

Fall Protection Policy

1.0 Purpose

The purpose of this policy is to ensure uniformity throughout GSI MPI's operations for precautions necessary to protect personnel from hazards associated with falls.

2.0 Scope

This policy applies to all GSI MPI employees and GSI MPI Subcontractors.

3.0 Requirements

Each employee on a walking/working surface with an unprotected side or edge 6 feet or more above a lower level will be protected from falling by the use of guardrail systems, safety net systems or personnel fall arrest systems. This policy also requires all personnel that ride in company vehicles to be in the enclosed cab and riding in the back of vehicles not designed to carry personnel is strictly prohibited.

3.1 Guardrail Systems

- A) The top edge of guardrails must be between 39 inches and 45 inches in height.
- B) Midrails, screen, mesh or intermediate vertical members must be installed between the top edge of the guardrail and the walking/working surface when there is no wall or parapet wall at least 21 inches high.
- C) Guardrails must be capable of supporting 200 pounds applied within two inches of the top edge in any outward direction.
- D) With 200 pounds of downward force, the top edge of the guardrail must not deflect to less than 39 inches.
- E) Midrails, screens, mesh and intermediate vertical members must be capable of withstanding a force of least 150 pounds applied in any downward or outward direction at any point.
- F) Top rails and mid rails must be at least one quarter inch nominal diameter. If wire rope is used for top rails, it shall be flagged at not more than 6-foot intervals.
- G) Toe boards shall be erected along the edge of the overhead walking working surface to protect employees below.
- I) Toe boards shall be capable of withstanding a force of at least 50 pounds applied in any downward or outward direction at any point along the toe board.

- H) Toe boards shall be a minimum of 3 ½ inches in vertical height from the edge to the walking/working surface.

3.2 Safety Net Systems

- A) Safety nets will be installed as close as possible but no more than 30 feet below the walking working surface.
- B) The potential fall area from the walking/working area or the safety net shall be unobstructed.
- C) Drop tests will take place:
- After installation and before being used as a fall protection system.
 - Whenever relocated.
 - After major repairs.
 - 6 month intervals if left in place.
- D) Drop tests shall be performed by dropping a 400 pound 30-32 inch diameter bag of sand into the net from the highest walking/working surface (but not less than 42 inches above that level).
- E) Materials, scrap pieces, equipment and tools which have fallen into the safety net must be removed as soon as possible and at least before the next work shift.
- F) Each safety net shall have a border rope for webbing with a minimum breaking strength of 5,000 pounds.

3.3 Personnel Fall Arrest Systems

- A) Full body harnesses will be used for personnel fall arrest systems.
- B) Lanyards and vertical life line must have a minimum breaking strength of 5,000 pounds.
- C) Personal fall arrest systems, when stopping a fall, must limit the maximum arresting force on the worker to 1,800 pounds when used with a full body harness.
- D) 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 designed, installed and used as part of a complete fall arrest system which maintains a safety factor of at least two under the supervision of a qualified person.
- E) Personnel fall arrest systems must be rigged so that the worker can neither fall more than six feet nor contact any lower level.

- F) The attachment point of a body harness will be in the center of the wearer's back near shoulder level, or above the head.
- G) Personnel fall arrest systems will be inspected prior to each use for wear, damage and other deterioration and defective components shall be removed.

4.0 Horizontal Life Lines

GSI MPI utilizes two horizontal life line systems for the construction of bridges in its work. The two systems are distinguished by the girder type being utilized during construction (steel girders or precast girders) Installation instructions for GSI MPI horizontal life lines have been provided in attachment A.

5.0 Training

- A) Each employee who is exposed to fall hazards shall receive training. The training will be completed by the site supervisor with assistance from the Director of Safety. Training will enable each employee to recognize hazards of falling and train each employee in the procedures to be followed in order to minimize these hazards.
- B) Training will be documented via training logs (attachment b) or tool box talk sign in sheets.

6.0 Responsibilities

6.1 Site Supervision

Site Supervision (Project Managers/Superintendents) is responsible for enforcement and implementation of this policy.

Attachment A Horizontal life installation procedure

Attachment B Training log

*Information referenced from 29 CFR 1926.501

Attachment A