Fall Protection

1.1 PURPOSE

1.1.1 The purpose of this policy is to ensure jobsites are free from uncontrolled fall hazards, employees are properly trained in fall prevention and protection, and that fall prevention systems are inspected and monitored to ensure effectiveness. It is the policy of TERRY R PITT CONSTRUCTION to take all practical measures possible to prevent employees from being injured by falls.

1.2 RESPONSIBILITIES

1.2.1 TERRY R PITT CONSTRUCTION

1.2.1.1 Take necessary steps to eliminate, prevent, and control fall hazards and fully comply with the OSHA fall protection standard. The first priority is given to the elimination of fall hazards. If a fall hazard cannot be eliminated, effective fall protection will be implemented and monitored to control the risks of injury due to falls.

1.2.1.2 Train employees exposed to potential falls from heights to minimize exposure. Training will be provided for each affected employee who has the potential to be exposed to fall hazards.

1.2.1.3 Provide fall protection equipment and require its use by all employees. Each supervisor will be responsible for implementation of a fall protection plan for their jobsite.

1.2.1.4 Take all practical measures to prevent fall and control fall-related situations.

1.2.2 Supervisors

1.2.2.1 Committed to the philosophy of continuous fall hazard control whenever the potential exists that an employee may fall from heights of 6 feet or more. Jobsites and activities will be assessed by onsite supervisors and all other employees in efforts to identify all above ground fall hazards. If a fall hazard cannot be eliminated by practical means, then other engineering controls will be considered (ex. personnel lifts).

1.2.2.2 Responsible for ensuring that this program is evaluated and revised annually or when there is a generally understood need for such review and/or revision.

1.2.2.3 Provide a training program for employees who work at heights or work in areas where potential for fall hazards exist.

1.2.2.4 Ensure employees required to work at heights have received suitable and sufficient information and training.

1.2.2.5 Provide resources that enable personnel to conduct tasks at height safely.

1.2.3 Employees

1.2.3.1 Assess jobsite and activities to identify above ground fall hazards.

1.2.3.2 Be trained in the proper use of fall protection equipment and adhere to the 100% tie-off philosophy when using fall protection.

1.3 HAZARD IDENTIFICATION

1.3.1 The supervisor on each jobsite will be responsible for identifying fall hazards on their jobsite. The supervisor will evaluate each situation or work procedure where employees may be exposed to a fall of 6 feet or more or 4 feet when working under the requirements of OSHA's General Industry standard, whichever may apply. The supervisor will be responsible for developing a plan to eliminate the exposures, if possible, or to select the appropriate fall protection systems and/or equipment.

1.3.2 The fall protection plan will be prepared by a qualified person for the specified worksite and will include the qualification(s) of the person preparing the plan, as well as the job title and identity of that person by name.

1.3.3 Hazard control will be utilized through personal fall protection, positioning devices, employee training, program audits, inspections, appropriate supervision, and signs.

1.4 FALL PROTECTION REQUIRED

1.4.1 Fall protection is required when TERRY R PITT CONSTRUCTION employees are potentially exposed to fall hazards from heights that exceed the applicable regulatory thresholds. Fall protection is required when working at heights 6 feet (4 feet when working under the requirements of OSHA's General Industry standard) or more from the perimeter of a structure, unprotected sides and edges, leading edges, through shaft ways and openings, sloped roof surfaces steeper than 7:12 or other sloped surfaces steeper than 40º not otherwise adequately protected. Fall protection is also required when working in boom lifts.

1.4.1.1 If the applicable regulatory threshold is less than the stated 6 feet, then TERRY R PITT CONSTRUCTION will follow the more stringent requirement.

1.4.2 Fall protection equipment must meet OSHA, ANSI, or ASTM requirements, where required.

1.4.3 Industry Specific requirements:

1.4.3.1 General Industry 1910.28(b)(1)(i)-for protection of wall openings and holes, every wall opening from which there is a drop of more than 4 feet shall be guarded.

1.4.3.2 Construction Industry 1926.501(b)(1)-for unprotected sides and edges, each employee on a walking/working surface (horizontal and vertical surfaces) with an unprotected side or edge which is 6 feet (1.8 m) or move above a lower level shall be protected from falling by use of guardrail systems, safety net systems, or personal fall arrest systems.

1.5 FALL PROTECTION TYPES

1.5.1 One of the following types of fall protection systems will be used when employees are exposed to fall hazards in excess of 6 feet or 4 feet when OSHA's General Industry standards apply:

1.5.1.1 Standard guardrails, cables, or floor hole covers

1.5.1.2 Personal fall arrest system

1.5.1.3 Positioning devices

1.5.1.4 Fall restraint systems

1.6 GUARDRAILS, SAFETY CABLES, OR COVERS

1.6.1 Standard guardrails, safety cables, and hole covers are TERRY R PITT CONSTRUCTION's preferred means of fall protection on jobsites.

1.6.2 Railings will be constructed of wood or in an equally substantial manner from other materials and will consist of a top rail not less than 42 in. or more than 45 in. in height measured from the upper surface of the top rail to the floor, platform, runway, or ramp level and a midrail. The midrail will be halfway between the top rail and the floor, platform, runway, or ramp.

1.6.3 Wooden posts will not be less than 2 in. by 4 in. in cross section, spaced at 8 ft. or closer intervals.

1.6.4 Wooden top railings will be smooth and of 2 in. by 4 in. or larger material. Double,1 in. by 4 in. members may be used for this purpose, provided that one member is fastened in a flat position on top of the posts and the other fastened in an edge-up position to the inside of the posts and the side of the top member. Midrails will be of at least 1 in. by 6 in. material.

1.6.5 The rails will be placed on the side of the post that will afford the greatest support and protection.

1.6.6 All guardrails, including their connections and anchorage, will be capable of withstanding a load of 13 pounds per linear foot applied either horizontally or vertically downward at the top rail.

1.6.7 Railings receiving heavy stresses from employees trucking or handling materials will be provided additional strength by the use of heavier stock, closer spacing of posts, bracing, or by other means.

1.6.8 Top rails and midrails of guardrail systems must be at least ¼ inch nominal diameter or thickness to prevent cuts and lacerations.

1.6.9 If wire rope is used for top rails, it must be flagged at not more 4 feet intervals with high-visibility material.

1.6.10 Steel and plastic banding cannot be used as top rails or midrails.

1.6.11 Manila, plastic, or synthetic rope used for top rails or midrails must be inspected as frequently as necessary to ensure strength and stability.

1.6.12 The top edge height of top rails or (equivalent) guardrails must be 42 in. (+ or - 3 in.) above the walking/working level.

1.6.13 When workers are using stilts, the top edge height of the top rail or equivalent member, must be increased an amount equal to the height of the stilts.

1.6.14 Screens, midrails, 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 are no walls or parapet walls at least 21 in. high.

1.6.14.1 When midrails are used, they must be installed to a height midway between the top edge of the guardrail system and the walking/working level.

1.6.14.2 When screens and mesh are used, they must extend from the top rail to the walking/working level and along the entire opening between top rail supports. Intermediate members, such as balusters, when used between posts, will not be more than 19 in. apart.

1.6.14.3 Other structural members, such as additional midrails and architectural panels, will be installed so that there are no openings in the guardrail system more than 19 in.

1.6.14.4 The guardrail system must be capable of withstanding a force of at least 200 pounds applied within 2 in. of the top edge in any outward or downward direction. When the 200 pound test is applied in a downward direction, the top edge of the guardrail must not deflect to a height less than 39 in. above the walking/working level.

1.6.14.5 Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members will be capable of withstanding a force of at least 150 pounds applied in any downward or outward direction at any point along the midrail or other member. Guardrail systems will be surfaced to protect workers from punctures or lacerations and to prevent clothing from snagging.

1.6.15 The ends of top rails and midrails must not overhang terminal posts, except where such overhang does not constitute a projection hazard.

1.6.16 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.

1.6.17 At holes, guardrail systems must be set up on all unprotected sides or edges. When holes are used for the passage of materials, the hole will have not more than two sides with removable guardrail sections. When the hole is not in use, it must be covered or provided with guardrails along all unprotected sides or edges.

1.6.18 If guardrail systems are used around holes that are used as access points (such as ladder ways), gates must be used or the point of access must be offset to prevent accidental entrance.

1.6.19 If guardrails are used at unprotected sides or edges of ramps and runways, they must be erected on each unprotected side or edge.

1.6.20 Floor, roof, and skylight openings will be guarded by a standard railing and toeboards or cover. Covering will be capable of safely supporting the greater of the weight of a 200-pound person or the weight of worker(s) and material(s) placed thereon.

1.6.21 Coverings will be secured in place to prevent accidental removal or displacement, and will bear a pressure sensitized, painted, or stenciled sign with legible letters not less than 1 in. high, stating: *OPENING – DO NOT REMOVE*. Markings of chalk or keel will not be used.

1.6.22 Ladder way openings or platforms will be guarded by standard railings with standard toeboards on all exposed sides, except at the entrance to the opening, with the passage through the railing either provided with a swinging gate or so offset that a person cannot walk directly into the opening.

1.6.23 Floor holes, into which persons can accidentally walk, will be guarded by either a standard railing with standard toeboards on all exposed sides, or a floor hole cover of standard strength and construction that is secured against accidental displacement. While the cover is not in place, the floor hole will be protected by standard railings.

1.6.24 Wall openings, from which there is a drop of more than 6 feet, and the bottom of the opening is less than 3 feet above the working surface, will be guarded with either a standard rail or intermediate rail or both.

1.6.25 An extension platform outside a wall opening onto which materials can be hoisted for handling will have side rails or equivalent guards of standard specifications. One side of an extension platform may have removable railings in order to facilitate handling materials.

1.6.26 Wall opening protection barriers will be of such construction and mounting that, when in place at the opening, the barrier is capable of withstanding a load of at least 200 pounds applied in any direction (except upward).

1.6.27 All elevator shafts in which cages are not installed and which are not enclosed with solid partitions and doors will be guarded on all open sides by standard railings and toeboards.

1.6.28 A full body harness and lanyard are required when using boom lifts.

1.7 PERSONAL FALL ARREST SYSTEM

1.7.1 These consist of an anchorage, connectors, and a body harness and may include a deceleration device, lifeline, or suitable combinations. If a personal fall arrest system is used for fall protection, it must do the following:

1.7.1.1 Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness

1.7.1.2 Be rigged so that an employee can neither free fall more than 6 feet nor contact any lower level

1.7.1.3 Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet

1.7.1.4 Have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of 6 feet or the free fall distance permitted by the system, whichever is less.

1.7.2 The use of body belts for fall arrest is prohibited and a full body harness is required.

1.7.3 Personal fall arrest systems must be inspected prior to each use for wear damage and other deterioration. Defective components must be removed from service.

1.7.4 Personal fall arrest systems consist of a full body harness and a shock-absorbing lanyard attached to suitable anchorage. They are also an effective means of preventing fall accidents. The system does not actually stop you from falling, but catches you and safely stops you from hitting the level below. Fall arrest systems will be TERRY R PITT CONSTRUCTION's preferred means of protection when standard guardrails, safety cables, or covers are not practical.

1.7.5 Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body harnesses will be made from synthetic fibers except when they are used in conjunction with hot work where the lanyard may be exposed to damage from heat or flame.

1.7.6 Anchorages used for attachment of personal fall arrest equipment will be independent of any anchorage being used to support or suspend platforms and will be capable of supporting at least 5,000 pounds per employee attached or will be designed, installed, and used as part of a complete personal fall arrest system which maintains a safety factor of at least two; and under the supervision of a qualified person.

1.7.7 The attachment point of the body harness will be located in the center of the wearer's back near shoulder level or above the wearer's head.

1.7.8 Where practical, the anchor end of the lanyard will be secured at a level not lower than the employee's waist, limiting the fall distance to a maximum of 6 feet.

1.7.9 Harnesses, lanyards, and other components will be used only for employee protection as part of a personal fall arrest system and not to hoist materials.

1.7.10 Personal fall arrest systems and components subjected to impact loading will be immediately removed from service and will not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.

1.7.11 TERRY R PITT CONSTRUCTION will provide for prompt rescue of employees in the event of a fall or will assure that employees are able to rescue themselves.

1.7.12 Personal fall arrest systems will be inspected prior to each use for wear, damage, and other deterioration and defective components will be removed from service.

1.7.13 Any lanyard, safety harness or drop line subjected to in-service loading, as distinguished from static load testing, will be immediately removed from service and will not be used again for employee safeguarding.

1.7.14 Personal fall arrest systems will not be attached to guardrails, unless the guardrail is capable of safely supporting the load.

1.7.15 Each personal fall arrest system will be inspected not less than twice annually by a competent person in accordance with the manufacturer's recommendations. The date of each inspection will be documented.

1.8 PERSONAL FALL RESTRAINT

1.8.1 Fall restraint systems are designed to prevent the wearer from reaching the edge or danger area and thus prevent them from falling.

1.8.2 Anchorage points used for fall restraint will be capable of supporting 4 times the maximum intended load.

1.8.3 Restraint protection will be rigged to allow the movement of employees only as far as the sides of the working level or working area.

1.9 LEADING EDGES

1.9.1 Each employee who is constructing a leading edge 6 feet or more, or 4 feet when OSHA's General Industry standards apply, above lower levels will be protected by guardrail systems, safety net systems, or personal fall arrest systems.

1.10 FRAMEWORK AND REINFORCING STEEL

1.10.1 For employees, while moving vertically and/or horizontally on the vertical face of rebar assemblies built in place, fall protection is not required when employees are moving. OSHA considers multiple hand holds and foot holds on rebar assemblies as providing similar protection as that provided by a fixed ladder. No fall protection is necessary while moving point to point for heights below 24 feet. An employee must be provided with fall protection when climbing or otherwise moving at a height more than 24 feet, the same as for fixed ladders.

1.11 HOIST AREAS

1.11.1 Each employee in a hoist area will be protected from falling 6 feet or more by guardrail systems or personal fall arrest systems. If guardrail systems (or chain gate or guardrail) or portions thereof must be removed to facilitate hoisting operations, as during the landing of materials, and a worker must lean through the access opening or out over the edge of the access opening to receive or guide equipment and materials, that employee must be protected by a personal fall arrest system.

1.12 RAMPS, RUNWAYS, AND OTHER WALKWAYS

1.12.1 Each employee using ramps, runways, and other walkways will be protected from falling 6 feet or more by guardrail systems.

1.13 CONTROLLED ACCESS ZONES

1.13.1 A controlled access zone is a work area designated and clearly marked in which certain types of work may take place without the use of conventional fall protection systems, guardrail, personal arrest, or safety net to protect the employees working in the zone.

1.13.2 Controlled access zones are used to keep out workers other than those authorized to enter work areas from which guardrails have been removed. A safety monitoring system will be used in controlled access zones.

1.13.3 Employees working in controlled access zones must comply promptly with fall hazard warnings from safety monitors.

1.14 SAFETY MONITORING SYSTEMS

1.14.1 When no other alternative fall protection has been implemented, TERRY R PITT CONSTRUCTION will implement a safety monitoring system. TERRY R PITT CONSTRUCTION will appoint a competent person and ensure that the safety monitor:

1.14.1.1 Complies with the fall protection plan

1.14.1.2 Is competent in the recognition of fall hazards

1.14.1.3 Is capable of warning workers of fall hazards and in detecting unsafe work practices

1.14.1.4 Is operating on the same walking/working surfaces of the workers and can see them

1.14.1.5 Is close enough to work operations to communicate orally with workers and has no other duties to distract from the monitoring function

1.14.1.6 Mechanical equipment will 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 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.

1.15 INCIDENT INVESTIGATION

1.15.1 All incidents and near misses will be reported to the safety department within 24 hours of the incident. Reports remain open until the incident has been investigated and deemed closed. Incident investigation results and corrections will be implemented and changes will be applied to the fall protection plan as necessary.

1.15.2 Incident investigations will be conducted to evaluate the fall protection plan for potential updates to practices, procedures, or training in order to prevent reoccurrence.

1.16 RESCUE

1.16.1 If an employee cannot rescue themselves, TERRY R PITT CONSTRUCTION will provide immediate rescue for anyone involved in a fall incident. Therefore, prior to conducting work at height and donning a harness, a risk assessment must be performed which includes a rescue plan. This will also require that the equipment for rescue is approved, inspected, and ready for use.

1.16.2 The onsite supervisor is responsible for coordinating prompt rescue of an employee who has been subject to a fall and for conducting investigations of equipment and circumstances.

1.16.3 Provisions to rescue such an employee will include, but not necessarily be limited to:

1.16.3.1 Availability of a ladder, lift, or ropes and fall arrest equipment to assist with the retrieval of the employee.

1.16.3.2 Telephone number of the local fire department or onsite rescue team to alert in the event that retrieval cannot be executed by other individuals safely.

1.16.3.3 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.

1.17 TRAINING

1.17.1 A training program will be provided for each employee who might be exposed to fall hazards. Training will enable each employee to recognize the hazards of falling and train each employee in procedures to follow to minimize these hazards.

1.17.2 All employees expected to perform work on and use portable ladders will receive appropriate training, as necessary. Training will be conducted by a qualified person and include proper inspection techniques, use, and maintenance. All training will be documented and retained.

1.17.3 TERRY R PITT CONSTRUCTION will maintain written documentation records showing employee name, date of training, topics covered, and instructor signature.

1.17.4 TERRY R PITT CONSTRUCTION will provide retraining when there are deficiencies in work, changes at the jobsite that affect work practices, when equipment changes are made, or there are equipment changes that render previous training obsolete.

1.17.5 Subcontractors will be responsible for training employees in accordance with applicable OSHA regulations.