

## SECTION 4.0

# FALL PROTECTION

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## Document Change History

Edition Number	Reason and Description of Change	Affected Pages	Effective Date
1.0	New	All	15 <sup>th</sup> December 2014

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## 1 Purpose

This document establishes the procedures for Fall Protection for all ALU employees that have an identified need to use Fall Protection. The Fall Protection Procedure is to ensure that employees are protected from falls from elevated work areas and when working above dangerous equipment.

## 2 Scope

This section describes the specific procedures for using a Personal Fall Arresting System. The procedures in this section apply to all work operations in elevated work areas. The procedures in this section shall be implemented by all Alcatel-Lucent Field Operations to ensure that employees working in elevated work areas are protected from falls and further bodily injuries in the event of a fall. All Alcatel-Lucent operations and locations (owned, leased or customer premises) shall comply with this section. (Working off portable ladders is exempt from this section). The fall protection system must be worn if:

The potential fall is 6 feet (1.8 meters) or more and the employee must work within 6 feet (1.8 meters) of an unprotected edge (distance from the unprotected edge is increased to 18 feet (5.5 meters) if wind speed is over 20 mph [32km/hr] constant or gust), these heights and distances to the unprotected edge may be different as per local regulations, Alcatel-Lucent approach shall be to adhere to the most stringent recommendation.

If a vertical lifting device is used under certain conditions (i.e., when working on elevated equipment platforms with no guardrails, when working outside of scissors lifts\* guardrails, when working from a boom lift platforms\*),

Note: \*Contact your Regional EHS Manager for necessary training involving the use and operation of vertical lifting devices (e.g., scissors lifts, boom lifts). The use of Bucket Trucks is not allowed. Employees need to work above dangerous equipment, or

If a fixed ladder greater than 20 feet ( 6.0 meters) in length with no protective caging must be climbed (Working off portable ladders is exempt from this section).

## 3 Roles and Responsibilities

Individual/Group	Roles/Responsibilities
	Some of the roles and responsibilities can be done by the same person
Field Operation	<ul style="list-style-type: none"><li>Ensuring that affected employees are properly trained by attending training course before work is performed</li></ul>

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<p>Managers</p> <p>If the work area is found to contain a fall hazard such as those listed under the Scope (e.g., working at or above 6 feet (1.8 meters) within 6 feet of an unprotected edge).</p>	<p>and have obtained external certification by a recognized Training Institution before the work is performed.</p> <ul style="list-style-type: none"><li>• Making sure affected employees have access to this Procedure.</li><li>• Providing each authorized employee (employees trained in Fall Protection) with approved Personal Fall Protection Equipment.</li><li>• Ensuring that a Risk Analysis, Pre Climbing meeting (Appendix B if applicable) and a Local Emergency Response Action Plan - Fall Rescue Emergencies (Appendix A) applicable to local operations are prepared and implemented when the use of Personal Fall Arrest Equipment is required. Refer to Appendix A for a sample of a Local Emergency Response Action Plan - Fall Rescue Emergencies applicable to operations utilizing fall arrest equipment. The Regional EHS Manager can be contacted for assistance with this Plan.</li><li>• Understanding the Local Emergency Response Action Plan - Fall Rescue Emergencies for their local working at heights Installation operations.</li><li>• Reviewing the Local Emergency Response Action Plan - Fall Rescue Emergencies with Installers(Appendix A), posting in an obvious location (where possible), and including a copy in each Personal Fall Arrest equipment kit.</li><li>• Assigning two Installers to operations requiring the use of Fall Arrest Equipment.</li></ul>
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	<ul style="list-style-type: none"><li>• Ensuring that all Installers and Maintenance Technicians at the site have a current First Aid-CPR certification.</li><li>• Ensuring that a First Aid kit is available at the site.</li><li>• Coordinating the availability of Personal Fall Arrest Equipment kits assigned to their location for annual kit inspections conducted by their Regional EHS Manager.</li><li>• Notifying the Regional EHS Manager of any incident where a fall has been sustained and writing an incident report after such incident has occurred.</li><li>• Making sure equipment involved in a fall or rendered damaged or defective has been taken out of service and tagged pending further evaluation by the equipment manufacturer.</li></ul>
<b>Authorized Employee</b>	<ul style="list-style-type: none"><li>• Visually inspect fall protection equipment prior to each use. If fall protection equipment is damaged, mark as <u>"DAMAGED DO NOT USE"</u> and dispose per your local guidelines.</li><li>• Contact their Regional EHS Manager prior to using the fall protection equipment.</li><li>• Maintain a buddy system during operations that require the use of Personal Fall Arrest Equipment.</li><li>• Understand and follow the Local Emergency Response Action Plan - Fall Rescue Emergencies for their local working at heights Installation operations.</li><li>• If trained, give emergency assistance to the best of</li></ul>

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	<p>their abilities.</p> <ul style="list-style-type: none"><li>• Identify the location of medical facilities and Fire Rescue closest to the immediate work area.</li><li>• Ensure means of communication are established prior to starting any operations requiring the use of Personal Fall Arrest Equipment.</li><li>• Ensure adequate alternate means of communication are identified when line or wireless means are not available or effective.</li><li>• Rescue suspended workers as quickly as possible without putting other personnel at risk.</li><li>• Adhere to all Fall Protection Procedures. These responsibilities also include:<ul style="list-style-type: none"><li>• Have obtained certification by a recognized training Procedure.</li><li>• Participating in scheduled Fall Protection Training sessions as directed.</li><li>• Performing all work functions according to instructions.</li><li>• Proper usage of the Personal Fall Arrest Equipment.</li><li>• Reading and understanding fall protection warnings and instructions included in this section before using the equipment.</li><li>• Storing and maintaining equipment in accordance with manufacturer's instructions to prevent damage of equipment.</li></ul></li></ul>
	<ul style="list-style-type: none"><li>• Formally inspect Personal Fall Arrest Equipment at least annually.</li></ul>

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<b>Regional EHS Managers</b>	<ul style="list-style-type: none"><li>• Be available to assist in the interpretation and implementation of the Fall Protection Procedure.</li><li>• Provide Fall Protection training.</li><li>• Assist in investigations of accidents involving the use of Personal Fall Arrest Equipment.</li></ul>
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## 4 Definitions and Acronyms

**Anchorage:** A secure point of attachment for lifeline, lanyards, or deceleration devices. A reliable anchorage point must be strong and sturdy, capable of supporting the high impact of falling a distance of no more than 6feet.

**Competent Person:** Employee who is knowledgeable of the work being performed, who has been adequately trained in fall protection, and who has the absolute authority to halt a job if a safety hazard becomes apparent. Competent persons are the only employees authorized to use approved Personal fall Arrest System. The term “Authorized Employees” will be used as a synonym to “Competent Persons”.

**Affected Employee:** An employee whose work area requires him/her to work at a height of 6 feet or more and within 6 feet (1.8 meters) of an unprotected edge, work above dangerous equipment, work from a vertical lifting platform under certain conditions or climb a fixed ladder that has no caging system and which is greater than 20 feet (6 meters) in length.

**Full-Body Harness:** A body system that distributes the impact energy of a fall over the shoulders, thighs, and buttocks. (Body belts are not acceptable as part of a Personal Fall Arrest System, and shall not be used as a means to arrest a fall.)

**Impact Loading:** Fall protection equipment that has been subjected to an impact (free fall weight of an employee) during a free fall.

**Lanyard:** A flexible strap, which may have a connector at each end for connecting the body harness to a lifeline or anchorage.

**Orthostatic Intolerance:** Condition caused by the accumulation of blood in the veins while in a sedentary position.

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**Personal Fall Arrest System:** A system used to stop an employee in a fall from an elevated working surface. It consists of an anchorage point, connectors, body harness, and may include a lanyard, deceleration device, lifeline or combination of these.

**Regional EHS Manager:** individual assigned to support a specific geographic area in North America.

**Suspension Trauma:** Fatalities resulting from orthostatic intolerance are referred as “harness-induced pathology” or “suspension trauma”.

**Unprotected Edge:** A roof parapet or edge that is less than 39 inches (1.1 meters) high. A roof parapet may only serve as a guardrail if it is at least 39 inches (1.1 meters) high.

## ACRONYMS

EHS	Environment, Health and Safety
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## 5 Referenced and Supplementary Documents

Document Number	Document Title or Source
Appendix A	Local Emergency Response Plans - Fall Rescue Emergencies
Appendix B	Risk Assessment / Tower Climbing Plan

## 6 Process Flow Diagram

Not Applicable

## 7 Process/ Procedure/ Work Instruction

### 7.1 Approved Personal Fall Arrest Equipment

#### 7.1.1 General

- 7.1.1.1 The Personal Fall Arrest System Kit shall be used for approved fall protection. The kit shall be used for all elevated work activities when elevated fall hazards exist. Contact your local EHS organization for details on how to obtain the kit.
- 7.1.1.2 Type of Job and System used on: All elevated work operations performed within 6 feet (1.8 meters) of an unprotected edge with the potential for a fall of greater than 6 feet requires the use of a Personal Fall Arrest System. This includes but is not limited to roof edges, the use of vertical lift platforms under certain conditions, non-protected fixed ladders greater than 20 feet (6 meters) in length. Also Installation operations meeting this criteria should be assessed for the need for fall protection (contact your assigned EHS Manager or EHS Professional for assistance if necessary).
- 7.1.1.3 The body harness, lanyards, lifelines, and other components of the Personal Fall Arresting System shall be used only for employee protection and not for hoisting material.
- 7.1.1.4 Make sure all equipment is compatible. DO NOT mix and match equipment from different manufacturers unless your EHS organization has approved the configuration.
- 7.1.1.5 Do not alter or substitute any components of the Personal Fall Arresting System. Any unauthorized tampering with the Personal Fall Arresting System could unnecessarily jeopardize your safety. Use only the attachments included in the Personal Fall Arrest System Kit for the body harness.

### 7.2 Training

#### 7.2.1 Training

All affected employees must be trained to ensure that they:

- Recognize site/work conditions that will require implementation of this Procedure.
- Know the proper use of Personal Fall Arrest Equipment.
- Understand the purpose of the Fall Protection Procedure.

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- Achieve external certification to work in heights by an recognized Training Institution.

### **7.2.2 Training Elements**

At a minimum, affected employees shall be trained in Fall Protection Training Course. The training shall include:

- Identifying fall hazards
- Proper methods of donning, adjusting, and interconnecting the equipment
- Function and performance characteristics of each piece of equipment
- Proper attachment methods of equipment
- Proper anchoring and tie-off techniques
- How to inspect, use and maintain the Personal Fall Arrest Equipment
- How to estimate the maximum arresting force for a safe and acceptable weight limit
- What to do before and after a fall to protect the user from injury.

### **7.2.3 Emergency Response Plan**

The Fall Protection Training course will also train employees and managers on how to establish an emergency response action plan for fall rescue emergencies, and on what to do if a fall occurs (See Appendix A). The plan should contain:

- Methods of rescue
- Rescue personnel availability
- Type of equipment available for rescue
- Effective means for summoning rescue personnel
- Steps to take after Personal Fall Arrest Equipment has been subjected to impact loading

Contact the Regional EHS Manager for training information and/or to schedule training classes.

## **7.3 Guidelines for Usage of Personal Fall Arrest System**

### **7.3.1 General Requirements**

- The Personal Fall Arrest Equipment must be used by trained and qualified employees only.
- Any equipment exhibiting unusual wear or deterioration must be marked as “damaged” and immediately returned to the Tool Room.

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- All Personal Fall Arrest Equipment subjected to impact loading shall be immediately removed from service, marked as “defective” and disposed. In some countries, the defective equipment is to be returned to the equipment manufacturer or approved supplier evaluation.
- Components of the Personal Fall Arrest Equipment shall not be altered in anyway.
- Do not attach two double locking snap hooks to each other.
- Do not attach double locking snap hooks to the lip of an H or I-beam.
- Do not attach snap hooks or carabiners to each other unless the proper configuration (carabiner attached to the neutral eye) is used.

### **7.3.2 Specific Instructions - Body Harness**

#### **7.3.2.1 The employee using the harness shall:**

- Visually check all buckles to assure proper and secure connections before each use.
- Ensure the harness fit snugly and is positioned properly.
- Ensure all fasteners are closed and secure.
- Not attach multiple snap hooks to a single D-ring.
- Not use the harness for any unapproved activities such as hoisting up tools or equipment.

### **7.3.3 Specific Instructions - Anchor Points**

- Ensure anchor point is at a height that limits fall distance to the shortest possible free fall (maximum 6 feet - 1.8 meters).
- A reliable anchor point must be identified and evaluated by a competent person at the job site (e.g., trained management representative, crew leader, installer, or customer representative).
- An anchorage point is not considered reliable if it has been exposed to the elements such as salt air, chemicals, corrosion, abuse, rust, etc.
- An anchorage point must be independent from the means supporting or suspending the employee.

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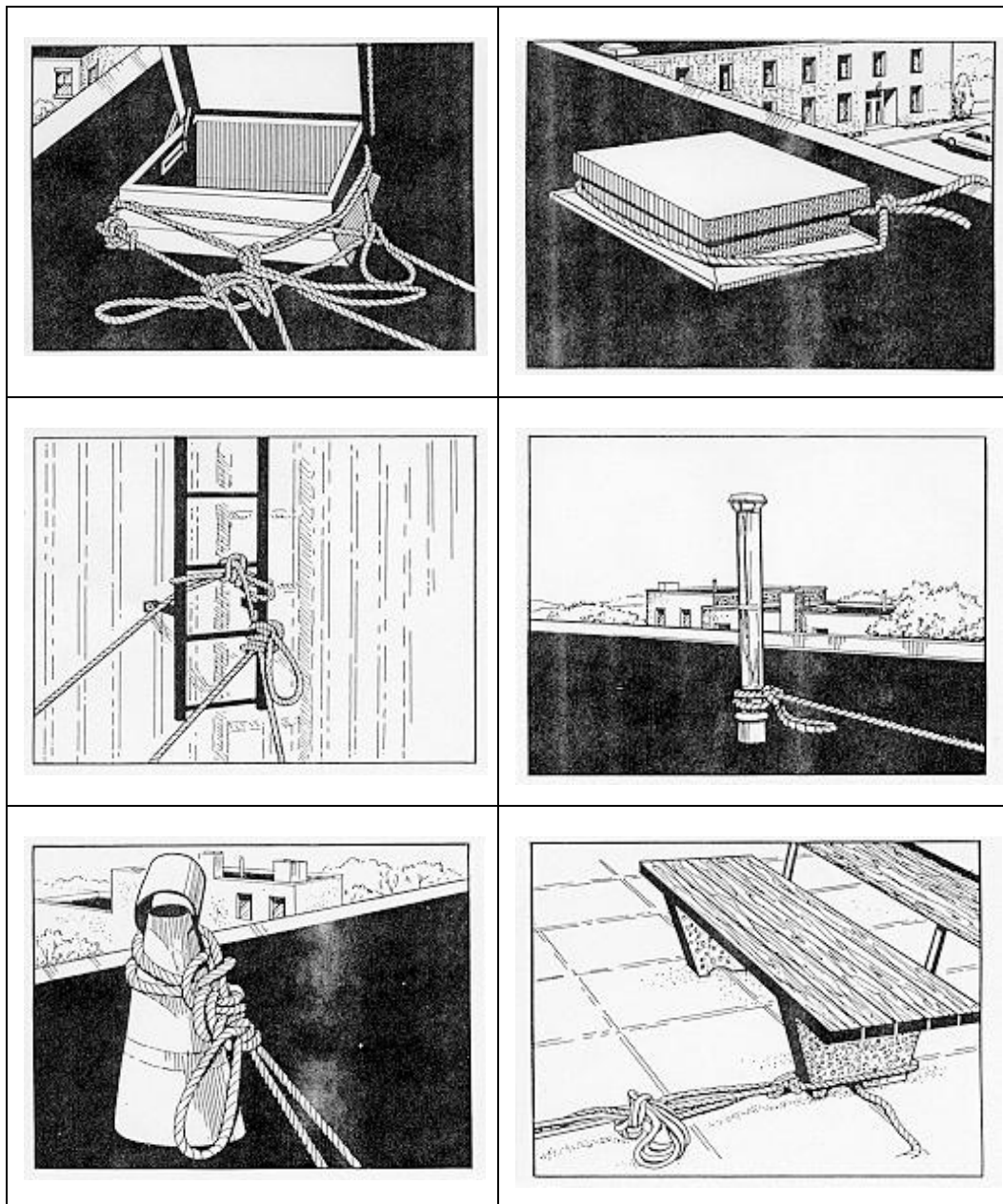
- Each employee shall use a separate anchorage point. No more than one installer shall be attached to a single anchorage point.
- Guardrails, electrical components, air conditioning equipment, exhaust and piping systems shall not be used as reliable anchorage points. (Refer to FIGS. 1 and 2 for examples of reliable and unreliable independent anchorage point.)

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**7.3.4 DO's and DON'T's**

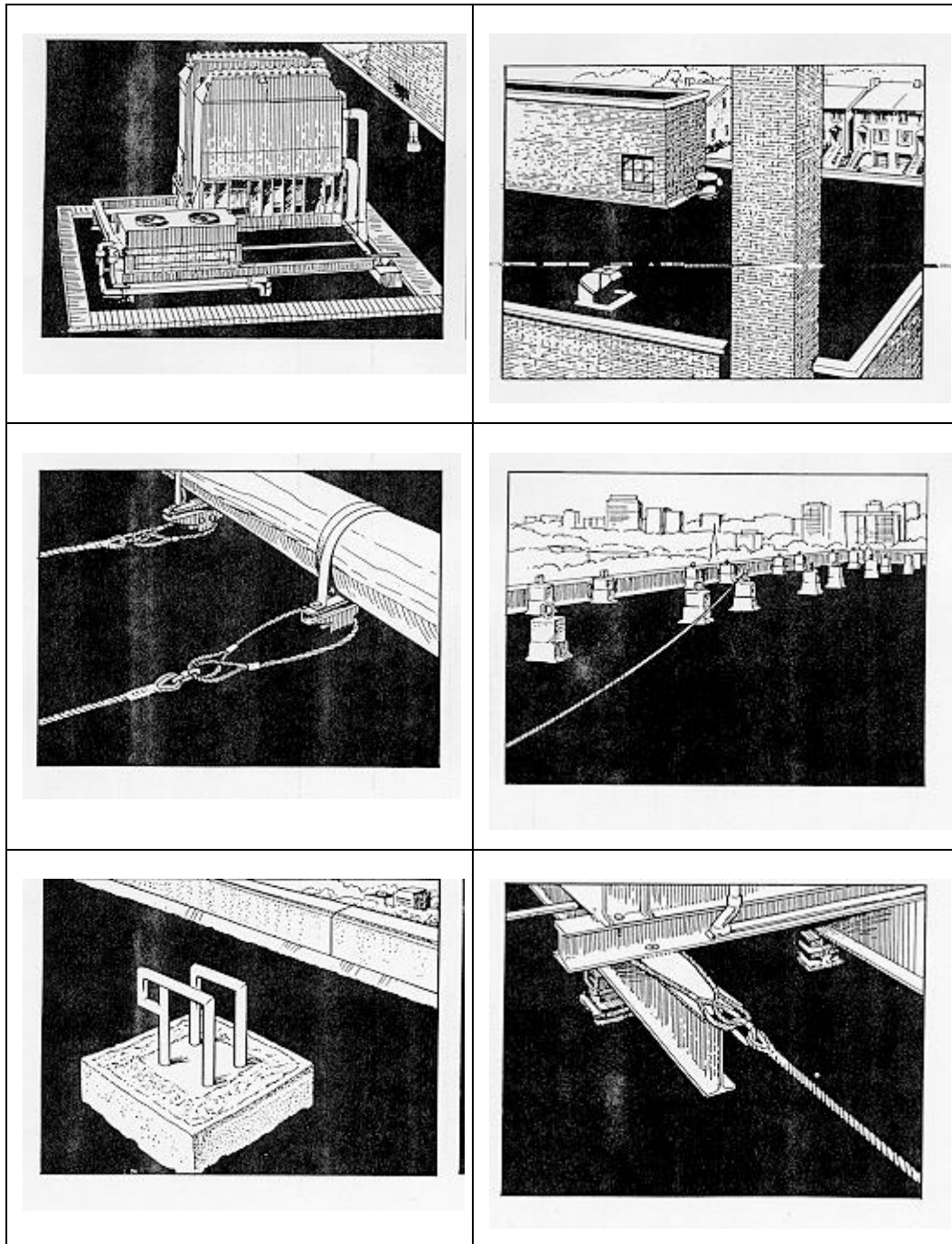
The following figures illustrate the DO's and DON'Ts when deciding on anchorage points.

**DON'TS**



**FIG. 1 ANCHORAGE POINTS DON'Ts**

**DO'S**



**FIG. 2 ANCHORAGE POINTS DO's**

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## 7.4 Inspection/Storage

### 7.4.1 Inspection

7.4.1.1 The Personal Fall Arrest Equipment shall be visually inspected prior to each use for the following:

- Mildew, wear and damage
- Cuts, tears, and abrasions
- Stretching
- Loose or damaged mountings
- Non-functioning parts
- Cracked, broken, rusted or deformed D-rings and snap-hooks
- All other damage or deterioration such as:
  - Contact with fire, acids, or other corrosives
  - Distorted hooks or faulty hook springs
  - Tongues unfitted to the shoulder of buckles
  - Ropes showing wear or internal deterioration.

7.4.1.2 Defective components shall be marked as “defective” and removed from service. All defective equipment must be returned to the Tool Room. Incomplete kits must be tagged as “Incomplete” and checked prior to use until defective components have been replaced in accordance with manufacturer’s specifications. Incomplete kits may be used if they have all components needed for the job. . If a kit is missing the kit’s harness, the kit must be tagged as “Out of Service” until the harness is replaced.

7.4.1.3 The Personal Fall Arrest Equipment shall be formally inspected by the local EHS Organization at least annually.

### 7.4.2 Storage

- All components of the Personal Fall Arrest Equipment shall be stored in a clean dry area.
- No components shall be stored such that it may be exposed to grease, oil, chemical, strong sunlight or other types of contamination which could degrade the equipment.
- Do not put wet components of the fall kit back in the storage bag as this will lead to potential rust and mildewing of kit components.

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## **7.5 Responding to Fall Incidents**

### **7.5.1 General**

7.5.1.1 Assistance from Rescue personnel will be needed when an employee sustains a fall while using a Personal Fall Arrest System.

Note: Research indicates that suspension in a fall arrest device can result in unconsciousness, followed by death, in less than 30 minutes.

7.5.1.2 Rescue personnel must be contacted immediately after a fall occurs. Installation Management and the Site Representative must be also notified of the emergency immediately.

### **7.5.2 Preventing Prolonged Suspension**

7.5.2.1 Employees involved in an operation where Personal Fall Arrest Equipment will be used, must be familiar with their Risk analysis, Pre-Climbing meeting and Local Emergency Response Action Plan - Fall Rescue Emergencies (See Appendix A) and take the following pre-operational steps in order to prevent prolong suspension:

- Utilize equipment as a restraining device whenever possible to prevent proximity to unprotected heights
- Identify availability of effective means of communication to summon outside help
- Identify and test alternate means of communications when wireless or wire line communications are not available or operational
- Identify location of closest Health facility, or clinic
- Ensure availability of reliable transportation
- Contact Rescue personnel immediately after a fall occurs
- Identify feasibility of employee rescue by co-workers without putting others at risk

### **7.5.3 Description of Hazard**

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**7.5.3.1 Identifying Orthostatic Intolerance Signs and Symptoms**

An individual who is suspended in a harness that is part of a Personal Fall Arrest System for extended periods of time may experience the following symptoms when approaching orthostatic intolerance:

- Faintness
- Breathlessness
- Sweating
- Paleness
- Hot Flashes
- Increased Heart Rate
- Nausea
- Dizziness
- Unusually Low Heart Rate
- Unusually Low Blood Pressure
- “Graying” or Loss of Vision

#### 7.5.3.2 Degree of Risk of Suspension Trauma

Factors that can affect the degree of risk of suspension trauma are listed below:

- Inability to move legs
- Pain
- Fatigue
- Hypothermia
- Shock
- Cardiovascular disease
- Respiratory disease
- Dehydration
- Blood loss
- Injuries during fall

**NOTE:** Suspended workers with head injuries or who are unconscious are particularly at risk.

#### 7.5.4 Contingency Actions

7.5.4.1 If self-rescue is impossible, or if rescue cannot be performed promptly, the worker should take action to reduce risk of venous pooling by using footholds (loops) in vertical lifeline, placing feet on side of building to get thighs more horizontal or squeezing leg muscles to force blood flow.

7.5.4.2 The suspended worker must be continuously monitored for signs and symptoms of orthostatic intolerance.

#### 7.5.5 Performing Treatment

7.5.5.1 The amount of time spent in the suspended position, with the legs below the heart, affects the manner in which the worker should be rescued. Worker must not be moved quickly into a horizontal position, when he or she had been suspended for an extended period of time.

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**NOTE:** Moving the worker quickly into a horizontal position - a natural reaction - is likely to cause a large volume of deoxygenated blood to move to the heart, if the worker had been suspended for an extended period. The heart may be unable to cope with the abrupt increase in blood flow, causing cardiac arrest. Rescue procedures must take this into account.

7.5.5.2 Rescued workers should be kept in a kneeling position after rescue and gradually lowered over 30 minutes into a prone position unless a head injury prevents this action.

7.5.5.3 If the worker is unconscious, keep the worker's air passages open and obtain first aid.

7.5.5.4 Monitor the worker after rescue, and ensure that a health-care professional evaluates the worker. The worker should be hospitalized when appropriate. Possible delayed effects, such as kidney failure, which is not unusual in these cases, are difficult to assess at the scene.

#### 7.5.6 Summary

7.5.6.1 Once a fall is sustained while using Personal Fall Arrest Equipment, the following steps must be followed:

- Contact Rescue personnel.
- Rescue suspended employee if able to do so without putting other employees at risk.
- Ensure employee receives medical attention.

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- Take equipment involved in the fall out of service and tag with a “Do Not Use” label.
- Notify the Regional EHS Manager of incident.
- Write an incident report. The Regional EHS Manager will assist with follow-up and incident investigation.
- Send equipment marked as defective to be disposed. In some countries, the defective equipment is to be returned to the equipment manufacturer for manufacturer’s or approved supplier’s evaluation. Equipment components will be replaced in accordance with manufacturer’s or approved supplier’s advice.

## **8 Measures**

Effectiveness of this Procedure will be measured through:

- Results of Site Safety Reviews and/or Corporate EHS audits
- Resolution of items found to be in need of improvement
- Results of Personal Fall Arrest Equipment Annual Inspections

## **9 Records**

- Job Hazard Assessments or Job Safety Analyses
- Pre Climbing Meeting
- Personal Fall Arrest Equipment Annual Inspections
- Local Emergency Response Action Plans
- SABA Training Records

**APPENDIX A- LOCAL EMERGENCY RESPONSE ACTION PLAN**

**FALL RESCUE EMERGENCIES**

**YOU MUST CONTACT YOUR REGIONAL EHS MANAGER PRIOR TO START**

State: \_\_\_\_\_ Assigned Location: \_\_\_\_\_

OAM: \_\_\_\_\_ Manager: \_\_\_\_\_

ALU EHS Regional Manager: \_\_\_\_\_

**PRE-OPERATIONAL CHECKLIST**

*(All items listed below must be satisfied before starting any operation that requires the use of Personal Fall Arrest Equipment)*

\_\_\_\_ Approved Personal Fall Arrest Equipment available for use

\_\_\_\_ Complete

\_\_\_\_ Inspected by ALU EHS at least once a year

\_\_\_\_ Inspected by user before each use

\_\_\_\_ Employees involved in operations requiring the use of Personal Fall Arrest Equipment has received Fall Protection training.

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\_\_\_ Effective means of summoning rescue personnel have been identified and established.

\_\_\_ All employees at the site have a current First Aid-CPR certification.

\_\_\_ Complete First Aid kit available at the site

\_\_\_ First Aid-CPR certified employees have been trained in Bloodborne Pathogens

\_\_\_ A buddy system will be maintained at all times.

## **RESCUE OPTIONS**

*(check which apply to your operation)*

\_\_\_ Contact external emergency response services,

\_\_\_ Rescue by co-workers

- Rescue pole/remote hook
- Rollgliss
- Use of ladders or lift devices to reach the person
- Have extra people available to throw a rope to the person and help pull them to safety

\_\_\_ Self Rescue

## **IF A FALL IS SUSTAINED**

Print Date: January 29, 2015

Alcatel-Lucent - Internal  
Proprietary - Use pursuant to Company instruction

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*(All items listed below must be satisfied before starting any operation that requires the use of Personal Fall Arrest Equipment)*

- \_\_\_ Rescue personnel will be contacted to ensure employee will receive standard trauma resuscitation /medical attention once rescued.
  
- \_\_\_ Employee will be rescued as quickly as possible if able to do so without putting Other employees at risk.
  
- \_\_\_ Equipment involved in the fall will be taken out of service and tagged with a “Do Not Use” label.
  
- \_\_\_ ALU Regional EHS Manager will be notified of the incident.
  
- \_\_\_ An incident report will be completed. (ALU EHS will be contacted for assistance and follow-up.)
  
- \_\_\_ Equipment taken out of service will be sent to manufacturer or approved supplier for evaluation. (NOTE: Incident report must accompany the Equipment).

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**APPENDIX B- RISK ASSESSMENT / TOWER CLIMBING PLAN**

LOCATION ADDRESS	TOWER IDENTIFICATION NUMBER	NAME OF COMPETENT PERSON/TEAM LEADER	DATE OF EVALUATION
TYPE OF TOWER <input type="checkbox"/> Self-Support <input type="checkbox"/> Guyed <input type="checkbox"/> Monopole <input type="checkbox"/> Other _____	ACCESS TO WORK AREA <input type="checkbox"/> Fixed Ladder System <input type="checkbox"/> Step Bolts <input type="checkbox"/> Other _____	DESCRIPTION OF WORK TO BE PERFORMED	TOWER HEIGHT WORK HEIGHT

**List of Employees Onsite** (All employees must be certified in tower climbing and rescue. Some of the roles and responsibilities can be done by the same employee.)

Responsibility	Name	Signature
Competent Person / Team Leader		
Ground Support / Designated Rescuer(s)		
Tower Climber(s)		

### Potential Hazards

<b>Environmental Hazards</b>	<input type="checkbox"/> Sun	<input type="checkbox"/> Rain	<input type="checkbox"/> Snow	<input type="checkbox"/> Heat	<input type="checkbox"/> Cold
	<input type="checkbox"/> Ice	<input type="checkbox"/> Night Work	<input type="checkbox"/> Windy or Gusty	<input type="checkbox"/> Other	<input type="checkbox"/> Non applicable
<b>Physical Hazards</b>	<input type="checkbox"/> No ladder safety system	<input type="checkbox"/> No Step Bolts	<input type="checkbox"/> Climb Path Obstructions	<input type="checkbox"/> Wet or Slippery Surfaces	
	<input type="checkbox"/> Other	<input type="checkbox"/> Non applicable			
<b>Other Recognized Hazards</b>	<input type="checkbox"/> Birds	<input type="checkbox"/> Reptiles	<input type="checkbox"/> Insects	<input type="checkbox"/> Electrical Equipment	
	<input type="checkbox"/> RF Exposure	<input type="checkbox"/> Mechanical Equipment	<input type="checkbox"/> High Crime Area	<input type="checkbox"/> Noise	
	<input type="checkbox"/> Electrical Power Lines	<input type="checkbox"/> Other	<input type="checkbox"/> Non applicable		

### Hazard Controls

<b>Equipment/supplies available onsite:</b>	First Aid Kit	<input type="checkbox"/> Yes <input type="checkbox"/> No	Hydration liquid	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Lockout/tagout equipment to de-energize antennas or equipment:</b>	<b>Required</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Available</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>RF Radiation Monitoring Device:</b>	<b>Required</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Available</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Have all tower climbing and rescue employees been trained? Training certifications must be checked.</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> Tower Climbing and Rescue <input type="checkbox"/> First Aid and CPR with Bloodborne Pathogens information				
<b>Has a drop zone of 50% of the height where work will be performed been established/barricaded off?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Do climber and designated rescuer have appropriate climbing equipment to perform required activities?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Has equipment and tower base been inspected? Tower base <u>must be</u> inspected by Competent Person prior to any climbing. Tower shall be inspected as it is ascended to the elevation point where work is being performed.</b>				
<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Has a pre-job briefing been conducted and was it attended by all employees onsite?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Were the following topics covered during the pre-job briefing?</b>	<input type="checkbox"/> Employees Responsibilities <input type="checkbox"/> Hazard Assessments and Work Plan <input type="checkbox"/> Equipment Configuration <input type="checkbox"/> Emergency/Rescue Plan			

**GLOBAL EHS PROCEDURES: FALL PROTECTION**  
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## Tower Climbing Work Plan (Employees shall be connected 100% of the time while climbing, descending and working on the tower.)

<b>Personal Protective Equipment / Safety Equipment</b>	
<input type="checkbox"/> Hard Hat with tether <input type="checkbox"/> Safety Glasses <input type="checkbox"/> Fall Protection <input type="checkbox"/> Hearing Protection <input type="checkbox"/> Gloves <input type="checkbox"/> RF Monitors <input type="checkbox"/> Other	
<b>Fall Protection to be Used</b>	
<input type="checkbox"/> Full Body Harness <input type="checkbox"/> Rope Grab <input type="checkbox"/> Horizontal Lifeline <input type="checkbox"/> Vertical Lifeline <input type="checkbox"/> Self Retracting Lifeline <input type="checkbox"/> Descenders <input type="checkbox"/> Bypass Lanyards <input type="checkbox"/> Anchorage Straps <input type="checkbox"/> Fixed Ladder Safety System	
<b>Method of Hoisting Used</b>	
<input type="checkbox"/> Winch <input type="checkbox"/> Block and Tackle <input type="checkbox"/> Capstan <input type="checkbox"/> Manual <input type="checkbox"/> Crane <input type="checkbox"/> Boom Truck <input type="checkbox"/> Other	
<b>Other Requirements</b>	
<input type="checkbox"/> Lift Plan <input type="checkbox"/> Excavation Permit <input type="checkbox"/> Burn Permit <input type="checkbox"/> Other	

## Equipment Inspection

	NO	YES
Is equipment within inspection cycle?      Indicate next inspection due date:	<input type="checkbox"/>	<input type="checkbox"/>
<b>Harness inspected and suitable for use? No frayed, torn straps or soft ties,</b> <input type="checkbox"/> No frayed/torn/damaged straps <input type="checkbox"/> No damaged/corroded D-rings <input type="checkbox"/> No damaged /corroded <b>buckles</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Lanyards inspected and suitable for use?</b> <input type="checkbox"/> No frayed/torn/damaged straps <input type="checkbox"/> No damaged/corroded D-rings <input type="checkbox"/> Connecting devices working properly	<input type="checkbox"/>	<input type="checkbox"/>
<b>Rope Grab inspected and suitable for use?</b> <input type="checkbox"/> Operating correctly <input type="checkbox"/> No signs of damage/corrosion	<input type="checkbox"/>	<input type="checkbox"/>
<b>Ropes/lifelines inspected and suitable for use?</b> <input type="checkbox"/> Not frayed/torn/damaged <input type="checkbox"/> No signs of mildew	<input type="checkbox"/>	<input type="checkbox"/>
<b>All other components (e.g., carabiners, Fisk Descenders, etc) inspected and suitable for use?</b> <input type="checkbox"/> Operating correctly <input type="checkbox"/> No signs of damage/corrosion	<input type="checkbox"/>	<input type="checkbox"/>
<b>Has any component been subjected to a shock load? WARNING: Any component subjected to a shock load (a fall) shall be removed from service until inspected by the manufacturer and replaced as necessary.</b>	<input type="checkbox"/>	<input type="checkbox"/>
All equipment must be inspected prior to use. Rescue equipment must be inspected prior to starting tower climbing operations. Employees inspecting equipment must sign below:  Climber (s) _____ Date _____ Climber (s) _____ Date _____ Climber (s) _____ Date _____  <div style="text-align: center;">Print Name / Signature</div>	<input type="checkbox"/>	<input type="checkbox"/>

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## Tower Climbing Emergency / Rescue Plan

Are cellular phones functional? ( i.e., charged, working signal)		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If cellular phones are not functional, are other means of communication available?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Radio <input type="checkbox"/> Land Line Phone <input type="checkbox"/> Other _____			
Rescue Equipment has been inspected and is available for use.		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Rescue Procedure: <input type="checkbox"/> Manual <input type="checkbox"/> Outside Services <input type="checkbox"/> Winch <input type="checkbox"/> Ascending/Descending <input type="checkbox"/> Other			
Directions to Location:			
Designated Rescuer(s) will need additional assistance in the event of a high angle rescue operation.		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, please complete the following:			
Local Fire/Rescue Department notified of the:			
tower climbing operation	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
location of the tower	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
type of tower	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
height climbers will be working at	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Local Fire/Rescue Department will be able to assist:		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Predicted Outside Services Response Time:			
Ambulance/Paramedics Emergency Phone Number:			
Location and Phone Number of closest Medical Facility:			
Fire/ Rescue Emergency Phone Number:			
Police Emergency Phone Number:			
<b>Should a fall occur:</b> All items listed below must be satisfied			
<input type="checkbox"/>	Local Fire/Rescue Department will be contacted prior to starting rescue procedures.		
<input type="checkbox"/>	Employee will be rescued as quickly as possible if able to do so without putting other employees at risk.		
<input type="checkbox"/>	Equipment involved in the fall will be taken out of service, tagged with a "Do Not Use" label and retain for evaluation.		
<input type="checkbox"/>	EHS representative will be notified of the fall. Name and Phone Number of EHS representative:		
<input type="checkbox"/>	An incident/accident report will be completed.		