

**CORESafety Participating Company (Insert your company name here)**

## **EXAMPLE OF: STANDARD OPERATING PROCEDURE**

### **1.0 PURPOSE**

Serious accidents can result from falls. All employees must utilize fall protection equipment according to the procedure to prevent or minimize accidents due to falls.

### **2.0 SCOPE**

This procedure applies to all functional areas, operations, offices, including employees, vendors, visitors and contractors within the scope of the Integrated Management System (IMS).

### **3.0 DEFINITIONS AND ACRONYMS**

#### **3.1 Definitions**

**Approved** is certified to meet the minimum standards established by the Health, Safety and Loss Prevention Department. All personal protective equipment used shall meet at least the American National Standards Institute (ANSI) standards, American Society for Testing and Materials (ASTM), or other international or local standards that comply with or exceed those standards.

**Anchor Point** is a fixed to which a person anchors the line with a hook, to be held securely and prevent a fall. This point must be able to withstand a weight of 5000 pounds for each person anchored.

**Anchorage Connector** consists of synthetic fiber strips, forged steel plates or snap hooks. They must withstand 5000 pounds.

**Belt** is equipment used to carry out any work involving positioning and restriction of movement. This equipment must comply with ANSI Z359.1 standards. Waist belts SHALL NOT be used in a fall arrest system.

**Fall Arrest System** is a system of equipment designed to protect the wearer in the event of a fall, consisting of a full body harness, a shock absorbing lanyard or a self-retracting lifeline, and an anchor point.

**Full Body Harness** is equipment that consists of belts, which go around the body in such manner that they distribute the force generated on an individual as he/she falls, reducing potential injury. This equipment must comply with ANSI Z359.1 standards.

**Fall Restraint System** is a system of equipment designed to prevent the wearer from falling;

usually consisting of a safety waist belt or a full body harness, a non-shock absorbing safety lanyard and an anchor point.

**General Rules** are rules which apply to all employees, vendors, visitors and contractors regardless of where they work or what they do.

**Job Specific** are requirements directly associated with a specific job, task or occupation.

**Lanyard** is a short flexible rope or strap webbing, which meets ANSI Z359.1 specifications, used to connect the worker's safety harness or belt to an anchor point. Lanyards shall not exceed 6 feet in length and are only accepted with self-locking snap hooks or self locking rebar hooks. Lanyards can be divided into two categories: which are shock absorbing and non-shock absorbing. Shock absorbing lanyards should be used whenever there is a risk of free fall and will have a maximum deceleration distance of 3.5 feet.

**Life Line** is a rope or cable used to remove an individual from a hazardous environment in the event of an emergency.

**Miller Grip FBA (Friction Bolt Anchor)** is a component that when correctly inserted into a 39mm friction bolt will provide a 5000 lbs anchorage point for a fall protection system. The Miller Grip FBA is a portable/reusable anchorage device designed to be used in underground mining applications.

**Positive Contact** is when radio or other types of verbal communication are used by more than one person to communicate a need and all persons understand the communication and its intent. A reply back as to having received, understood, agree, or disagree with the communication is required for the completion of the positive contact.

**Pre-Use Inspection** is a daily inspection of vehicles and equipment that shall be completed prior to operation.

**Self Retracting Life Lines (SRL or Sala Block)** are components used to prevent excessive slack build up in a lanyard which meets ANSI Z359.1. The line extends and retracts automatically as a worker moves up or down reducing the fall distance to inches when used properly.

**Tie Back Lanyard** is a lanyard designed to be tied back upon itself. A tie-back lanyard is designed to be wrapped around anchorages (beams, pipes, etc) and the self locking snap hook secured back on the lanyard.

**Work Area Inspection** is an inspection of the area an employee may work in and/or has responsibility for (e.g., dump, pit, grind, crusher, etc.) to identify possible health and safety hazards/risks which then must be reported and corrected.

**Work at Height** is all work performed whenever there is a danger of falling, which could cause personal harm.

### 3.2 Acronyms

<b>ANSI</b>	American National Standards Institute
<b>FBA</b>	Friction Bolt Anchor
<b>HSLP</b>	Health, Safety and Loss Prevention
<b>IMS</b>	Integrated Management System
<b>ISEA</b>	International Safety Equipment Association
<b>PPE</b>	Personal Protective Equipment
<b>SRL</b>	Self Retracting Life Line

## 4.0 ROLES AND RESPONSIBILITIES

### 4.1 Document Owner

Health, Safety and Loss Prevention

### 4.2 Responsible Roles and Position-Holders

#### 4.2.1 Contractors/Vendors

Contractors/Vendors are responsible for ensuring their employees working on sites understand and comply with the requirements as outlined in this procedure.

#### 4.2.2 Employees and Contracted Employees

All employees in any position whether company employees or contracted employees working on any company site are responsible for complying with the requirements as outlined in this procedure.

#### 4.2.3 Visitors

Visitors are anyone not employed by the company in any capacity but are traveling or touring on the site. They are responsible for complying with the requirements as outlined in this procedure.

#### 4.2.4 HSLP

HSLP is an employee working under and including the director of HSLP. They are responsible for periodically auditing for compliance to this procedure, including inspection records, and for assisting areas in correct selection of fall protection and ensure approved fall protection equipment is available and is being utilized as appropriate for task.

#### 4.2.5 Supervisor/Foreman or Designee

Supervisor/Foreman or Designee can be an employee or a contractor/vendor working or traveling on any company site. They are responsible for enforcement of all requirements, rules and established guidelines as outlined in this procedure. They ensure personnel in his/her responsibility are provided with needed and necessary training for this procedure.

## 5.0 DIRECTION

All employees, vendors, contractors and visitors traveling/working on site shall comply with and ensure personnel accountable to them comply with the following requirements of this procedure.

### 5.1 General Work Guidelines

5.1.1 Fall protection equipment shall meet the requirements of ANSI Z359.1.

5.1.2 Employees shall select, wear and use the appropriate fall protection system as required by the procedure whenever there exists the potential for a fall. Shock absorbing lanyards will not be used for fall restraint. If uncertain what to use, consult with a supervisor.

5.1.3 Ensure the anchor points used are appropriate and as high as feasible to reduce fall distance should a fall occur.

- 5.1.4 Employees must inspect the fall equipment daily before any work at heights. The inspection should identify breaks, cuts, rust on metal parts, wear on seams/ threads, cleanliness and others hazards. Properly store and care for all fall protection equipment
- 5.1.5 If any fall protection equipment has been used to arrest a fall, this must be immediately reported to the supervisor.
- 5.1.6 When choosing an anchor point, it must be located above the worker's head or as high as feasible so the distance of falling is as short as possible.
- 5.1.7 All fall protection devices will be marked with an in-service date at time of issue. (If an in-service date cannot be determined, then the date of manufacture will be used).
- 5.1.8 Do not hang anything from fall protection equipment. Use a sturdy canvas bag to carry materials or tools and hang it from a support point within the work area.
- 5.1.9 Any work requiring assembly must be done on the ground in order to minimize work at height.
- 5.1.10 If there are people working at lower levels, a canvas must be placed (under the net, if applicable) at a distance suitable to protect people from any falling materials or tools.
- 5.1.11 If there is no one working at a lower level, the perimeter of the Work at Height area must be fenced with a red tape and signs reading: "DANGER – KEEP OUT," "PERSONNEL WORKING OVERHEAD," or similar message.
- 5.1.12 It is forbidden to leave or store surplus material, cuttings, bolts, tools, etc. on structural beams, roofs, uncompleted levels and the like.
- 5.1.13 In assembly work involving high levels and voids, hand rails or strong platforms with stops must be placed around the hole to prevent falls.
- 5.2 Supervisors**
- 5.2.1 Ensure that fall protective equipment inspections are conducted annually and documented.
- 5.2.2 The supervisor must make sure that life lines and anchors are capable of withstanding the force produced by the fall of all the persons anchored to the line.
- 5.2.3 Ensure that the life line systems and nets are properly designed and installed, and inspect them daily.
- 5.2.4 Make sure that all personnel have their PPE for working at heights.
- 5.2.5 Make sure that the personnel are anchored through the anchor line at all times.
- 5.2.6 Provide proper fall protection equipment and ensure the fall protection system being utilized is appropriate for the task.
- 5.2.7 Ensure that all employees use appropriate fall arrest or fall restraint systems.

### 5.3 Inspection and Maintenance

- 5.3.1 Before each use, visually inspect all the fall protection equipment (belts, anchor lines, harnesses, ropes or lanyards, hooks, connectors) looking for the following:
- (a) Webbing: damage such as frayed edges, broken fibers, pulled stitches, cuts, burns, unusual wear and chemical damage.
  - (b) Metal Fixtures: damage such as cracks, breaks, wear, rough or sharp edges, corrosion or distortion.
  - (c) Self-locking Snap Hooks or Rebar Hooks: damage such as distortion, cracks or corrosion.
  - (d) Self-Retracting Life Lines: cable or webbing should be pulled out and inspected for damage, corrosion or distortion.
  - (e) Inspect markings or tags on equipment: They must be present and fully legible.
  - (f) Pinches, mashes, cuts or unraveling of the lines and damage in general.
- 5.3.2 Fall protection equipment must be maintained as frequently as may be required to guarantee proper operation and to prevent premature wear. Basic maintenance consists of the following:
- (a) Remove any dirt from the surfaces using a sponge moistened with clean water.
  - (b) Complete cleaning by wetting a sponge with a mild soap and water solution. DO NOT USE DETERGENTS.
  - (c) Dry the equipment with a clean cloth and hang it so it will finish drying. Equipment must not be placed close to excessive heat.
  - (d) Once dry, store the equipment in a clean and dry place free of any steam or gases that produce rust.
- 5.3.3 Remove all defective equipment from service and put a label in a visible place, reading: "DO NOT USE."
- 5.3.4 If the equipment has been used to arrest a fall, regardless of the distance, immediately remove it from service, destroy it and dispose; in the case of a retractable lanyard, place a "DO NOT USE" tag on it and give it to your supervisor.
- 5.3.5 Replace fall protection gear 5 years from the date equipment was put into service, to ensure that this happens an annual inspection of all fall protection will take place and the following information tracked:
- Date of Inspection;
  - Department;
  - Inspected by;
  - Number Inspected; and
  - Number Destroyed and Replaced.

## 5.4 Use

- 5.4.1 Appropriate fall protection is required whenever there is a danger of falling which could cause personal harm.
- (a) Safety belts must only be used for fall restraint. They must never be used when there is potential for falls to a different level. Surface maintenance will not use safety belts.
- (b) A full body harness with a self-retracting lifeline must be used when working at height with a fall potential that is less than 18 feet. (With the exception of controlled mine rescue activities).
- (c) A full body harness with lanyard and shock absorber or a full body harness and self-retracting lifeline is required when total fall height is greater than 18 feet. (With the exception of controlled mine rescue activities.)
- 5.4.2 Fall protection must be used when a worker is within 10 feet of a roof edge, open hole, open stope or other unprotected edge.
- 5.4.3 In the case of work at heights where a life line is not used and movement is required on the structures, workers must use a two-way lanyard line (100% tie off).
- 5.4.4 Fall protection must always be used when working over moving machines, hazardous chemicals, over slopes (de-thatching and samplings) and when there are no hand rails, guards or other fall protection devices.
- 5.4.5 Work areas must be cordoned off in such away to prevent entrance of personnel beneath working areas when working on roofs or surfaces above 12 feet. If the area cannot be effectively cordoned off, or if employees are working below the work at heights above 12 feet, a net must be placed around the work to prevent falling materials from hitting those below.
- 5.4.6 If people move along split levels or slopes and there is a possibility to fall, the edges facing the space must have hand rails. The hand rails must have pipes, battens or 3/8" steel cables with a resistance of 200 pounds located 42 inches high (upper hand rail) and 24 inches high (intermediate hand rail), respectively, of the scaffolds platform.
- 5.4.7 All bridges connecting the same level or split levels to allow people to pass must have hand rails.
- 5.4.8 Fall protection must be used in accordance with the procedure.
- 5.4.9 Anchor points for a fall arrest system must be capable of supporting no less than 5000 pounds per employee attached.
- 5.4.10 Anchor points for a fall arrest systems shall be installed in such a matter as to minimize "Swing Fall."
- 5.4.11 Lanyards SHALL NOT be linked together or knotted.
- 5.4.12 Personal fall protection equipment SHALL be worn whenever working from man lifts or man baskets. Man lifts or Man baskets SHALL be provided with anchor points capable of supporting no less than 5000 pounds per employee attached.