A 38 year old male employee fell 19' off the edge of a roof while installing roofing underlayment on a 5:12 steep sloped roof.

This contractor was hired to construct the framing and exterior portions of a new residential home. According to the owner, his workers were assigned to complete the exterior portions of the house, which included installing plywood sheeting on the roof as sheathing. Two employees were working on a roof with a 5/12 pitch, 19 feet above the deck on the backside of the home; neither employee was wearing or using fall protection. At around 6:00pm the workers were finishing up for the day and cleaning up the site. According to coworkers, the victim stated that "he wanted to work with the paper." As the victim was unrolling the underlayment on the roof with his coworker, he took a step backwards and stepped off the edge and fell from the roof, approximately 19 feet to the deck below. The victim was a new employee and had only been in the construction field for a few weeks.

It was determined that the victim was working on the roof to install underlayment material, and not utilizing fall protection. During interviews, employees explained that they only use fall protection on roofs whenever the roof is so steep that they cannot walk easily. It was also determined that there was no training program in place for fall protection, nor did the employer enforce the use of fall protection.

# <u>Citation(s) as Originally Issued</u>

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

# <u>Citation 1 Item 1</u> Type of Violation: Serious \$900

**29 CFR 1926.50(c):** A person with a valid certificate in first-aid training was not available at the worksite to render first-aid.

In that an adequately trained person was not available at the work site to render first aid in the event of employee injury. The closest emergency room, LeConte Medical Center, was approximately 11.9 miles/26 minutes away.

<u>Citation 1 Item 2a</u> Type of Violation: Serious \$4000 29 CFR 1926.451(a)(6): Scaffolds were not designed by a qualified person.

In that 5 employees were exposed to fall hazards due to site-built scaffolds constructed of lumber that had not been designed by a qualified person in the following instances:

a) One site-built scaffold was erected against the rear interior wall in the main living area of the home and reached 15 feet in height.

- b) One site-built scaffold was erected against the rear exterior wall of the home above the main deck and reached 10 feet in height.
- c) One site-built scaffold was erected between the upper and lower decks on the side and rear of the home and reached 11 feet in height.

## <u>Citation 1 Item 2b</u> Type of Violation: Serious \$0

**29 CFR 1926.451(b)(1)(i):** Each platform unit (e.g., scaffold plank, fabricated plank, fabricated deck, or fabricated platform) was not installed so that the space between adjacent units and the space between the platform and the uprights were no more than 1 inch (2.5 cm) wide, except where the employer can demonstrate that a wider space is necessary.

In that a site-built scaffold against the rear interior wall in the main living area of the home utilized two adjacent 2" x 10" planks as a platform, but there was a gap between them along the entire length of the planks that was approximately 7 inches wide.

## <u>Citation 1 Item 2c</u> Type of Violation: Serious \$0

29 CFR 1926.451(b)(2): Scaffold platforms and walkways were not at least 18 inches wide.

In that site-built scaffolds in and around the home had platforms less than 18 inches wide in the following instances:

- a) One scaffold against the rear exterior wall of the home above the main deck utilized single 2" x 10" lumber as platforms.
- b) One scaffold between the upper and lower decks on the side and rear of the home utilized single 2" x 12" lumber as platforms.

#### Citation 1 Item 2d Type of Violation: Serious \$0

**29 CFR 1926.451(f)(7):** Scaffolds were not erected, moved, dismantled, or altered, by trained and experienced employees under the supervision and direction of a competent person qualified in scaffold erection, moving, dismantling or alteration. Such activities were not performed only by experienced and trained employees selected for such work by the competent person.

In that 5 employees were exposed to fall hazards while constructing site-built scaffolds on the jobsite without being supervised by a competent person, in the following instances:

- a) One site-built scaffold was erected against the rear interior wall in the main living area of the home with a platform height of 15 feet.
- b) One site-built scaffold was erected against the rear exterior wall of the home above the main deck with a platform height of 10 feet.

c) One site-built scaffold was erected between the upper and lower decks on the side and rear of the home with a platform height of 11 feet.

# <u>Citation 1 Item 3</u> Type of Violation: Serious \$4000

**29 CFR 1926.451(g)(1):** Employees on scaffolds more than 10 feet (3.1 m) above a lower level were not protected from falling to that lower level by fall protection established in paragraphs (g)(1)(i)-(vii) of this section.

In that 5 employees were exposed to fall hazards greater than 10 feet while using site-built scaffolds on the job site without any means of fall protection in place in the following instances:

- a) One scaffold against the rear interior wall in the main living area of the home was approximately 15' above the floor.
- b) One scaffold below the upper deck on the side of the home was approximately 11' above the ground.

## <u>Citation 1 Item 4</u> Type of Violation: Serious \$1200

**29 CFR 1926.454(a):** The employer did not have each employee who performed work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards.

In that 5 employees were exposed to fall hazards while utilizing site-built scaffolds throughout the work site and had not been trained on scaffold-specific hazard recognition and controls.

#### <u>Citation 1 Item 5</u> Type of Violation: Serious \$7000

**29 CFR 1926.501(b)(11):** Each employee on a steep roof with unprotected sides and edges 6 feet (1.8 m) or more above lower levels was not protected from falling by guardrail systems with toe boards, safety net systems, or personal fall arrest systems.

In that two employees were working on a 5/12 pitch roof 19 feet above a deck on the backside of the home and they were not using any form of fall protection which led to a fatal fall for one of those workers.

#### <u>Citation 1 Item 6</u> Type of Violation: Serious \$5400

**29 CFR 1926.501(b)(13):** Each employee(s) engaged in residential construction activities 6 feet (1.8 m) or more above lower levels were not protected by guardrail systems, safety net system, or personal fall arrest system, nor were employee(s) provided with an alternative fall protection measure under another provision of paragraph 1926.501 (b).

In that 5 employees working within a residence under construction were exposed to fall hazards without utilizing fall protection in the following instances:

- a) One open basement stairwell with no stairs 12' above the basement floor.
- b) One open second floor loft area approximately 10' above the main floor.
- c) A deck attached to the main floor on the rear of the home with a walking/working surface 18.5' above the ground below.
- d) A deck attached to the walkout basement level on the rear of the home with a walking/working surface 6.5' above the ground below.
- e) A rough wall opening on the left side of the home approximately 13' above the ground below.
- f) A rough wall opening on the back side of the home approximately 12' above the upper deck.
- g) A rough wall opening on the front, right side of the home approximately 12' above the front deck.
- h) A rough wall opening on the front, left side of the home approximately 15' above the ground below.

# <u>Citation 1 Item 7</u> Type of Violation: Serious \$1200

**29 CFR 1926.503(a)(1):** The employer did not provide a training program for each employee potentially exposed to fall hazards to enable each employee to recognize the hazards of falling and the procedures to be followed in order to minimize these hazards.

In that 5 employees were working in, on, and around the home under construction where they were exposed to several fall hazards throughout the work site, but had not been properly trained on fall hazards, protection, and procedures.

#### Citation 1 Item 8 Type of Violation: Serious \$900

**29 CFR 1926.1051(a):** At this job site, stairway(s) or ladder(s) were not provided at all personnel points of access where there was a break in elevation of 19 inches (48 cm) or more, or no ramp, runway, sloped embankment, or personnel hoist was provided.

In that 5 employees were working in, on, and around the home under construction where they were required to climb up or down approximately 3 feet 5 inches on the front deck/porch to enter or exit the worksite.









# Fall from roof—Insp # 1677565 David Arreaga dba D.C. Custom Exteriors



