

Construction Site Accidents

Fall Protection



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I. LAWYER BIOGRAPHY

Jules Zacher has practiced law since 1974 in state court in Pennsylvania and federal court in Pennsylvania, Florida, and Maryland.

Mr. Zacher received his law degree at Temple University in 1974, as well as a masters degree in economics from Temple in 1970. Mr. Zacher has taken non-degree course work at Princeton University, Woodrow Wilson School of Public and International Affairs. He received his undergraduate degree from the University of Pittsburgh in 1964.

Mr. Zacher's legal career has included working as a trial lawyer in one of the premier personal injury law firms in the nation prior to starting his own firm in 1982. He has litigated construction site cases including a welder performing work on a bridge who was electrocuted, a concrete worker who was seriously injured at an oil storage tank, and a carpenter who received serious injuries while working at a home construction site. He has been active in community affairs in the Grays Ferry area of Philadelphia. Many of the cases he has tried have involved numerous defendants and complex issues of facts and law.

Mr. Zacher is a member of the Philadelphia Bar Association, and the Philadelphia Trial Lawyers Association. He is admitted to practice law in Pennsylvania and the United States District Court of the Eastern District of Pennsylvania.

II. HOW TO CONTACT THE FIRM

Jules Zacher, P.C. is a law firm incorporated as a professional corporation with offices located at 1601 Walnut Street, Suite 707, Philadelphia, PA 19102. Its phone number is 215-988-0160; its fax number is 215-988-0169; and its e-mail address is zacherlaw@aol.com. The law firm has two Websites: www.juleszacher.com and www.legionnairelawyer.com.

III. CONSTRUCTION SITE ACCIDENTS

1. Industry Background

Even though the construction industry has 5% of the workforce, it has 21% of the workplace fatalities in the United States.¹ Ranking the number of fatalities on construction sites shows that falls result in the highest number of deaths, with transportation accidents second, and contact with objects and equipment third. Roughly 30% of these fatalities are caused by falls from elevated positions.

According to US government statistics, approximately 1 in 10 injuries on the job occur on construction sites.² In 2005 this accounted for approximately 408,000 injuries, a number which has doubled in less than ten years (In 1997 there were 189,839 on-the-job injuries). In 2005, 1186 construction workers were killed at work—representing nearly half of the 2,452 total deaths in the entire private goods producing sector. As the head of the trauma unit of Philadelphia hospital, which treats one construction worker a month for serious injury, said, “Construction sites are extremely lethal areas” (Bartholomew Tortella as cited in the *Philadelphia Inquirer*, 2/11/00, pg. 1).

Most construction sites involve numerous companies at various levels, with the owner of the building or the developer using an architect and engineer to draw up the construction site plans. The owner or developer will also contract with a prime or general contractor to do the actual construction. If the prime does not do construction work, it is considered a construction manager. The prime usually contracts with subcontractors to do such work as demolition, excavation, foundations, steel erection, electrical and concrete work.

2. Statutory Duty

Any analysis used to establish whether an injured person can collect damages from any potential defendant in a workplace accident must start with the legal duty the defendant had to the worker. The source of legal duty can be a law and any regulations stemming from the law, such as the Occupational Safety and Health Act (OSHA), passed by the U.S. Congress in 1970.

The standards set up in OSHA dealing with construction, as an example, hold the prime contractor responsible for enforcement of OSHA standards regardless of any contractual agreement between the prime and sub-contractors. The non-delegable duty of the prime contractor extends to all employees on construction sites regardless of who employs them. It can occur even if the general contractor has no employees himself on

¹ *Fatal occupational injuries by event or exposure and major private industry sector, All United States, 2005*. U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State and Federal agencies, Census of Fatal Occupational Injuries.

² *Workplace Injuries and Illnesses in 2006*, U.S. Department of Labor, Bureau of Labor Statistics.

the jobsite³. Further, the OSHRC (Occupational Safety and Health Review Commission) has ruled that any employer, regardless of what level that may be on a multi-tier level construction site, who can get rid of a hazardous condition violative of OSHA regulations must do so even though only employees of other companies are at the worksite.

The employer, however, will be let off the hook from violating OSHA standards if the employee is unforeseeably disobeying the instructions of the employer. In order to show that the employee disobeyed instructions it is necessary for the employer to prove that it has work rules established to prevent a violation which has been connected to the employee, it has made efforts to uncover any violations, and it has enforced its rules when any violations which were discovered.⁴

Prior OSHA violations by the same company are available from the regional OSHA office. Any prior citations for the same type of safety violation would go a long way towards establishing notice to the company.

Owners typically have progress photos taken of the jobsite to refute any claims which may be brought against a job for delay. These same photos can be used to establish OSHA violations on the jobsite prior to the accident happening.

3. OSHA Regulations | Fall Protection

A. Duty to Have Fall Protection⁵

These OSHA regulations explain an employer's duty to provide fall protection to its employees. A summary of the regulations follow:

- Employees will be allowed to work on walking/working surfaces only when the employer has determined that the surfaces have the required strength and structural integrity.
- *Unprotected Sides and Edges*. Each employee on a walking/working surface with an unprotected side or edge which is 6 feet or more above a lower level, must be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.
- *Leading Edges*. Each employee who is constructing a leading edge 6 feet or more above lower levels or on a walking/working surface 6 feet or more above a lower

³ Anning v. Johnson Co., 4 OSHRC (BNA) 1195, 1994 (1976)

⁴ A.P. O'Horo Co., Inc. v. Secretary of Labor, OSHRC Docket No. 85-369, 20 (1989)

⁵ U.S. Department of Labor. Occupational Safety & Health Administration. Regulations; 29 CFR 1926.501

level where leading edges are under construction, shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems.

- *Hoist Areas.* Each employee in a hoist area shall be protected from falling 6 feet or more to lower levels by guardrail systems or personal fall arrest systems. If guardrail systems, or portions thereof, are removed to facilitate the hoisting operation, and an employee must lean through the access opening or out over the edge of the access opening, that employee shall be protected from fall hazards by a personal fall arrest system.
- *Holes.* Each employee on walking/working surfaces must be protected from falling through holes (including skylights) more than 6 feet above lower levels, by personal fall arrest systems, covers, or guardrail systems. Each employee on a walking/working surface must also be protected from tripping in or stepping into or through holes (including skylights) by covers. Each employee on a walking/working surface shall be protected from objects falling through holes (including skylights) by covers.
- *Formwork and Reinforcing Steel.* Each employee on the face of formwork or reinforcing steel must be protected from falling 6 feet or more to lower levels by personal fall arrest systems, safety net systems, or positioning device systems.
- *Ramps, Runways, and Other Walkways.* Each employee on ramps, runways, and other walkways must be protected from falling 6 feet or more to lower levels by guardrail systems.
- *Excavations.* Each employee at the edge of an excavation 6 feet or more in depth that is not readily seen because of visual barriers, must be protected from falling by guardrail systems, fences, or barricades. Each employee at the edge of a well, pit, shaft, and similar excavation 6 feet or more in depth must be protected from falling by guardrail systems, fences, barricades, or covers.
- *Dangerous Equipment.* Each employee less than 6 feet above dangerous equipment must be protected from falling onto the dangerous equipment by guardrail systems or by equipment guards, and must also be protected from other fall hazards by personal fall arrest systems, safety net systems, or by equipment guards.
- *Overhand Bricklaying and Related Work.* Each employee performing overhand bricklaying and related work 6 feet or more above lower levels, or reaching more than 10 inches below the level of the surface on which they are working, must be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or must work in a controlled access zone.
- *Roofing Work on Low-Slope Roofs.* Each employee engaged in roofing activities on low-slope roofs, with unprotected sides and edges 6 feet or more above lower

levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, warning line systems, or a combination thereof.

- *Steep Roofs.* Each employee on a steep roof with unprotected sides and edges 6 feet or more above lower levels shall be protected from falling by guardrail systems with toeboards, safety net systems, or personal fall arrest systems.
- *Precast Concrete Erection.* Each employee engaged in the erection of precast concrete members (such as wall panels, columns, beams, and floor and roof "tees") and related operations such as grouting of precast concrete members, who is 6 feet or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems.
- *Residential Construction.* Each employee engaged in residential construction activities 6 feet or more above lower levels shall be protected by guardrail systems, safety net system, or personal fall arrest system.
- *Wall Openings.* Each employee working on, at, above, or near wall openings (including those with chutes attached) where the outside bottom edge of the wall opening is 6 feet or more above lower levels and the inside bottom edge of the wall opening is less than 39 inches above the walking/working surface, shall be protected from falling by the use of a guardrail system, a safety net system, or a personal fall arrest system.
- *Walking/Working Surfaces Not Otherwise Addressed.* Each employee on a walking/working surface 6 feet or more above lower levels must be protected from falling by a guardrail system, safety net system, or personal fall arrest system.
- *Protection From Falling Objects.* When an employee is exposed to falling objects, the employer must have each employee wear a hard hat and must implement one of the following measures:
 - Erect toeboards, screens, or guardrail systems to prevent objects from falling from higher levels; or,
 - Erect a canopy structure and keep potential fall objects far enough from the edge of the higher level so that those objects would not go over the edge if they were accidentally displaced; or,
 - Barricade the area to which objects could fall, prohibit employees from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced.

B. Fall Protection Systems Criteria and Practices⁶

These OSHA regulations indicate the criteria and practices for how employers are to provide and install fall protection systems before employees begin work. A summary of the regulations follow:

- *Guardrail Systems.* Guardrail systems and their use shall comply with the following provisions:
 - Top edge height of top rails, or equivalent guardrail system members, must be 42 inches above the walking/working level.
 - Midrails, screens, mesh, intermediate vertical members, or equivalent intermediate structural members must be installed between the top edge of the guardrail system and the walking/working surface when there is no wall or parapet wall at least 21 inches high. Other structural members (such as additional midrails) must be installed such that there are no openings in the guardrail system that are more than 19 inches wide.
 - Guardrail systems must be capable of withstanding a force of at least 200 pounds, while midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members must be capable of withstanding a force of at least 150 pounds.
 - Guardrail systems shall be structured to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.
 - When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail section must be placed across the access opening between guardrail sections when hoisting operations are not taking place.
 - When guardrail systems are used at holes, they shall be erected on all unprotected sides or edges of the hole.
- *Safety Net Systems.* Safety net systems and their use shall comply with the following provisions:
 - Safety nets shall be installed under the walking/working surface on which employees are working, and never more than 30 feet below that surface level.
 - Safety nets and safety net installations shall be drop-tested at the jobsite after initial installation and before being used as a fall protection system, whenever relocated, after major repair, and at 6-month intervals if left in one place.

⁶ U.S. Department of Labor. Occupational Safety & Health Administration. Regulations; 29 CFR 1926.502

- Safety nets must be inspected at least once a week for wear, damage, and other deterioration. Safety nets must also be inspected after any occurrence which could affect the integrity of the safety net system.
- *Personal Fall Arrest Systems.* Personal fall arrest systems and their use shall comply with the provisions below:
 - Connectors must be drop forged, pressed or formed steel, or made of equivalent materials. Connectors must also have a corrosion-resistant finish, and all surfaces and edges must be smooth to prevent damage to interfacing parts of the system.
 - Lifelines shall be protected against being cut or abraded. Ropes and straps used in lanyards, lifelines, and strength components of body belts and body harnesses shall be made from synthetic fibers.
 - Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached, or shall be used as part of a complete personal fall arrest system and under the supervision of a qualified person.
 - Personal fall arrest systems, when stopping a fall, shall be assembled such that an employee can neither free fall more than 6 feet, nor make contact with any lower level. Personal fall arrest systems shall bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet.
 - The attachment point of the body belt shall be located in the center of the wearer's back. The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level, or above the wearer's head.
 - Personal fall arrest systems and components subjected to impact loading must be immediately removed from service and must not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.
 - The employer shall provide for prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves.
 - Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.
 - Personal fall arrest systems shall not typically be attached to guardrail systems or hoists. When a personal fall arrest system is used at hoist areas, it shall be rigged to allow the movement of the employee only as far as the edge of the walking/working surface.

- *Safety Monitoring Systems.* Safety monitoring systems and their use shall comply with the following provisions:
 - The employer shall designate a competent person to monitor the safety of other employees. The employer is required to ensure that this safety monitor is competent to recognize fall hazards and will warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner. The safety monitor must be on the same walking/working surface and within visual sighting distance of the employee being monitored, as well as close enough to communicate orally with the employee. The safety monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function.
 - Mechanical equipment must not be used or stored in areas where safety monitoring systems are being used to monitor employees engaged in roofing operations on low-slope roofs.
 - No employee, other than an employee engaged in roofing work on low-sloped roofs or an employee covered by a fall protection plan, shall be allowed in an area where an employee is being protected by a safety monitoring system.
- *Protection From Falling Objects.* Falling object protection shall comply with the following provisions:
 - Toeboards, when used as falling object protection, shall be erected along the edge of the overhead walking/working surface for a distance sufficient to protect employees below.
 - Guardrail systems, when used as falling object protection, shall have all openings small enough to prevent passage of potential falling objects.
 - During overhand bricklaying and related work, no materials or equipment except masonry and mortar may be stored within 4 feet of the working edge. Excess mortar, broken or scattered masonry units, and all other materials and debris must be kept clear from the work area by removal at regular intervals.
 - During roofing work, materials and equipment must not be stored within 6 feet of a roof edge unless guardrails are erected at the edge. Materials which are piled, grouped, or stacked near a roof edge must be stable and self-supporting.
 - Canopies, when used as falling object protection, must be strong enough to prevent collapse and to prevent penetration by any objects which may fall onto the canopy.

B. Training Requirements⁷

These OSHA regulations provide for how employees are required to be trained in fall protection. A summary of the regulations follow:

- *Training Program.* The employer must provide a training program for each employee who might be exposed to fall hazards. The program is required to enable each employee to recognize the hazards of falling and must train each employee in the procedures to be followed in order to minimize these hazards. The employer shall assure that each employee has been trained, as necessary, by a competent person qualified in the following areas:
 - The nature of fall hazards in the work area;
 - Correct procedures for erecting, maintaining, disassembling, and inspecting, the fall protection systems to be used;
 - The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used; and,
 - Correct procedures for equipment handling and storage.
- *Certification of Training.* The employer must prepare a written certification record which contains the name or other identity of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature of the employer.
- *Retraining.* When the employer has reason to believe that any employee who has already been trained does not have the understanding and skill required, the employer shall retrain each such employee. Circumstances where retraining is required include, but are not limited to, situations where:
 - Changes in the workplace render previous training obsolete; or
 - Changes in the types of fall protection systems or equipment to be used render previous training obsolete; or
 - Inadequacies in an employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill.

⁷ U.S. Department of Labor. Occupational Safety & Health Administration. Regulations; 29 CFR 1926.503

V. CASE QUESTIONNAIRE

Do I Have A Case?

Provide the details and we will make a free, preliminary determination.

Your Name:

Address:

City:

State:

Zip Code:

E-mail:

Phone Number:

Enter your question or case details here:

I understand that my request and my response thereto does not form an attorney-client relationship.