

**Case 21. 35-year-old male laborer wearing a hard hat was killed when a brick weighing nearly 18 pounds fell approximately 115 feet and struck his head.**

On July 30, 2002, a 35-year old male laborer was assisting with the re-lining of a lime kiln. The cylindrical kiln's outer surface was lined with metal plating. The interior of the kiln was lined with 2 layers of brick. The victim was standing on the ground loading a sling with bricks weighing approximately 18 pounds. Above the ground level was a circular metal ceiling that had a square hatch with a trap door; the door was opened and closed by using a handle located near the hatch. Ground worker were responsible to close this trap door when loading the sling. The loaded sling was hoisted to an upper level through the trap door by workers located approximately 115 feet above ground on a metal work platform attached to a lift cable. The work platform floor had a trap door to allow the sling to be raised to the platform and the bricks unloaded. After the bricks were hoisted to the work platform, a worker unloaded them from the sling and placed on the perimeter of the platform. The sling was then lowered and the workers on the ground loaded the sling with another load of bricks. A worker on the upper level was moving a brick when it was knocked from his hand. The trap door was open and the brick fell approximately 115 feet through the open trap door. The victim, who was wearing a hard hat, was struck in the head by the falling brick. The hard hat was cracked from the brick's impact.

MIOSHA issued the following serious citations to the employer:

1. Employees were exposed to an unsafe lifting device. The load was not secured and balanced before the load was lifted more than 6 inches (Lifting and Digging Equipment, Part 10, Rule R408.41025(a).16). The bricks were hand stacked on a lifting device with 2 open sides and were not banded or secured.
2. Reinforcing steel was used as a load-bearing member of a job-built lifting device. (Concrete Construction, Part 25, Rule R408.42518(5)).
3. Employer's inspection of the site work operation did not assure unsafe operating conditions were eliminated. The hatch approximately 20 feet above the employees was left in the open position while employees load sling with materials directly below hatch opening. Employees on the work platform approximately 100 feet above were handling refractory materials. (General Rules, Part 1, Rule R408.40114(2))
4. Job built safety device was not proof tested. Employees were using a job-built lifting device to hoist refractory materials to the scaffold platform. The unsafe lifting device was made out of a piece of conveyor belt with holes drilled through and bolted to the conveyor belt material to allow attachment to a hook on a hoist line. (Handling and Storage of Materials, Part 8, Rule 408.40836(4)).