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1 OBJECTIVE

Prowess Utility Group Inc provides protection for each employee exposed to fall hazards. This program was created to ensure compliance with California Code of Regulations, Title 8, Sections 3210, 3211, 3212 and 3213.

2 PROGRAM ADMINISTRATOR

Prowess Utility Group Inc has designated Julian Alcaide for the administration of this program. Julian Alcaide will be responsible for:

- Identifying work areas, processes or tasks that could potentially expose employees to falls;
- b. Selecting and implementing the appropriate fall protection systems;
- c. Maintaining records pertaining to the program;
- d. Evaluating the program; and
- e. Updating the written program as needed.

3 GUARDRAILS AT ELEVATED LOCATIONS

3.1 Buildings

Guardrails will be provided on all open sides of unenclosed elevated work locations, such as: roof openings, open and glazed sides of landings, balconies or porches, platforms, runways, ramps or working levels more than 30 inches above the floor, ground or other working areas of a building as defined in California Code of Regulations, Title 8, Section 3207. Where overhead clearance prohibits installation of a 42-inch guardrail, a lower rail or rails will be installed. The railing will be provided with a toeboard where the platform, runway or ramp is 6 feet or more above places where employees normally work or pass and the lack of a toeboard could create a hazard from falling tools, material or equipment.

3.2 Other Elevated Locations

The unprotected sides of elevated work locations that are not buildings or building structures where an employee is exposed to a fall of 4 feet or more will be provided with guardrails. Where overhead clearance prohibits installation of a 42-inch guardrail, a lower rail or rails will be installed. The railing will be provided with a toeboard where the platform, runway or ramp is 6 feet or more above places where employees normally work or pass and the lack of a toeboard could create a hazard from falling tools, material or equipment.

3.3 Alternate Means of Protecting Employees

Where the guardrail requirements of Sections 3.1 and 3.2 are impracticable due to machinery requirements or work processes, an alternate means of protecting employees from falling, such as personal fall protection systems, will be used.



3.4 Ladderway Access

Openings in guardrails for ladderway access will be protected as required by Section 5.1.2(a).

4 WALL OPENINGS

An opening in a wall or partition not provided with a glazed sash, having a height of at least 30 inches and a width of at least 18 inches, through which a person might fall to a level 30 inches or more below, will be guarded by a guardrail or other barrier of such construction and mounting that the guardrail or barrier is capable of withstanding a force of at least 200 pounds applied horizontally at any point on the near side of the guardrail or barrier. Barriers may be of solid construction, grillwork with openings not more than 8 inches long, or of slatwork with openings not more than 4 inches wide with unrestricted length.

5 FLOOR OPENINGS, FLOOR HOLES, SKYLIGHTS AND ROOFS

5.1 General

5.1.1 Every floor and roof opening will be guarded by a cover, a guardrail or equivalent on all open sides. While the cover is not in place, the openings will be constantly attended by someone or will be protected by guardrails. Toeboards will be installed around the edges at openings where persons may pass below the opening.

EXCEPTION: Stairway entrances.

5.1.2 a. Every ladderway floor opening or platform with access provided by ladderway, including ship stairs (ship ladders) will be protected by guardrails with toeboards meeting the requirements of Section 7 on all exposed sides except at entrance to the opening. The opening through the railing will have either a swinging gate or equivalent protection, or the passageway to the opening will be so offset that a person cannot walk directly into the opening.

EXCEPTION: Ladder openings for entrance/access at perimeter roof edges where guardrail protection is not required by Section 5.4.

- b. 1. The uppermost surface or railing member of the swinging gate or other equivalent protection required by Section 5.1.2(a) will have a vertical height from the platform or floor level of between 42 to 45 inches =/- 1 inch; and
 - The swinging gate or other equivalent protection will be capable of withstanding a force of at least 200 pounds applied vertically downward to the uppermost surface or railing member and horizontally outward at any point on the exit side of the ladder opening.



5.1.3 Hatchways and chute floor openings will be guarded by guardrails or by hinged or removable covers or by removable railings provided such covers or railings will afford protection equivalent to that provided by a guardrail.

This does not apply to chute openings which are effectively covered or protected by machine or equipment during operation. However, such chutes will be covered during repair or maintenance or when otherwise exposing employees to the hazards of unguarded floor openings.

- 5.1.4 Foundry pits and similar sunken locations in which employees are required to work may be left unprotected during such times as the necessary handling of materials or other work prohibits the use of guardrails or equivalent; but when such pits are not in use, they will be either covered, filled in or protected with guardrails or equivalent.
- 5.1.5 Floor holes through which materials or tools may fall and create a hazard, or through which parts of a person's body may contact dangerous moving parts, will be completely covered except when in use unless these floor holes are used to feed machines or receptacles containing hot, toxic or corrosive materials, then these openings will be guarded by hoppers, guardrails or grates having openings not exceeding 1 inch by 5 inches. Floor holes through which transmission equipment passes may be guarded by toeboards.

5.2 Cover Design

Floor and roof opening covers will be designed by a qualified person and be capable of safely supporting the greater of 400 pounds or twice the weight of the employees, equipment and materials that may be imposed on any one square foot area of the cover at any time. Covers 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 inch high stating: "Opening – Do Not Remove." Markings of chalk or keel will not be used.

5.3 Cover Projection

Covers will not project more than 1 inch above the floor level and all edges will be chamfered to an angle with the horizontal of not over 30 degrees. All hinges, handles, bolts or other parts will set flush with the floor or cover surface.

5.4 Guardrails

5.4.1 Guardrails as specified in Section 7 will be required at locations where there is a routine need for any employee to approach within 6 feet of the edge of the roof. When intermittent work is being done, safety belts and lanyards, or an approved fall protection system, may be provided in lieu of guardrails.

For the purpose of this requirement, routine need means more than 4 times a year and intermittent work means work not exceeding 4 times a year.



- 5.4.2 Guardrails required by Section 5.4.1 will be provided along the roof edge extending at least 6 feet beyond the areas occupied by persons accessing, servicing or repairing permanently-mounted machinery and/or equipment.
- 5.4.3 Where fall protection systems are used, safety lines and/or lanyards will be attached to roof tie-backs meeting the requirements of California Code of Regulations, Title 8, Section 3291(f) or equivalent anchorage. A safe and unobstructed access will be provided to all roof tie-back locations.

5.5 Skylights

Any employee approaching within 6 feet of any skylight will be protected from falling through the skylight or skylight opening by any one of the methods contained in this section.

5.5.1 Skylight Screens Installed Above the Skylight

The design, construction and installation of skylight screens will meet the strength requirements equivalent to that of covers specified in Section 5.2. They will also be of such design, construction and mounting that under design loads or impacts, they will not deflect downward sufficiently to break the glass below them. The construction will be of:

- a. Grillwork with openings not more than 4 inches by 4 inches; or
- b. Slatwork with openings not more than 2 inches wide with length unrestricted; or
- c. Other material of equal strength and similar configuration.
- 5.5.2 Skylight Screens Installed Below the Skylight Existing screens (i.e. burglar bars) will meet the following requirements if they will be relied upon for fall protection:
 - a. Screens installed at the same level or higher than the walking/working surface will meet the strength requirements of Section 5.2.
 - b. Screens installed within 2 feet of the walking/working surface will meet the strength requirements of Section 5.2 with increased strength based on the fall distance below the walking/working surface as determined by a qualified person. In no case will the strength of the screen below the skylight be less than the strength requirements of Section 5.2. A screen more than 2 feet below the walking/working surface will not serve as fall protection.
 - c. A screen will not be used for fall protection in accordance with Section 5.5.2(a) or 5.5.2(b) if the broken skylight glazing will pose an impalement hazard to a worker who has fallen through the skylight and is lying on top of the screen. Skylights containing tempered, laminated or plastic glazing, or similar materials, will not be considered to impose an impalement hazard.
 - d. The screen construction will be of grillwork with openings less than 12 inches in the least horizontal dimension.
- 5.5.3 Guardrails meeting the requirements of Section 7 may be used.
- 5.5.4 The use of a personal fall protection system meeting the requirements of Section 8 may be used.



- 5.5.5 Covers, including the skylight itself, meeting the requirements of Section 5.2 installed over the skylights or skylight openings may be used. Where the skylight itself serves as a cover, the skylight will be required to meet only the strength requirements of Section 5.2. Further, for skylights serving as covers, documentation will be obtained from the manufacturer that the skylight will meet the strength requirements of Section 5.2 for the dates that work will be performed in the vicinity of the skylight. Such documentation will be obtained prior to the start of work and will be made available upon request.
- 5.5.6 Skylight Nets
 - a. Materials used for skylight nets will be of natural or synthetic fiber of sufficient size, strength and number to absorb a 400-pound load dropped from 42 inches above the surface of the net. The net hardware will be drop forged, pressed or formed steel, or material of equal or better quality. The maximum size of mesh will not exceed 36 square inches or be longer than 6 inches on any side, measured center-to-center of mesh ropes or webbing. No mesh member will exceed 6 inches in length measured center-to-center of mesh crossings. All mesh crossings will be anchored to eliminate frictional wear and prevent enlargement of mesh openings. Nets will not be larger than 12 feet by 12 feet.
 - b. Inspection
 - 1. Skylight nets will be inspected weekly by a competent person utilizing the inspection procedures supplied by the manufacturer.
 - 2. Visual inspections will be performed daily by an authorized person trained on the manufacturer's inspection procedures before the net is relied upon for fall protection.
 - c. Employees will be trained to recognize the hazards of falling into nets and on the procedures to be followed in order to limit the potential injury from such falls. The training program will include, at a minimum:
 - 1. The tested limits of the net;
 - 2. Avoiding falls;
 - 3. Location of weekly inspection records and the person responsible;
 - 4. Procedures for retrieving a worker who has fallen into the net;
 - 5. Manufacturer's instructions on the use and limitations of the skylight net;
 - 6. Manufacturer's inspection requirements; and
 - 7. Factors affecting net life, including, but not limited to: sunlight, abrasion, dirt/sand, rust and airborne contaminants.
 - d. The care, maintenance and storage of nets will be in accordance with the net manufacturer's recommendations. Net will be protected from sparks, hot slag or other materials which could compromise the strength of the net.
 - e. Nets will be removed from service under any of the following conditions:
 - 1. The frame becomes warped, bent or distorted;
 - 2. The netting becomes torn, unraveled, cut or has excessive slippage of the mesh crossings;
 - 3. The net has been modified from the original manufacturer's design or specification;
 - 4. The recommended service life of the net as provided by the manufacturer has expired. Nets without a manufacturer supplied



expiration date will not be used for fall protection in accordance with this section; or

- 5. Other removal criteria specified by the manufacturer.
- f. Nets will not be left on the skylight for longer than the duration of the job or one year, whichever is less.
- g. Nets will be used with sufficient clearance to prevent user's contact with the surfaces or structures below the skylight.
- 5.5.7 A fall protection plan as prescribed in Section 9 may be used when it can be demonstrated that the use of fall protection methods as contained in Sections 5.5.1 through 5.5.6 is impractical or creates a greater hazard.

EXCEPTION TO SECTION 5.5: When the work is of short duration and limited exposure such as measuring, roof inspection, electrical/mechanical equipment inspection, etc., and the time involved in rigging and installing the safety devices required in Sections 5.5.1 through 5.5.6 equal or exceed the performance of the designated tasks of measuring, roof inspection, electrical/mechanical equipment inspection, etc., these provisions may be temporarily suspended provided that adequate risk control is recognized and maintained.

5.6 Access

Access will not be permitted on glazed surfaces such as roofs, vaults, canopies or skylights glazed with transparent or translucent materials unless an engineer currently registered in the State of California and experienced in the design of such glazed structures has certified that the surface will support all anticipated loads. Employees working on such surfaces will be protected by a fall protection system meeting the requirements of Section 8.

5.7 Maintenance Access

When glazed surfaces cannot be safely accessed for maintenance in accordance with Section 5.6, scaffolds, catwalks, rolling ladders, platforms or other methods of safe access will be provided.

6 SERVICE PITS AND YARD SURFACE OPENINGS

6.1 Unused portions of service pits and pits not in actual use will be either covered or protected by guardrails. This may be accomplished by moveable posts or stanchions and chain rails or other guardrails which will provide equivalent protection.

EXCEPTION: Inspection, transfer and service pits used exclusively for maintenance of rolling railroad stock where impracticable to install guardrails or equivalent.

6.2 Permanent yard surface openings such as pits or sumps will be guarded as required by Section 5.



- 6.3 Trench or conduit covers and their supports, when located in plant roadways, will be designed to carry a truck rear-axle load of at least 20,000 pounds.
- 6.4 Manhole covers and their supports, when located in plant roadways, will comply with local standard highway requirements, if any. Otherwise, they will be designed to carry a truck rear-axle load of at least 20,000 pounds.

7 STANDARD GUARDRAILS

Wherever guardrail protection is required, the following standards will be adhered to except that other types and arrangements of guardrail construction will be acceptable where the height, surface and end projection of the top rail complies with the standard specifications and the closure of the vertical area between the top rail and floor, platform, runway or ramp provides protection at least equivalent to that afforded by a midrail.

- 7.1 A standard guardrail will consist of top rail, midrail or equivalent protection, and posts, and will have a vertical height within the range of 42 inches to 45 inches from the upper surface of the top rail to the floor, platform, runway or ramp level. The top rail will be smooth-surfaced throughout the length of the railing. The midrail will be approximately halfway between the top rail and the floor, platform, runway or ramp. The ends of the rails will not overhang the terminal posts except where such overhang does not constitute a projection hazard.
- 7.2 All guardrails and other permissible types, including their connections and anchorage, will be designed for a live load of 20 pounds per linear foot applied either horizontally or vertically downward at the top rail. Dimensional details of railing members of a few types of construction which comply with this strength requirement are given hereinafter in Section 7.3.

Railing members will be framed in such a position that they will afford the greatest support and protection. For example, top rails of structural steel angles will have the outside face of vertical leg located on the side adjacent to the side of normal contact by the employee.

- 7.3 The following are some acceptable guardrail specifications. Other combinations will be accepted as long as equivalent strength and protection are maintained.
 - a. In wooden construction, the posts to be of at least 2-inch by 4-inch nominal material spaced not to exceed 6 feet, the top rails to be smooth with corners rounded and not less than 2-inch by 4-inch nominal material. The posts may be spaced on 8-foot centers if the top rails consist of double 1-inch by 4-inch nominal boards, provided that one board is fastened in a flat position on top of the posts and the other is fastened in an edge-up position to the inside of the posts and the side of the top board. Single midrails, where permitted, will be not less than 2-inch by 4-inch nominal material and installed on the contact side of the guardrail.
 - b. If constructed of standard metal pipe, the top rails and single midrail, where permitted, to be 1-1/2 inch outside diameter or larger. The posts to be 1-1/2 inch outside diameter or larger, the spacing not to exceed 8 feet.
 - c. Guardrails installed on, or before, May 26, 2011



If constructed of structural metal, the top rails to be angle iron of at least 2-inch by 2-inch by 1/4-inch angles or other metal shapes of equivalent bending strength; and the single midrail, where permitted, to be iron or steel of at least 2inch by 2-inch by 1/4-inch angles or other metal shapes of equivalent strength. The posts to be angle iron of at least 2-inch by 2-inch by 1/4-inch stock, the spacing not to exceed 8 feet.

- d. Guardrails installed after May 26, 2011 If constructed of structural metal, the top rails to be angle iron of at least 2-inch by 2-inch by 3/8-inch angles or other metal shapes of equivalent bending strength; and the single midrail, where permitted, to be iron or steel of at least 2inch by 2-inch by 3/8-inch angles or other metal shapes of equivalent strength. The posts to be angle iron of at least 2-inch by 2-inch by 3/8-inch stock, the spacing not to exceed 8 feet.
- 7.4 Where toeboards are required, they will be constructed of wood, concrete, metal or other suitable material. Where constructed of metal grille, mesh will not exceed 1 inch. The top of the toeboard will be not less than 3-1/2 inches above the platform, walkway or other working level and the bottom clearance will not exceed 1/4 inch.

NOTE: Where materials are piled, higher toeboards or paneling from floor to intermediate rails or top rail will be provided where necessary for safety.

8 PERSONAL FALL ARREST SYSTEMS, PERSONAL FALL RESTRAINT SYSTEMS AND POSITIONING DEVICES

- 8.1 Approved personal fall arrest, personal fall restraint or positioning systems will be worn by those employees whose work exposes them to falling in excess of 7-1/2 feet from the perimeter of a structure, unprotected sides and edges, leading edges, through shaftways and openings, sloped roof surfaces steeper than 7:12 or other sloped surfaces steeper than 40 degrees not otherwise adequately protected under the provisions of the California Code of Regulations Construction Safety Orders.
- 8.2 Personal fall arrest systems and their use will comply with the provisions set forth below.
 - a. On suspended scaffolds or similar work platforms with horizontal lifelines which may become vertical lifelines, the devices used to connect to a horizontal lifeline will be capable of locking in both directions on the lifeline.
 - b. Horizontal lifelines will be designed, installed and used, under the supervision of a qualified person, as part of a complete personal fall arrest system which maintains a safety factor of at least two.
 - c. Lanyards and vertical lifelines will have a minimum breaking strength of 5,000 pounds.
 - d. Except as provided in Section 8.2(e), when vertical lifelines are used, each employee will be attached to a separate lifeline.
 - e. During the construction of elevator shafts, two employees may be attached to the same lifeline in the hoistway, provided both employees are working atop a false car that is equipped with guardrails; the strength of the lifeline is 10,000 pounds; and all other criteria specified in this section for lifelines have been met.
 - f. Lifelines will be protected against being cut or abraded.



- g. Self-retracting lifelines and lanyards which automatically limit free fall distance to 2 feet or less will be capable of sustaining a minimum tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully-extended position.
- h. Self-retracting lifelines and lanyards which do not limit free fall distance to 2 feet or less, ripstitch lanyards and tearing and deforming lanyards will be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device with the lifeline or lanyard in the fully-extended position.
- i. Ropes and straps (webbing) used in lanyards, lifelines and strength components of body belts and body harnesses will be made from synthetic fibers except for when they are used in conjunction with hot work where the lanyard may be exposed to damage from heat or flame.
- j. Anchorages used for attachment of personal fall arrest equipment will 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 will be designed, installed and used as follows:
 - 1. As part of a complete personal fall arrest system which maintains a safety factor of at least two; and
 - 2. Under the supervision of a qualified person.
- k. Personal fall arrest systems, when stopping a fall, will:
 - 1. Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness;
 - 2. Be rigged such that an employee can neither free fall more than 6 feet, nor contact any lower level, and, where practicable, the anchor end of the lanyard will be secured at a level not lower than the employee's waist;
 - 3. Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet; and
 - 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.
- I. The attachment point of the body belt will be located in the center of the wearer's back. 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.
- m. Body belts, harnesses and components will be used only for employee protection and not to hoist materials. Body belts used in conjunction with fall restraint systems or positioning devices will limit the maximum arresting force on an employee to 900 pounds.
- n. Employees will be promptly rescued in the event of a fall or the employees will be able to rescue themselves.
- o. Personal fall arrest systems will be inspected prior to each use for wear, damage and other deterioration. Defective components will be removed from service.
- p. Body belts will be at least 1-5/8 inches wide.
- q. Personal fall arrest systems will not be attached to hoists, nor will they be attached to guardrails.
- r. When a personal fall arrest system is used at hoist areas, it will be rigged to allow the movement of the employee only as far as the edge of the working level or working area.
- s. 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.



- 8.3 Positioning device systems and their use will conform to the following provisions:
 - a. Positioning devices will be rigged such than an employee cannot free fall more than 2 feet.
 - b. Positioning device systems will be inspected prior to each use for wear, damage and other deterioration. Defective components will be removed from service.
 - c. The use of non-locking snaphooks will be prohibited.
 - d. Anchorage points for positioning device systems will be capable of supporting two times the intended load or 3,000 pounds, whichever is greater.
- 8.4 Personal Fall Restraint
 - a. Body belts or harnesses may be used for personal fall restraint.
 - b. Body belts will be at least 1-5/8 inches wide.
 - c. Anchorage points used for fall restraint will be capable of supporting 4 times the intended load.
 - d. Restraint protection will be rigged to allow the movement of employees only as far as the sides of the working level or working area.
- 8.5 Lanyards will be secured to a substantial member of the structure or to securelyrigged lines.
- 8.6 All fall arresting, descent control and rescue equipment will be approved as defined in California Code of Regulations, Title 8, Sections 1504 and 1505 and used in accordance with the manufacturer's recommendations.
- 8.7 If an employee's duties require horizontal movement, rigging will be provided so that the attached lanyard will slide along with the employee. Such rigging will be provided for all suspended staging, outdoor advertising sign platforms, floats and all other catwalks, or walkways 7-1/2 feet or more above the ground or level beneath.
- 8.8 Any lanyard, safety belt, harness, dropline, lifeline or other component 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.
- 8.9 Lifelines and anchorages will be capable of supporting a minimum dead weight of 5,000 pounds.
- 8.10 Lifelines subject to excessive fraying or rock damage will be protected and will have a wire rope center. Seriously worn or damaged rope will be promptly removed from service.
- 8.11 All safety belts, harnesses and lanyards will be labeled as meeting the requirements contained in ANSI A10.14-1975, Requirements for Safety Belts, Harnesses, Lanyards, Lifelines and Drop Lines for Construction and Industrial Use or be in compliance with the requirement stated in Section 8.12.
- 8.12 All personal fall arrest, personal fall restraint and positioning device systems will be labeled as meeting the requirements contained in ANSI A10.14-1991 American National Standard for Construction and Demolition Use, or ANSI Z359.1-1992 American National Standard Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components.



8.13 Powered Platforms and Equipment for Building Maintenance Employees on working platforms will be protected by a personal fall arrest system meeting the requirements of Appendix 2 and as otherwise provided by this program.

9 FALL PROTECTION PLAN

9.1 General

This section applied to all operations when it can be shown that the use of conventional fall protection is impractical or creates a greater hazard.

- 9.1.1 The fall protection plan (Appendix 1) will be prepared by a qualified person and developed specifically for the site where the construction work is being performed and the plan will be maintained up to date. The plan will document the identity of the qualified person.
- 9.1.2 Any changes to the fall protection plan will be approved by a qualified person. The identity of the qualified person will be documented.
- 9.1.3 A copy of the fall protection plan, with all approved changes, will be maintained at the job site.
- 9.1.4 The implementation of the fall protection plan will be under the supervision of a competent person. The plan will document the identity of the competent person.
- 9.1.5 The fall protection plan will document the reasons why the use of conventional fall protection systems (guardrails, personal fall arrest systems or safety nets) are infeasible or why their use would create a greater hazard.
- 9.1.6 The fall protection plan will include a written discussion of other measures that will be taken to reduce or eliminate the fall hazard for workers who cannot be provided with protection provided by conventional fall protection systems.
- 9.1.7 The fall protection plan will identify each location where conventional fall protection methods cannot be used. These locations will then be classified as controlled access zones and the criteria in Section 9.2.1 will be complied with.
- 9.1.8 Where no other alternative measure (i.e. scaffolds, ladders, vehicle-mounted work platforms, etc.) has been implemented, a safety monitoring system in conformance with Section 9.2.2 will be implemented.
- 9.1.9 The fall protection plan will include a statement which provides the name or other method of identification for each employee who is designated to work in controlled access zones. No other employees may enter controlled access zones.



9.1.10 In the event an employee falls or some other related, serious incident occurs (e.g., a near miss), the circumstances of the fall or other incident will be investigated to determine if the fall protection plan needs to be changed and those changes will be implemented to prevent similar types of falls or incidents.

9.2 Controlled Access Zones and Safety Monitoring Systems

- 9.2.1 Controlled Access Zones
 - a. When used to control access to areas where leading edge and other operations are taking place, the controlled access zone will be defined by a control line or by any other means that restricts access. Signs will be posted to warn unauthorized employees to stay out of the controlled access zone.
 - b. When control lines are used, they will be erected not less than 6 feet nor more than 25 feet from the unprotected or leading edge, except when erecting precast concrete members.
 - c. When erecting precast concrete members, the control line will be erected not less than 6 feet nor more than 60 feet or half the length of the member being erected, whichever is less, from the leading edge.
 - d. The control line will extend along the entire length of the unprotected or leading edge and will be approximately parallel to the unprotected or leading edge.
 - e. The control line will be connected on each side to a standard railing or wall or securely anchored on each end.
 - f. Control lines will consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions as follows:
 - 1. Each line will be flagged or otherwise clearly marked at not more than 6-foot intervals with high-visibility material.
 - 2. Each line will be rigged and supported in such a way that its lowest point (including sag) is not less than 39 inches from the working level/working area and its highest point is not more than 45 inches.
 - 3. Each line will have a minimum breaking strength of 200 pounds.
- 9.2.2 Safety Monitoring Systems
 - a. A competent person will be designated to monitor the safety of other employees and will be required to comply with the following requirements:
 - 1. The safety monitor will be competent to recognize fall hazards;
 - 2. The safety monitor will warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;
 - 3. The safety monitor will be within visual sighting distance of the employee and will always be in communication with the employee being monitored; and
 - 4. The safety monitor will not have other responsibilities which could take the monitor's attention from the monitoring function.
 - b. No employee, other than an employee covered by a fall protection plan, will be allowed in an area where an employee is being protected by a safety monitoring system.
 - c. Each employee working in a controlled access zone will be directed to comply promptly with fall hazard warnings from safety monitors.



10 TRAINING

All employees assigned to work in areas where fall hazards may exist will be trained before they are allowed to work in areas in which fall hazards exist.

10.1 Training Topics

Fall protection training will include:

- a. The nature of fall hazards in the work area;
- b. The correct procedures for erecting, maintaining, disassembling and inspecting the fall protection systems to be used;
- c. The use and operation of guardrail systems, personal fall arrest systems, safety monitoring systems, and other protection to be used;
- d. The role of each employee in the safety monitoring system when this system is used;
- e. The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection; and
- f. The role of employees in fall protection plans.

10.2 Retraining

When there is reason to believe that any affected employee who has already been trained does not have the understanding and skill required by Section 9.1, each such employee will be retrained. Circumstances where retraining is required include, but are not limited to:

- a. Changes in the workplace render previous training obsolete;
- b. Changes in the types of fall protection systems or equipment to be used render previous training obsolete; or
- c. Inadequacies in an affected employee's knowledge or use of fall protection system or equipment indicate that the employee has not retained the requisite understanding or skill.

10.3 Documentation of Training

A written record will be prepared for each employee upon completion of fall protection training. The written record will contain:

- a. The name or other identity of the employee trained;
- b. The date(s) of the training; and
- c. The signature of the person who conducted the training or the signature of the employer.



APPENDIX 1 – FALL PROTECTION PLAN

Company Name:	Date:
Site Address:	

Reasons why the use of convention fall protection systems (such as guardrail systems, personal fall arrest systems or safety nets) are infeasible or why their use would create a greater hazard:

Discussion of other measures that will be taken to reduce or eliminate the fall hazard for workers who cannot be provided with protection from the conventional fall protection systems



Identify each location where conventional fall protection methods cannot be used (check all that apply). These locations will be classified as Controlled Access Zones.

Open-sided walking/working surfaces (i.e. roofs, open-sided floors):
Open-sided ramps, runways, platforms:
Floor openings:
Wall openings:
Skylight openings:
Trenches:
Other locations:

Employees who received fall protection training on the above site specific fall protection plan are designated to work in controlled access zones. No other employees may enter controlled access zones.

Designated Employees:



APPENDIX 2 – PERSONAL FALL ARREST SYSTEMS FOR EMPLOYEES USING POWERED PLATFORMS

Use of the Appendix

Section I of this appendix sets out the criteria for personal fall arrest systems used by all employees using powered platforms, as required by Section 8.13. Section II sets out test procedures which will be used to determine compliance with applicable requirements contained in Section I of this appendix. Section III provides non-mandatory guidelines which are intended to assist in complying with these provisions.

I. Personal Fall Arrest Systems

a. Scope and Application

This section establishes the application of, and performance criteria for, personal fall arrest systems which are required for use by all employees using powered platforms.

- Definitions Definitions that apply to terms used in this appendix are located in California Code of Regulations, Title 8, Section 3281.
- c. Design for System Components
 - 1. Connectors will be drop forged, pressed or formed steel, or made of equivalent materials.
 - 2. Connectors will have a corrosion-resistant finish and all surfaces and edges will be smooth to prevent damage to interfacing parts of the system.
 - 3. Lanyards and vertical safety lines which tie-off one employee will have a minimum breaking strength of 5,000 pounds. All ends will be spliced or swaged as per the manufacturer's specifications. Knots will not be permitted at ends or anywhere along the length of the lanyard or "safety line."
 - 4. Self-retracting safety lines and lanyards which automatically limit free fall distance to 2 feet or less will have components capable of sustaining a minimum static tensile load of 3,000 pounds applied to the device with the safety line or lanyard in the fully-extended position.
 - 5. Self-retracting safety lines and lanyards which do not limit free fall distance to 2 feet or less, ripstitch lanyards and tearing and deforming lanyards will be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device with the safety line or lanyard in the fully-extended position.
 - 6. D-rings and snaphooks will be capable of sustaining a minimum tensile load of 5,000 pounds.
 - 7. D-rings and snaphooks will be 100% proof-tested to a minimum tensile load of 3,600 pounds without cracking, breaking or taking permanent deformation.
 - Snaphooks will be sized to be compatible with the member to which they are connected. Only double-acting snaphooks designed to prevent accidental disengagement will be used.
 - Horizontal safety lines, where used, will be designed under the supervision of a professional engineer currently registered in the State of California and installed as part of a complete personal fall arrest system which maintains a safety factor of at least two.
 - 10. Anchorages to which personal fall arrest equipment is attached will be capable of supporting at least 5,000 pounds per employee attached or will be designed under the supervision of a professional engineer currently registered in the State of California and installed and used as part of a complete personal fall arrest system which maintains a safety factor of at least two.



- 11. Ropes and straps (webbing) used in lanyards, safety lines and strength components of body harnesses will be made from synthetic fibers or wire rope.
- 12. All body harnesses and lanyards will be designed and built to conform to ANSI A10.14-1975, Requirements for Safety Belts, Harnesses, Lanyards, Lifelines and Drop Lines for Construction and Industrial Use.
- 13. All personal fall arrest, personal fall restraint and positioning device systems will be designed and built to conform to either ANSI A10.14-1991 American National Standard for Construction and Demolition Use or ANSI Z359.1-1992 American National Standard Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components.
- d. System Performance Criteria
 - 1. Personal fall arrest systems will, when stopping a fall:
 - a. Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness;
 - b. Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet; and
 - c. 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.
 - a. When used by employees having a combined person and tools weight of less than 310 pounds, personal fall arrest systems which meet the criteria and protocols contained in paragraphs (b), (c) and (d) in Section II of this appendix will be considered as complying with the provisions of subparagraphs (d)(1)(A) through (d)(1)(C) above.
 - b. When used by employees having a combined tool and body weight of 310 pounds or more, personal fall arrest systems which meet the criteria and protocols contained in paragraphs (b), (c) and (d) in Section II may be considered as complying with the provisions of subparagraphs (d)(1)(A) through (d)(1)(C), provided that the criteria and protocols are modified appropriately to provide proper protection for such heavier weights.
- e. Care and Use
 - 1. Body belts will not be used as part of a personal fall arrest system.
 - 2. Devices used to connect to a horizontal safety line which may become a vertical safety line will be capable of locking in either direction on the safety line.
 - 3. Personal fall arrest systems will be rigged such that an employee can neither free fall more than 6 feet nor contact any lower level obstacle.
 - 4. The attachment point of the body belt will be located in the center of the wearer's back. The attachment point of the body harness will be located in the center of the wearer's back near should level or above the wearer's head.
 - 5. When vertical safety lines are used, each employee will be provided with a separate safety line.
 - 6. Personal fall arrest systems or components will be used only for employee fall protection.
 - 7. Personal fall arrest systems or components subjected to impact loading will be immediately removed from service and will not be used again for employee protection until repaired or replaced. Repaired or replaced components or component parts will meet the performance and testing requirements of this appendix.
 - 8. Employees will be promptly rescued in the event of a fall or will be capable of selfrescue.



9. Before using a personal fall arrest system, and after any component or system is changed, employees will be trained in accordance with the requirements of California Code of Regulations, Title 8, Section 3298 in the safe use of the system.

f. Inspections

- 1. Personal fall arrest systems will be inspected prior to each use for mildew, wear, damage and other deterioration. Defective components will be removed from service if their strength or function may be adversely affected.
- 2. 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.

II. Test Methods for Personal Fall Arrest Systems

a. General

Paragraphs (b), (c), (d) and (e) of this Section II set forth test procedures which will be used to determine compliance with requirements in subparagraphs (d)(1)(A) through (d)(1)(D) of Section I of this appendix.

- b. General conditions for all tests in Section II
 - 1. Safety lines, lanyards and deceleration devices will be attached to an anchorage and connected to the body harness in the same manner as they would be when used to protect employees.
 - 2. The anchorage will be rigid and will not have a deflection greater than .04 inches when a force of 2,250 pounds is applied.
 - 3. The frequency response of the load measuring instrumentation will be 120 Hz.
 - 4. The test weight used in the strength and force tests will be a rigid, metal, cylindrical or torso-shaped object with a girth of 38 inches +/- 4 inches.
 - 5. The lanyard or safety line used to create the free fall distance will be supplied with the system, or in its absence, the least elastic lanyard or safety line available to be used with the system.
 - 6. The test weight for each test will be hoisted to the required level and will be quickly released without having any appreciable motion imparted to it.
 - 7. The system's performance will be evaluated taking into account the range of environmental conditions for which it is designed to be used.
 - 8. Following the test, the system need not be capable of further operation.
- c. Strength Test
 - During the testing of all systems, a test weight of 300 pounds +/- 5 pounds will be used. (See subparagraph (b)(4) above)
 - 2. The test consists of dropping the test weight once. A new unused system will be used for each test.
 - 3. For lanyard systems, the lanyard length will be 6 feet +/- 2 inches as measured from the fixed anchorage to the attachment on the body harness.
 - 4. For rope-grab-type deceleration systems, the length of the safety line above the centerline of the grabbing mechanism to the safety line's anchorage point will not exceed 2 feet.
 - 5. For lanyard systems, for systems with deceleration devices which do not automatically limit free fall distance to 2 feet or less, and for systems with deceleration devices which have a connection distance in excess of one foot (measured between the centerline of the safety line and the attachment point to the body belt or harness) the test weight will be rigged to free fall a distance of 7.5 feet from a point that is 1.5 feet above the anchorage point, to its hanging location (6 feet below the anchorage). The test weight will fall without interference, obstruction or hitting the floor or ground during the test. In some cases, a non-elastic wire lanyard



of sufficient length may need to be added to the system (for test purposes) to create the necessary free fall distance.

- 6. For deceleration device systems with integral safety lines or lanyards which automatically limit free fall distance to 2 feet or less, the test weight will be rigged to free fall a distance of 4 feet.
- 7. Any weight which detaches from the belt or harness will constitute failure for the strength test.
- d. Force Test
 - The test consists of dropping the respective test weight specified in subsection (d)(2)(A) or (d)(3)(A) once. A new, unused system will be used for each test.
 - 2. For lanyard systems:
 - A. A test weight of 200 pounds +/- 3 pounds will be used. (See subparagraph (b)(4) above).
 - B. Lanyard length will be 6 feet +/- 2 inches as measured from the fixed anchorage to the attachment on the body harness.
 - C. The test weight will fall free from the anchorage level to its hanging location (a total of 6 feet free fall distance) without interference, obstruction or hitting the floor or ground during the test).
 - 3. For all other systems:
 - A. A test weight of 220 pounds +/- 3 pounds will be used. (See subparagraph (b)(4) above).
 - B. The free fall distance to be used in the test will be the maximum fall distance physically permitted by the system during normal use conditions, up to a maximum free fall distance for the test weight of 6 feet, except as follows:
 - i. For deceleration systems which have a connection link or lanyard, the test weight will free fall a distance equal to the connection distance (measured between the centerline of the safety line and the attachment point to the body harness).
 - ii. For deceleration device systems with integral safety lines or lanyards which automatically limit free fall distance to 2 feet or less, the test weight will free fall a distance equal to that permitted by the system in normal use.
 - 4. A system fails the force test if the recorded maximum arresting force exceeds 2,520 pounds when using a body harness.
 - 5. The maximum elongation and deceleration distance will be recorded during the force test.
- e. Deceleration Device Tests
 - 1. General

The device will be evaluated or tested under the environmental conditions (such as rain, ice, grease, dirt, type of safety line, etc.) for which the device is designed.

- 2. Rope-grab-type deceleration devices
 - A. Devices will be moved on a safety line 1,000 times over the same length of line a distance of not less than 1 foot, and the mechanism will lock each time.
 - B. Unless the device is permanently marked to indicate the type(s) of safety line which must be used, several types (different diameters and different materials) of safety lines will be used to test the device.
- Other self-activating-type deceleration devices The locking mechanisms of other self-activating-type deceleration devices designed for more than one arrest will lock each of 1,000 times as they would in normal service.



III. Non-Mandatory Guidelines for Personal Fall Arrest Systems

The following information constitutes additional guidelines for use in complying with requirements for a personal fall arrest system.

a. Selection and Use Considerations

The kind of personal fall arrest system selected should match the particular work situation and any possible free fall distance should be kept to a minimum. Consideration should be given to the particular work environment. For example, the presence of acids, dirt, moisture, oil, grease, etc., and their effect on the system, should be evaluated. Hot or cold environments may also have an adverse effect on the system. Wire rope should not be used where an electrical hazard is anticipated. As required by the program, there will be plans to have means available to promptly rescue an employee should a fall occur since the suspended employee may not be able to reach a work level independently.

Where lanyards, connectors and safety lines are subject to damage by work operations such as welding, chemical cleaning and sandblasting, the component should be protected or other securing systems should be used. The work conditions and environment (including seasonal weather changes) should be evaluated before selecting the appropriate personal fall protection system. Once in use, the system's effectiveness should be monitored. In some cases, a program for cleaning and maintenance of the system may be necessary.

b. Testing Considerations

Before purchasing or putting into use a personal fall arrest system, information about the system should be obtained based on its performance during testing so that it can be known if the system meets this standard. Testing should be done using recognized test methods.

Section II of this appendix contains test methods recognized for evaluating the performance of fall arrest systems. Not all systems may need to be individually tested; the performance of some systems may be based on data and calculations derived from testing of similar systems, provided that enough information is available to demonstrate similarity of function and design.

c. Component Compatibility Considerations

Ideally, a personal fall arrest system is designed, tested and supplied as a complete system. However, it is common practice for lanyards, connectors, safety lines, deceleration devices and body harnesses to be interchanged since some components wear out before others. It is realized that not all components are interchangeable. For instance, a lanyard should not be connected between a body harness and a deceleration device of the self-retracting type since this can result in additional free fall for which the system was not designed. Any substitution or change to a personal fall arrest system should be fully evaluated or tested by a qualified person to determine that it meets the standard before the modified system is put in use.

d. Employee Training Considerations

Thorough employee training in the selection and use of personal fall arrest systems is imperative. As stated in the program, before the equipment is used, employees will be trained in the safe use of the system. This should include the following: 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. Careless or improper use of the equipment can result in serious injury or death. Everybody in the organization should become familiar with the material in this appendix, as well as the manufacturer's



recommendations, before a system is used. Of uppermost importance is the reduction in strength caused by certain tie-offs (such as using knots, typing around sharp edges, etc.) and maximum permitted free fall distance. Also, to be stressed are the importance of inspections prior to use, the limitations of the equipment and unique conditions at the worksite which may be important in determining the type of system to use.

e. Instruction Considerations

Comprehensive instructions from the supplier as to the system's proper use and application should be obtained, including, where applicable:

- 1. The force measured during the sample force test;
- 2. The maximum elongation measured for lanyards during the force test;
- 3. The deceleration distance measured for deceleration devices during the force test;
- 4. Caution statements on critical use limitations;
- 5. Application limits;
- 6. Proper hook-up, anchoring and tie-off techniques, including the proper D-ring or other attachment point to use on the body harness for fall arrest;
- 7. Proper climbing techniques;
- 8. Methods of inspection, use, cleaning and storage; and
- 9. Specific safety lines which may be used.

This information will be provided to employees during training.

f. Inspection Considerations

As stated in the program (Section I, paragraph (f)), personal fall arrest systems must be regularly inspected. Any component with any significant defect, such as cuts, tears, abrasions, mold or undue stretching; alterations or additions which might affect its efficiency; damage due to deterioration; contact with fire, acids or other corrosives; distorted hooks or faulty hook springs; tongues unfitted to the shoulder of buckles; loose or damaged mountings; non-functioning parts; or wearing or internal deterioration in the ropes must be withdrawn from service immediately and should be tagged or marked as unusable, or destroyed.

g. Rescue Considerations

As required by the program (Section I, subparagraph (e)(8)), when personal fall arrest systems are used, it will be assured that employees can be promptly rescued or can rescue themselves should a fall occur. The availability of rescue personnel, ladders or other rescue equipment should be evaluated. In some situations, equipment which allows employees to rescue themselves after the fall has been arrested may be desirable, such as devices which have descent capability.

- h. Tie-off Considerations
 - One of the most important aspects of personal fall protection systems is fully planning the system before it is put into use. Probably the most overlooked component is planning for suitable anchorage points. Such planning should ideally be done before the structure or building is constructed so that anchorage points can be incorporated during construction for use later for window cleaning or other building maintenance. If properly planned, these anchorage points may be used during construction as well as afterwards.
 - 2. Everybody should be, at all times, aware that the strength of the personal fall arrest system is based on its being attached to an anchoring system which does not significantly reduce the strength of the system (such as properly-dimensioned eyebolt/snaphook anchorage). Therefore, if a means of attachment is used that will reduce the strength of the system, that component should be replaced by a stronger one, but one that will also maintain the appropriate maximum arrest force characteristics.



- 3. Tie-off using a knot in a rope lanyard or safety line (at any location) can reduce the safety line or lanyard strength by 50% or more. Therefore, a stronger lanyard or safety line should be used to compensate for the weakening effect of the knot, or the lanyard length should be reduced (or the tie-off location raised) to minimize free fall distance, or the lanyard or safety line should be replaced by one which has an appropriately-incorporated connector to eliminate the need for a knot.
- 4. Tie-off a rope lanyard or safety line around and "H" or "I" beam or similar support can reduce its strength as much as 70% due to the cutting action of the beam edges. Therefore, use should be made of a webbing lanyard or wire core safety lines around the beam; or the lanyard or safety line should be protected from the edge; or free fall distance should be greatly minimized.
- 5. Tie-off where the line passes over or around rough or sharp surfaces reduces strength drastically. Such a tie-off should be avoided or an alternative tie-off rigging should be used. Such alternatives may include use of a snaphook/D-ring connection, wire rope tie-off, an effective padding of the surfaces or an abrasion-resistant strap around or over the problem surface.
- 6. Horizontal safety line may, depending on their geometry and angle of sag, be subjected to greater loads than the impact load imposed by an attached component. When the angle of horizontal safety line sag is less than 30 degrees, the impact force imparted to the safety line by an attached lanyard is greatly amplified. For example, with a sag angle of 15 degrees, the force amplification is about 2:1 and at 5 degrees sag, it is about 6:1.

Depending on the angle of sag and the line's elasticity, the strength of the horizontal safety line and the anchorages to which it is attached should be increased a number of times over that of the lanyard. Extreme care should be taken in considering a horizontal safety line for multiple tie-offs. The reason for this is that in multiple tie-offs to a horizontal safety line, if one employee falls, the movement of the falling employee and the horizontal safety line during arrest of the fall may cause other employees to also fall. Horizontal safety line and anchorage strength should be increased for each additional employee to be tied off. For these and other reasons, the design of systems using horizontal safety lines must only be done by qualified persons. Testing of installed safety lines and anchors prior to use is recommended.

- 7. The strength of an eve-bolt is rated along the axis of the bolt and its strength is greatly reduced if the force is applied at an angle to this axis (in the direction of shear). Also, care should be exercised in selecting the proper diameter of the eye to avoid accidental disengagement of snaphooks not designed to be compatible for the connection.
- 8. Due to the significant reduction in the strength of the safety line/lanyard (in some cases, as much as a 70% reduction), the sliding hitch knot should not be used for safety line/lanyard connections except in emergency situations where no other available system is practical. The "one-and-one" sliding hitch knot should never be used because it is unreliable in stopping a fall. The "two-and-two" or "three-and-three" knot (preferable), may be used in emergency situations; however, care should be taken to limit free fall distance to a minimum because of reduced safety line/lanyard strength.
- 9. Elongation and Deceleration Distance Considerations
- Vertical Safety Line Considerations As required by this program, each employee will have a separate safety line when the safety line is vertical. The reason for this is that in multiple tie-offs to a single safety line,



if one employee falls, the movement of the safety line during the arrest of the fall may pull other employees' lanyards, causing them to fall as well.

j. Free Fall Considerations

All personal should, at all times, be aware that a system's maximum arresting force is evaluated under normal use conditions established by the manufacturer and in no case using a free fall distance in excess of 6 feet. A few extra feet of free fall can significantly increase the arresting force on the employee, possibly to the point of causing injury. Because of this, the free fall distance should be kept at a minimum and, as required by the program, in no case greater than 6 feet. To help assure this, the tie-off attachment point to the safety line or anchor should be located at, or above, the connection point of the fall arrest equipment to harness. (Since otherwise additional free fall distance is added to the length of the connecting means (i.e. lanyard)). Attaching to the working surface will often result in a free fall greater than 6 feet. For instance, if a 6-foot lanyard is used, the total free fall distance will be the distance from the working level to the body harness attachment point plus the 6 feet of lanyard length. Another important consideration is that the arresting force which the fall system must withstand also goes up with greater distance of free fall, possibly exceeding the strength of the system.

- k. Elongation and Deceleration Distance Considerations Other factors involved in a proper tie-off are elongation and deceleration distance. During the arresting of a fall, a lanyard will experience a length of stretching or elongation, whereas activation of a deceleration device will result in a certain stopping distance. These distances should be available with the lanyard or device's instructions and must be added to the free fall distance to arrive at the total fall distance before an employee is fully stopped. The additional stopping distance may be very significant if the lanyard or deceleration device is attached near, or at, the end of a long safety line, which may itself add considerable distance due to its own elongation. As required by the program, sufficient distance to allow for all of these factors must also be maintained between the employee and obstructions below to prevent an injury due to impact before the system fully arrests the fall. In addition, a minimum of 12 feet of safety line should be allowed below the securing point of a rope grab type deceleration device and the end terminated to prevent the device from sliding off the safety line should extend to the ground or the next working level below. These measures are suggested to prevent the worker from inadvertently moving past the end of the safety line and having the rope grab become disengaged from the safety line.
- Obstruction Considerations
 The location of the tie-off should also consider the hazard of obstructions in the potential fall path of the employee. Tie-offs which minimize the possibilities of exaggerated swinging should be considered.
- m. Other Considerations

Because of the design of some personal fall arrest systems, additional considerations may be required for proper tie-off. For example, heavy deceleration devices of the selfretracting type should be secured overhead in order to avoid the weight of the device having to be supported by the employee. Also, if self-retracting equipment is connected to a horizontal safety line, the sag in the safety line should be minimized to prevent the device from sliding down the safety line to a position which creates a swing hazard during fall arrest. In all cases, manufacturer's instructions should be followed.



APPENDIX 3 – RESCUE PLAN

PROJECT INFORMATION		
Project name:		
Project address:		
Project date(s):		
RESCUE PERSONNEL		
Name:	Role:	Contact Info:
RESCUE EQUIPMENT		
 Ladder Rescue Pole Crane Scaffold 	 Aerial Lift RSQ R500 Other: 	
RESCUE FACTORS		
Anchor Point:		
Landing Area:		
Obstructions/Hazards:		
Additional Factors:		
ADDITIONAL INFORMATION	J	
AUTHORIZATION		
Completed by:		

Name

Signature

Date

*A copy of this plan, including all approved changes, will be maintained at the job site.

