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|  | **APARNA PROPERTY MANAGEMENT SERVICES PRIVATE LIMITED**  **STANDARD OPERATING PROCEDURE FOR HEIGHT WORK PERMITE** |

**Purpose**: To establish, document to set out the requirements for procedure that ensures the health and safety of all persons who work at heights on any of worksites. Serious accidents can result from falls. All employees of the COMPANY must utilize fall protection equipment according to the procedure to prevent or minimize accidents due to falls.

**Scope**: This procedure provides guide lines on Height work process &shall be carried out in safe smooth environment by all the BIAC staff members.

**Process Owner**: Power Network In-charge / Engineers /Operators and Technicians.

**Prerequisites:** All employees & contractors working on site shall comply and ensure to follow this procedure.

**Responsibility:** Technician / Engineer**.**

**Operational Procedure:**

**General Work Guidelines**

1. Employees shall select, wear and use the appropriate fall protection system as required by the procedure whenever their exists the potential for a fall. Helmets, Safety jackets, Safety shoes, Lanyards and Safety horns will be applicable depending on heights.
2. 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 other hazards.
3. Properly store and care for all fall protection equipment if any fall protection equipment has been used to arrest a fall, this must be immediately reported to the Supervisor. 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.
4. 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. Any work requiring assembly must be done on the ground in order to minimize work at height.
6. 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.
7. 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 WORKINGOVERHEAD” or similar message.
8. It is forbidden to leave or store surplus material, cuttings, bolts, tools, etc. on structural beams, roofs, uncompleted levels and the like. IN assembly work involving high levels and voids, hand rails or strong platforms with stops, must be placed around the hole to prevent falls.

**Responsibilities of engg**:

1. Ensure that fall protective equipment inspections are conducted annually and documented by Engineer /Environmental officer.
2. Ensure that the life line systems and nets are properly designed and installed, and inspect them daily.
3. Make sure that all personnel have their PPE for working at heights.
4. Make sure that the personnel are anchored through the anchor line at all times.
5. Provide proper fall protection equipment and ensure the fall protection system being utilized is appropriate for the task.
6. Ensure that all employees use appropriate fall arrest or fall restraint systems.

## Procedures:

This procedure applies to all functional areas, operations, offices, including employees, Vendors, visitors and contractors within the scope of the Integrated Management System is understood, applied and observed within their area of authority.

## Safe Use of Ladders

As a rule ladders should be used as a means of access and egress or for short-term work. Mobile platforms, elevated work platforms or scaffolds should be used for heavy or lengthy work. If a ladder is used, ensure that

1. Only industrial rated ladders having a minimum load rating of 120 kgs are used in the workplace.
2. Only one person is on a ladder at any one time.
3. When ascending or descending the ladder, always face the ladder and maintain three points of contact at all times. Do not climb from one ladder to another.
4. When working on a ladder, always work within easy arms reach and remain centered between the stiles, maintaining three point of contact.
5. A tool-pouch, shoulder bag or haul bag is used to convey tools.
6. Only light work is undertaken while on the ladder, where three points of contact can be maintained and tools can be operated safely with one hand.
7. Where a portable or fixed ladder is used as a working platform and a fall of more than 1.8 meters is possible, a fall-restraint or arrest system should be used.
8. Do not attempt to ‘walk’ or move a ladder while a person is on the ladder
9. No person stands on a ladder any higher than 900 mm from the top.
10. Portable ladders are not erected on elevated walkways, scaffolding or elevated work platforms to gain extra height.
11. Ladders are not used for ‘hot work’ such as welding or oxy-acetylene cutting.
12. Two persons handle long and heavy ladders (greater than 20 kg).
13. The manufacturer’s instructions regarding the erection use and maintenance of the portable ladder are followed.
14. Metal, wire reinforced or otherwise conductive ladders shall not be used on or near equipment if an electrical hazard might result from their use.

## Pitch angle

1. A portable ladder should be positioned at a slope of 1 in 4 e.g. a 4.0 meter long ladder should be placed with the foot of the ladder 1 meter out from the wall as illustrated in figure
2. Appropriate fall protection is required whenever there is a danger of falling which could cause personal harm.
3. 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.
4. 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.
5. A full body harness with lanyard and shock absorber or a full body harness and Self-Retracting Lifeline (SRL) is required when total fall height is greater than 18 feet.
6. Fall protection must be used when a worker is within 10 feet of a roof edge, open hole, open stop or other unprotected edge.
7. 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).
8. 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.
9. Work areas must be cordoned off in such a way to prevent entrance of personnel beneath working areas when working on roofs or surfaces above 12 ft. If the area cannot be effectively cordoned off, or if employees are working below the work at heights above 12 ft. a net must be placed around the work to prevent falling materials from hitting those below.
10. 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.
11. All bridges connecting the same level or split levels to allow people to pass must have hand rails.
12. Fall protection must be used in accordance with the procedure. Anchor points for a fall arrest system must be capable of supporting no less than 5000Pounds per employee attached.
13. Anchor Points for a fall arrest systems shall be installed in such a matter as to minimize “Swing Fall”. Lanyards SHALL NOT be linked together or knotted.
14. 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.

**Safety Instructions:**

Remove all defective equipment from service and put a label in a visible place, reading. “DO NOT USE”. If the equipment has been used to arrest a fall, regardless of the distance, immediately remove it from service, destroy it and dispose of it; in the case of a retractable lanyard place a “DONOT USE” tag on it and give it to your supervisor.

**Revision Guide:**

Any change in the systems will need a change in the SOP.

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