PURPOSE

The purpose of this program is to protect employees by eliminating injuries resulting from falls and improve the ability of the employee to survive a fall during the waiting period for rescue.

1. GENERAL
2. Fall protection is required whenever employees are potentially exposed to falls from heights that exceed applicable regulatory thresholds. Guard rails, safety nets, or personal fall arrest systems should be used. Some applicable regulatory thresholds may include:

* General Industry 1910.23(b) - Protection for wall openings and holes. Every wall opening from which there is a drop of more than 4 feet shall be guarded.
* Construction Industry 1926.501(b)(1) - Unprotected sides and edges. Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.
* Marine Terminals 1917.112(b)(1) - Guardrails shall be provided at locations where employees are exposed to floor or wall openings or waterside edges, including bridges or gangway-like structures leading to pilings or vessel mooring or berthing installations, which present a hazard of falling more than 4 feet (1.22 m) or into the water.
* Shipyard Industry 1915.73(d) - When employees are exposed to unguarded edges of decks, platforms, flats, and similar flat surfaces, more than 5 feet above a solid surface, the edges shall be guarded by adequate guardrails.
* Steel Erection 1926.760(a)(1) - Each employee engaged in a steel erection activity who is on a walking/working surface with an unprotected side or edge more than 15 feet (4.6 m) above a lower level shall be protected from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, positioning device systems or fall restraint systems.

1. The HSE Manager shall be responsible for establishing the Company’s fall protection training standards. All Company personnel shall be trained to the level of “End User / Rescue Planning”. The onsite fall protection plan shall be prepared by a qualified person for the specified worksite operation.
2. All Fall Protection Equipment shall meet ANSI, ASTM and/or OSHA requirements.
3. DEFINITIONS
4. Safety Harness – A full body harness consisting of straps which may be secured about the employee in a manner to distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of personal fall arrest system. The primary “D” ring will be positioned along the line of the spine, between the shoulder blades of the user.
5. Safety Lanyard – A rope, either wire or nylon, no greater than six (6) feet in length with double locking safety snaps on either end for connecting the safety harness to a deceleration device, lifeline, or anchorage.
6. Fall Protection System – A personal fall arrest system, a positioning device system, or a personal fall protection system for climbing activities which protects a worker from falling, or safely arrests a worker’s fall, should a fall occur. It consists of an anchorage, a body harness, a lanyard and may include a deceleration device, lifeline, or suitable combinations of these. All system components must be properly used and employees properly trained in the use of the equipment.
7. Self-Retracting Lifeline – Deceleration device which contains a drum-wound line which may be slowly extracted from, or retraced onto the drum under slight tension during normal worker movement, and which, after the onset of a fall, automatically locks the drum and arrests the fall.
8. Anchorage – A secure point of attachment for lifelines, lanyards, or deceleration devices, and which is independent of the means of supporting or suspending the employee. The point of anchorage should always be above the highest point of access, for example above the top rung of a fixed ladder. Anchorage point must be capable of supporting 5, 000 lbs of pressure per employee attached.
9. Tie-Off – The act of a worker, wearing personal fall protection equipment, to connect directly or indirectly to an anchorage. It also means the condition of a worker being connected to an anchorage.
10. Competent Person – A person who is capable of identifying hazardous or dangerous conditions in the personal fall arrest system or any component thereof, as well as in their application and use with related equipment, and who has authorization to take prompt corrective measures to eliminate them.
11. Work Platform – Work platforms more than six (6) feet above adjacent surfaces must be protected by a standard handrail configuration. Handrails must be at least forty-two (42) inches above the platform, and have an intermediate and mid-rail. If there is a potential hazard of material falling onto workers below, there must be a toe-board attached at floor level, a minimum of four (4) inches high.
12. Snap-Hook – A connector comprised of a hook-shaped member with a normally closed keepers, which may be opened to permit the hook to receive an object, and when released automatically closes to retain the object. Company uses only the double locking type snap-hook, which features a self-closing, self-locking keepers which remains closed and locked until manually unlocked and pressed open for connection or disconnection by the wearer.
13. GENERAL WORK SITE PROCEDURES

1. Employees of the Company are not authorized to install or otherwise erect scaffolding.
2. Any lifeline, safety harness, or lanyard actually subjected to in-service loading, as distinguished from static load testing, shall be immediately removed from service and shall not be used again for employee safeguarding.
3. Lifelines shall be secured above the point of operation to an anchorage or structural member capable of supporting a minimum tensile load of 5,000 pounds.
4. Safety lanyard shall be a minimum of ½ inch nylon, or equivalent, with a maximum length to provide for a fall of no greater than six (6) feet. Employees are provided with a double lanyard to ensure compliance with the Company’s policy requiring 100% tie-off at all times while working six (6) feet or higher.
5. All safety harness and lanyard hardware, except rivets, shall be capable of withstanding a tensile loading of 5,000 pounds without cracking, breaking, or taking a permanent deformation.
6. Fall arrest systems designed to meet the requirements of 29 CFR 1926 and used by an employee with a combined person and tool weight of less than 310 pounds will be considered in compliance.
7. Safety nets, when in use, shall be installed by a competent person and will be capable of successfully passing a “drop test” of 5,000 pounds without breaking.
8. Warning lines may be used on low-slope platforms in combination with other controls such as safety monitors, guardrails and personal fall arresting equipment or nets. Warning lines shall be made of rope, wire or chains and flagged every six (6) feet with highly visible material. The line shall be supported by stanchions and the line shall be installed 39 inches above the walking/working surface. The warning line shall have a minimum tensile strength of 500 pounds.
9. Controlled Access Zones may be used for controlling the access to areas where there is potential for hazards of falling objects. Controlled access zones shall be provided between six (6) and twenty-five (25) feet from an unprotected or leading edge. The controlled access zones will be marked by a line that consists of rope, wire, tape or equivalent materials, supported by stanchions and flagged every six (6) feet. The line must have a minimum breaking strength of 200 pounds, and be located between thirty-nine (39) and forty-five (45) inches above the walking/working surface.
10. A Safety Monitor system shall be implemented when there are no other alternate methods. The Safety Monitor shall be trained to the level of “Competent Person” and will be assigned to:
11. Recognize fall hazards;
12. Be on same working surface and in visual sight;
13. Remain close enough for verbal communication;
14. Warn employees if they are unaware of a fall hazard or acting in an unsafe manner;
15. Not have other assignments that would take monitor's attention from the monitoring function.
16. Anchor points must be capable of supporting 5,000 pounds per attached employee. The adequacy of an anchor point must be determined by a competent individual (either the third party scaffold erecting crew or a structural engineer). Where there is doubt about the strength of an anchorage point, an engineer must be consulted. Permanently installed anchor points should be provided for fall hazards that are routinely encountered. Anchor points used for fall protection and exposed to corrosive conditions (acids, moisture etc.) should be corrosion-resistant.
17. “Hole Covers” shall be capable of withstanding at least twice the expected minimum load. Consideration shall be given to concentrated and impacted loads. The covers shall be secured to prevent inadvertent movement and either be color-coded or labeled “Hole” or “Cover”.
18. The need for fall protection will be assessed by the Site Supervisor and Customer Representative for temporary job site activities.
19. GENERAL INSTRUCTIONS TO EMPLOYEES REGARDING FALL PROTECTION
20. When tying off above head, ensure that the object you have selected is immovable and capable of sustaining more than 5,000 pounds. Employees should consider that if a fall occurs while fall protection is being worn, the sudden stop could place a significant amount of stress on the end of the rope. If the lanyard is worn, frayed, or otherwise damaged, it cannot be trusted to sustain your weight in the event of a fall. Therefore, any lanyard, which appears to be in improper condition or is suspected of being same, will not be used and will be immediately taken out of service.
21. Employees are to ensure that all open areas are barricaded and/or protected in such a manner that no individual will accidentally fall through the opening. Whenever physical barriers are not practical, a Safety Monitor shall be stationed a few feet away from the opening, in plain view of all who approach from either direction, for the sole purpose of diverting persons away from the hazard area.
22. Employees are to perform a visual inspection of gangways, ramps and other walkway surfaces attached to vessels from a dock, pier or other vessels. Shake the structure from side to side to note the degree of swaying, if any, which is present. Inspect tie-down anchors to ensure that they not only are secure, but also are capable of sustaining the weight of the user in addition to any materials or equipment, which may accompany him.
23. Report all circumstances where fall protection is needed to Onsite Supervisor prior to any work start-up.
24. Do not ascend to any height if you are afraid of heights. Make the Site Supervisor aware of this fact before deployment to the job site. You may be assigned other responsibilities, which do not require working on surfaces above ground level.
25. Never tie lanyards or lifelines to the bumpers of vehicles, cranes, cherry pickers, or to other pieces of equipment, which may be used at any time without advance notice, and which are not designed for personnel support and/or suspension.
26. Fall Protection & Arrest Equipment shall be utilized when performing any work related task on scaffolds, ladders or other elevated work platforms.
27. Employees will receive site-specific training regarding work on elevated platforms prior to the start of the temporary job site activity. Such training shall be specific to the site where such elevated work platform will be erected, and shall include, at a minimum:
28. The OSHA Fall Protection standard;
29. The nature of the fall hazards in the work area;
30. The role of employees in the fall protection plans;
31. The correct procedures for erecting, maintaining, disassembling and inspecting fall protection systems to be used (when applicable);
32. The use and operation of guardrails, personal fall arrest systems, safety net system, warning line systems, safety monitoring systems, controlled access zones and other protection to be used;
33. The role of each employee in the safety monitoring system when this system is used;
34. The limitations of mechanical equipment during the performance of work;
35. The correct procedure for the handling and storage of equipment and materials and the erection of overhead protection.
36. EQUIPMENT INSPECTIONS
37. Personal fall arresting equipment (body harness, lanyard, etc.), which has been subjected to a significant fall, shall be discarded.
38. Equipment shall be maintained in accordance with the manufacturer’s guidelines and inspected prior to use.
39. The following, at a minimum should be checked during this inspection:
40. Buckles – For distortion, sharp edges or cracks;
41. D-rings – For cracks, distortion, and corrosion, pitting or excessive wear (Note: D-Rings must be a minimum of 2¼” inside diameter);
42. Body Harness – For burns, damage due to chemicals, cuts, and abrasion to the material or broken stitches;
43. Keepers and Snap Locks – To ensure that they operate correctly;
44. Retractable Lines – To ensure that they operate smoothly. The rope or cable should not be damaged. A quick pull of the line should cause the line to lock. The retractable lifeline assemblies shall be returned to the factory for re-certification as specified by the manufacturer. Check the date of the unit for the last certification performed by the manufacturer;
45. Lanyard – For cuts, frayed parts, damaged fibers, and the condition of connections. There should be no knots in the line. A knot can result in a substantial reduction in strength;
46. Shock Absorber – For ripped stitches, signs of impact loading and connections.
47. PROVISIONS FOR RESCUE
48. It shall be the responsibility of the Site Supervisor to coordinate the rescue of an employee who has fallen into a net or is suspended by fall arresting equipment, and to conduct investigations of equipment and circumstances coincidental to a fall. Another employee shall be designated to “monitor” the employee until such assistance arrives.
49. Provisions to rescue such an employee shall include, but not necessarily be limited to:
50. The availability of a ladder, lift or ropes, themselves equipped for fall arresting, to assist with the retrieval of the employee; or
51. The telephone number of the local fire department or on-site rescue team to alert in the event that other individuals cannot execute retrieval safely.
52. The on-site supervisor shall provide prompt rescue (15 minutes or less) of any employee in the event of a fall or shall assure the employee is able to rescue themselves. All employees who have been involved in a fall should be examined by a licensed medical professional without regard to the use of fall arresting device.
53. Following any fall incident, an investigation shall be conducted to evaluate the fall protection plan for potential updates to practices, procedures or training in order to prevent reoccurrence.
54. EMPLOYEE TRAINING
55. The Company shall provide a training program for each employee who might be exposed to fall hazards. Training shall enable each employee to recognize the hazards of falling & shall train each employee in the procedures to follow to minimize these hazards.
56. Employers are to have written certification records showing the following:
57. Who was trained, when, dates of training
58. Signature of person providing training & date the Company determined training was deemed adequate.
59. Employer shall provide re-training when the following are noted:

* Work place changes
* Deficiencies in training
* Fall protection systems or equipment changes that render previous training obsolete

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| **Reviewed and Approved** |
| Quality Manager or President |  |  |
|  | Date |