

Fall Protection Plan for Construction

OSHA currently regulates fall protection for construction under Part 1926, Subpart M. The standards for regulating fall protection systems and procedures are intended to prevent employees from falling off, onto or through working levels and to protect employees from falling objects. Fall protection requirements under the OSHA Construction regulations require considerable planning and preparation. [Note: These regulations do not address the issue of whether employers should compile a written fall protection plan, except to provide for the use of a written plan as justification for less conventional fall protection measures during leading edge work, pre-cast concrete erection work, or residential construction.]

Written fall protection procedures establish guidelines to be followed whenever an employee works above dangerous equipment on ramps or runways, or at heights with fall protection at the job site. The regulations:

- Are designed to provide a safe working environment, and
- Govern use of fall protection procedures and equipment.

Written procedures for fall protection establish uniform requirements for fall protection training, operation, and practices. The effectiveness of the written fall protection procedures depends on the active support and involvement of all employees who perform the jobs requiring it. This plan is intended to document procedures that ensure all work requiring fall protection is carried out safely.

Purpose

EMA is dedicated to the protection of its employees from on-the-job injuries. All employees of EMA have the responsibility to work safely on the job. The purpose of this plan is to:

- Supplement our standard safety policy by providing safety standards specifically designed to cover fall protection on the job.
- Ensure that each employee is trained and made aware of the safety provisions which are to be implemented by this plan prior to the start of erection/construction.

This program informs interested persons, including employees, that EMA is complying with OSHA's Fall Protection requirements, (29 CFR 1926.500 to.503).

This program applies to all employees who might be exposed to fall hazards, except when designated employees are inspecting, investigating, or assessing workplace conditions before the actual start of construction work or after all construction work has been completed.

The Project Manager is responsible for its implementation and is the competent person for our company. Copies of the written program may be obtained from EMA's written Safety and Health plan. Certain employees are authorized to inspect, investigate, or assess workplace conditions before construction work begins or after all construction work has been completed. These employees are exempt from the fall protection rule during the performance of these duties.

These authorized employees determine if all walking/working surfaces on which our employees

work have the strength and structural integrity to support the employees. Our employees will not be allowed to work on these surfaces until they have the requisite strength and structural integrity.

All employees, or their designated representatives, can obtain further information about this written program, and/or the fall protection standard from the Project Manager/Competent Person.

Our Duty to Provide Fall Protection

To prevent falls EMA has a duty to anticipate the need to work at heights and to plan our work activities accordingly. Careful planning and preparation lay the necessary groundwork for an accident-free jobsite.

Worksite Assessment and Fall Protection System Selection

This written plan is for our various construction sites. There are situations at these worksites that will require fall protection.

All fall protection systems selected for each application will be installed before an employee is allowed to go to work in an area that necessitates the protection. When selecting and purchasing fall protection equipment and supplies, they shall be approved for the purpose for which they are intended. Such fall protection equipment shall bear appropriate labels clearly indicating that the equipment meets or exceeds applicable ANSI and ASTM requirements.

This fall protection plan is intended to anticipate the particular fall hazards to which our employees may be exposed. Specifically, we:

- Inspect the area to determine what hazards exist or may arise during the work.
- Identify the hazards and select the appropriate measures and equipment.
- Give specific and appropriate instructions to workers to prevent exposure to unsafe conditions.
- Ensure employees follow procedures given and understand training provided.
- Apprise ourselves of the steps our specialty subcontractors have taken to meet their fall protection requirements.

Providing fall protection requires an assessment of each fall situation at a given jobsite. Our criteria for selecting a given fall protection system follow those established at 29 CFR 1926.502, fall protection systems criteria and practices. Each employee exposed to these situations must be trained as outlined later in this plan.

Unprotected Sides and Edges

Our employees must be protected when they are exposed to falls from unprotected sides and edges of walking/working surfaces (horizontal and vertical surfaces) which are 6 feet or more above lower levels.

We know that OSHA has determined that there is no "safe" distance from an unprotected side or edge that would render fall protection unnecessary.

At EMA we utilize and require the use of covers, standard guardrails, or personal fall arrest systems (PFAS) to protect our employees and subcontractors from fall hazards.

We maintain the system(s) chosen until all work has been completed or until the permanent elements of the structure which will eliminate the exposure to falling hazards are in place.

Leading Edge Work

Some construction sites requires leading edge work. Leading edges are defined as the edge of a floor, roof, or formwork that changes location as additional floor, roof, or formwork sections are placed, formed, or constructed. If work stops on a leading edge it will be considered to be an "unprotected side or edge" and will be covered by the section of this plan on unprotected sides and edges.

We presume that it is feasible and will not create a greater hazard to implement at least one of the conventional fall protection systems for our leading edge work.

At EMA we utilize and require the use of covers, standard guardrails, safety nets, or personal fall arrest systems (PFAS) to protect our employees and subcontractors from fall hazards.

Employees who are not constructing the leading edge, but who are on walking/working surfaces where leading edges are under construction, will also protected from falls by the use of standard guardrails, safety nets, or personal fall arrest systems (PFAS).

Hoist Areas

In all situations where equipment and material hoisting operations take place, we protect our employees from fall hazards. When we are involved in hoisting operations we utilize and require the use of covers, standard guardrails, safety nets, or personal fall arrest systems (PFAS) to protect our employees and subcontractors from fall hazards.

When operations require the materials to be lifted by crane to a landing zone (and do not require an employee to lean through the access opening or out over the edge to receive or guide materials), we can select either personal fall arrest equipment or a guardrail system.

When guardrails (or chains or gates) are removed to facilitate hoisting operations, and one of our employees must lean through the access opening or out over the edge to receive or guide materials they will be protected by a personal fall arrest system.

Holes

EMA protects employees from:

- Tripping in or stepping into or through holes (including skylights).
- Objects falling through holes (including skylights).

At EMA we utilize and require the use of covers, standard guardrails, safety nets, or personal fall arrest systems (PFAS) to protect our employees and subcontractors from fall hazards.

At our worksites employees can trip or step into or through a hole (including skylights) or an object could fall through a hole and strike a worker. In these instances we use covers to prevent accidents.

We understand that OSHA does not intend that a guardrail be erected around holes while employees are working at the hole, passing materials, and so on. Therefore, if the cover is

removed while work is in progress, guardrails are not required because they would interfere with the performance of work. When the work has been completed, we will be required to either replace the cover or erect guardrails around the hole.

Formwork and Reinforcing Steel

We are involved in work where different systems fit different applications. If our jobsites requires formwork or reinforcing steel work 6 feet or more above lower levels, we will chose a fall protection systems at each location to protect our employees:

At EMA we utilize and require the use of covers, standard guardrails, safety nets, or personal fall arrest systems (PFAS) to protect our employees and subcontractors from fall hazards.

Ramps, Runways, and Other Walkways

We equip all ramps, runways, and other walkways with guardrails when employees are subject to falling 6 feet or more to lower levels.

Excavations

At our jobsites we may have excavation edges that will not be readily seen (i. e., concealed from view by plant growth, etc.). In addition, walls, pits, shafts, and similar excavations 6 feet or more deep will be guarded to prevent employees from falling into them. When it is necessary, and when the excavation is 6 feet or more deep we will protect our employees and subcontractors.

At EMA we utilize and require the use of standard guardrails, fences, barricades, or personal fall arrest systems (PFAS) to protect our employees and subcontractors from fall hazards.

Dangerous Equipment

EMA is committed to protecting our employees from falling onto dangerous equipment. Because of the inherent danger an employee or subcontractor will be exposed to, EMA will utilize and require the use of covers, standard guardrails, safety nets, or personal fall arrest systems (PFAS) to protect our employees and subcontractors from these fall hazards.

Overhand Bricklaying and Related Work

Each employee performing overhand bricklaying and related work 6 feet or more above lower levels must be protected from falls. Related work means mason tending as well as electrical work that must be incorporated into the brick wall during the bricklaying process.

When a job requires overhand bricklaying and related work, our employees will be protected by the use of covers, standard guardrails, safety nets, controlled access zone, or personal fall arrest systems (PFAS).

When workers must reach more than 10 inches below the level of their working surface, a controlled access zone may not be used as the fall protection measure.

We realize that there cannot be any exposure to our workers to fall hazards such as holes, or hoist areas, within a controlled access zone. If there is, the workers must be protected by a fall protection means addressing the specific hazard.

Roofing Work on Low-Slope Roofs

Each of our employees engaged in roofing activities on low-slope roofs (4 in 12 or less, vertical to horizontal pitch) with unprotected sides and edges six-feet or more above lower levels will be protected from falling by requiring the use of covers, standard guardrails, safety nets, safety monitoring systems, or personal fall arrest systems (PFAS).

We follow the guidelines in Appendix A of Subpart M to determine how to correctly measure a roof that is not a rectangle.

Steep Roofs

We will protect our workers on roofs with slopes greater than 4 in 12 vertical to horizontal pitch (steep roofs) from falling when the roof has unprotected sides or edges more than 6 feet above lower levels by the use of covers, standard guardrails, safety nets, or personal fall arrest systems (PFAS).

Pre-cast Concrete Erection

Our company may be involved with pre-cast concrete erection work.

We presume that it is feasible and will not create a greater hazard to implement at least one of the conventional fall protection systems for any pre-cast concrete erection work. When our employees are erecting pre-cast concrete members 6 feet or more above a lower level they must be protected from falling by the use of standard guardrail, or personal fall arrest systems (PFAS).

Wall Openings

Employees who are exposed to the hazard of falling out or through 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 must be protected from falling.

We protect our employees from falls out or through wall openings by the use of covers, standard guardrails, safety nets, or personal fall arrest systems (PFAS).

Walking/Working Surfaces Not Otherwise Addressed

We realize there will be situations that are not covered by our written safety plan, for which we have the duty to provide fall protection. All employees exposed to falls of 6 feet or more to lower levels must be protected by a guardrail system, safety net system, or personal fall arrest system except where specified otherwise in Part 1926. In addition to these measures, Safety Monitoring systems and controlled access zones may be utilized as alternative protection in accordance with the requirements of 29 CFR 1926.502(g) & (h).

When Safety Monitoring Systems are utilized, the Project Manager will serve as the safety monitor or he shall designate an individual adequately trained under this program to serve as the safety monitor. The safety monitor is designated the competent person and has the authority to take prompt corrective action should he/she identify or predict any fall hazards that our employees may be exposed to.

Duties of the safety monitor shall be :

1. To recognize fall hazards.
2. Warn employees if they are unaware of a fall hazard or is acting in an unsafe manner.
3. Be on the same working surface and in visual sight of employees.
4. Stay within a distance that verbal communication can be heard and understood.
5. Shall not assume any other duties or assignments which may interfere with performing the duties of the safety monitor.

Protection From Falling Objects

When employees are exposed to falling objects, we ensure they wear hard hats and also implement one of the following measures:

- Erect toe boards, screens, or guardrail systems to prevent objects from falling from higher levels.
- 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 moved.
- 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 moved.
- Cover or guard holes 6 feet or more above a lower level.

General Worksite Policy

1. If any one of the conditions described in the Workplace Assessment is not met for the area or piece of equipment posing a potential fall hazard, then do not perform that work until the condition is met. If you cannot remedy the condition immediately, notify a supervisor of the problem and utilize a different piece of equipment or work in a different area, according to the situation.
2. If the situation calls for use of fall protection devices such as harnesses or lanyards and belts because the fall hazard cannot be reduced to a safe level, then the employee must don such protective equipment before beginning the work and use it as intended throughout the duration of the work.
3. Only employees trained in such work are expected to perform it.
4. All places of employment, job sites shall be kept clean and orderly and in a sanitary condition.
5. All walking/working surfaces must be kept in a clean and, so far as possible, dry condition. Where wet processes are used, drainage shall be maintained, and false floors, platforms, mats, or other dry standing places should be provided where practicable.

Training Program

Under no circumstances shall employees work in areas where they might be exposed to fall hazards, do work requiring fall protection devices, or use fall protection devices until they have

successfully completed this company's fall protection training program.

The training program includes classroom instruction and operational training on recognition and avoidance of unsafe conditions and the regulations applicable to their work environment for each specific fall hazard the employee may encounter. The training program is given by a "competent person" qualified in each aspect of the program, and must cover the following areas:

- The nature of fall hazards in the work area.
- Selection and use of personal fall arrest systems, including application limits, proper anchoring and tie-off techniques, estimation of free fall distance (including determination of deceleration distance and total fall distance to prevent striking a lower level), methods of use, and inspection and storage of the system.
- The 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.
- The role of each employee in the safety monitoring system when this is used.
- The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs.
- The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection.
- The role of employees in fall protection plans.
- The standards contained in Subpart M of the construction regulations.

The Project Manager will identify all current and new employees who require training and schedule the classroom instruction for those employees. Training on the above components will occur both in the classroom and on the job site, as appropriate. Classroom training will cover written policy/procedures on fall protection and include a training video on the subject. Job site instruction will include demonstration of and practice in wearing fall protection equipment and any instruction necessary for a specific job.

The Project Manager has overall responsibility for the safety of employees and will verify compliance with 1926.503(a), training program, for each employee required to be trained.

The Project Manager has the responsibility of determining when an employee who has already been trained, does not have the understanding and skill required by the training program (1926.503(a)).

A written certificate of training is required which must include:

- The name or other identity of the employee trained.
- The date(s) of training.
- The signature of the competent person who conducted the training or the signature of the employer.

Retraining is required when an employee cannot demonstrate the ability to recognize the hazards of falling and the procedures to be followed to minimize fall hazards.

Enforcement

Constant awareness of and respect for fall hazards, and compliance with all safety rules are considered conditions of employment. The Project Manager reserves the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this program.

Incident Investigation

All accidents that result in injury to workers, regardless of their nature, are investigated and reported. It is an integral part of any safety program that documentation take place as soon as possible so that the cause and means of prevention can be identified to prevent a reoccurrence.

In the event that an employee falls or there is some other related, serious incident (e.g., a near miss) occurs, this plan will be reviewed to determine if additional practices, procedures, or training need to be implemented to prevent similar types of falls or incidents from occurring.

Changes to Plan

Any changes to the plan must be approved by the Project Manager. This plan is reviewed by a qualified person as the job progresses to determine if additional practices, procedures or training needs to be implemented by the competent person to improve or provide additional fall protection. Workers are notified and trained, if necessary, in the new procedures. A copy of this plan and all approved changes is maintained at the jobsite.