts have a weight capacity that ranges from 1,500 pounds to 3,000 pounds and costs start at approximately $300.

Recommendation No. 2: Subcontractors should have their onsite competent person and their onsite safety person conduct a hazard assessment of the job site each day before work commences.
According to the Code of Federal Regulation 1926.20(b)(2), employers are to designate a competent person to frequently conduct inspections of the job site that include materials and equipment. Each subcontractor’s onsite competent person and onsite safety person should perform a hazard assessment of the work site before each day work commences that includes the identification of potential physical hazards such as transporting materials to the installation location. An evaluation of the homemade construction box should have been performed by the general contractor’s employees. The construction box was built to be used in conjunction with a forklift to distribute building materials/tools to upper floors, and to remove trash from the upper floors. The construction box should only be used to transport items that do not have any other mode for transport. It should not have been used to transport the granite and the sinks since a granite cart was available to use.

Safety aids such as cleats that would have added stability to the construction box, and openings or handles in appropriate locations that would make it easy to secure the construction box to the forklift as required by 29 CFR 1926.602(c)(1)(viii)(A). Instructions on how to secure loads to forklifts properly and to safely prevent load displacement should have been discussed. The importance of not leaning out of a window to retrieve materials should be discussed with the workers.

**Recommendation No. 3: Employers/general contractors should ensure that all subcontractors have a written worker safety program.**

Employers, including general contractors, should require proof that subcontractors have an applicable, written safety program before work is allowed to commence. The program should include written procedures on performing typical job hazard analyses at each job site as well as procedures on how to perform each job task. These safety procedures should outline and explain safe practices for each hazardous task. Instructions should include how to perform the task and how to safely operate any equipment required to perform each task. A section on unsafe work practices should be included in the written safety procedures. Unsafe work practices such as leaning out of windows and onto construction boxes not intended for human occupancy should be included. 29 Code of Federal Regulations 1926.20(b)(1) states that it is the responsibility of the employer to develop and institute a safety program in accordance with the safety requirements of the contract with the general contractor.

Recognition of signs of fatigue and how to reduce it should be included in the safety procedures. On the day of the fatality, the workers had moved approximately 20 granite vanity tops, sinks, and back splashes which weighed approximately 4,000 pounds. They had moved the granite three times; once from the crate to the sawhorses, once from the sawhorses to the construction box, and once from the construction box to the bathrooms.

**Recommendation No. 4: Forklift operators should be trained by a competent person to operate forklifts correctly and safely.**

In this incident, a homemade construction box was used to hoist building materials from the ground to a second story window to be unloaded. It was the second load of the day, and the
construction box had not been secured to the mast or the forks. It is unknown if the first load had been secured to the forklift. Son 1 had a forklift operator’s license, but the extent of his training and experience is unknown. Sections of the Kentucky Occupational Safety and Health Code of Federal Regulations which specifically apply to this incident are: 29 CFR 1910.178(l)(3)(i)(G) that states the operator should understand fork and attachment adaptation, operation and use limitations of the forklift. 29 CFR 1910.178(l) are general industry standards that apply to forklifts and are also incorporated into the 29 CFR 1926 construction standards. 29 CFR 1926.602(c)(1)(viii)(A) states that a safety construction box, etc., should be “firmly secured to the lifting carriage and/or forks”. Forklift operators should also be trained to recognize proper weight distribution of the loads they are elevating with the forks. This would include recognition of unstable weight at the end of the forks on the forklift and the hazardous condition this creates. 29 CFR 1910.178(l)(3)(ii)(B) states that the operator should understand the “composition of the loads to be carried and load stability”. Also, operators should be instructed to recognize that the forks should be opened as wide as possible to provide stability to the construction box.

**Recommendation No. 5: Work should only be performed when the general contractor has a competent person on the job site.**

According to 29 CFR 1926.32(f), a competent person is defined as “one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them”. The competent person should be knowledgeable of specific standards applicable to the work site, be capable of identifying hazards specific to the operation, and have the authority to correct them. On a normal workday, the general contractor had a job superintendent/competent person on site who performed site assessments throughout the day and abated unsafe situations. This particular day when the incident occurred was not a usual workday and the subcontractor’s employees were the only workers on the job site. It should be clearly stated in contract language between general contractors and subcontractors that work should only be performed while the general contractor’s competent person is on the job site.

The Kentucky Fatality Assessment & Control Evaluation Program (FACE) is funded by a grant from the Centers for Disease Control and the National Institute of Safety and Health. The purpose of FACE is to aid in the research and prevention of occupational fatalities by evaluating events leading to, during, and after a work related fatality. Recommendations are made to help employers and employees to have a safer work environment. For more information about FACE and KIPRC, please visit our website at: www.kiprc.uky.edu