

# Working at Height

### **OHS STANDARDS AND GUIDELINES**

Tak			ntents			
			Height1			
		-	ction			
1						
2		1 de 1	e			
3		- C	and application3			
4	Def	initi	ons and glossary3			
5	Rel	atec	a corporate and international standards and legislation4			
6			s description4			
6	••		eral Rules			
-	.2		tification of Fall Risks			
-	.3		e Working Instructions			
-	.4		uirements concerning planning and execution of work			
-	.5		ning and Practice			
6	.6		hnical			
	6.6.	-	Scaffolds			
	6.6.	_	Ladders			
	6.6.	-	Crane Baskets – Aerial Man Lifts			
~	6.6. 7	-	Mobile elevated work platforms			
0	6.7 Inspection of Fall Protection Equipment					
	<ul><li>6.7.1 Equipment Maintenance</li></ul>					
	6.7.	_	Safety Equipment Design			
7	-	-				
7						
8			entation7			
Ap	Appendices					



		Owner:	Review date:
Standard nr: UPM OHS	5 00900	Jaakko Nikkilä	15.2.2016
Document name	Working at Height		

#### Amendment record

Nr	Date	Section	Amendment
0	14.12.2011		First version
1	1.11.2012	1,3 4, 5, 6,	General phrases to harmonize UPM standards.
		8	Harness use in section 6, headings hierarchy update
2	2.12.2013		No changes in 2013 standard review process
3	9.1.2015	4	Definitions and glossary: Qualified person is a technical educated person.
4	22.1.2016	6.4	New paragraph added: Requirements concerning planning and execution of work
		6.6.4	New paragraph added: Mobile elevated work platforms Changes highlighted in red.

Important: This is a controlled document. The issue of printed and electronic copies is permitted but they are not controlled documents Users will be alerted to changes in the controlled version.

Page 2 of 7



Standard nr: UPM OHS	S 00900	Owner: Jaakko Nikkilä	Review date: 15.2.2016
Document name	Working at Height		

## 1 Introduction

This standard belongs to a series of UPM Safety Standards. Safety Standards describe the minimum requirements for safety in the operations in UPM. Requirements in this document are applicable for all UPM staff as well as contractors work in UPM premises or under UPM supervision. Minimum requirements in the standards are mandatory to all UPM Businesses and Functions. Implementation of the standards, and the follow-up of their use is line management responsibility.

OHS standards official language is English. In case differences in translations English text will apply.

## 2 Purpose

This standard gives minimum requirements to working on height activities. Aim of this standard Safeguard people health and safety at work and to harmonize the approach to working on height in UPM.

## **3** Scope and application

This standard applies to all units within UPM and is applicable to all personnel (UPM employees, temporary workers, contractors and visitors) working on UPM properties.

## 4 Definitions and glossary

Work at Height: works with the risk of falling

Authorized person:

Person trained to utilize fall protection systems and authorized by the company to carry out the task.

Competent Person:

Personnel with appropriate training and knowledge to conduct hazard assessments, provide training to Authorized Person, and have appropriate level of authority by the unit to stop work if necessary. The Competent Person can assist in helping identify which fall protection equipment is best for a given situation.

Qualified Person:

Important: This is a controlled document. The issue of printed and electronic copies is permitted but they are not controlled documents Users will be alerted to changes in the controlled version.



Standar	d nr: UPM OHS	\$ 00900	Owner: Jaakko Nikkilä	Review date: 15.2.2016
Document name		Working at Height		

Is a technical educated person who is qualified to calculate dynamic forces needed to design or determine appropriate certified anchorages for fall arrest systems.

Fall Arrest:

The technique of securing an authorized person to an anchorage using a system that would stop free fall once it has begun and prevents the user from contacting a lower level.

Fall Restraint:

The technique of securing an authorized person to an anchorage using a lanyard short enough to prevent the person's centre of gravity from reaching the fall hazard.

## 5 Related corporate and international standards and legislation

Compliance against national legal requirements is to be followed all times.

#### Related UPM Safety standards:

Permit to work Personal protective equipment Risk assessment Lock out, tag out

## 6 **Process description**

### 6.1 General Rules

Each production unit shall develop and implement a written Plan that addresses working at heights. This Plan will define the scope, authorization, rules, training and methods to control risks associated with working at heights.

The Plan should cover all aspects of working at heights including scaffolding, ladders, man lifts, floor and wall opening, and shall include the following elements at a minimum.

If risk of falling, the minimum starting height from which fall arrest equipment is mandatory: 2m, or stricter if there is risk of injury or according national or local regulation, if more strict.

### 6.2 Identification of Fall Risks

All routine exposures to fall hazards must be identified, and evaluated by a Competent Person. These assessments shall be documented and the risks controlled through active or passive measures.

All other fall hazards not formally evaluated and documented previously shall be evaluated and controls established prior to start of work (in the Work Permit for example).

In all cases, the mandatory hierarchy for working in height risks minimization is the following:
Can the work in height be fully eliminated

Important: This is a controlled document. The issue of printed and electronic copies is permitted but they are not controlled documents Users will be alerted to changes in the controlled version.

Page 4 of 7



Standard nr: UPM OHS	\$ 00900	Owner: Jaakko Nikkilä	Review date: 15.2.2016
Document name	Working at Height		

- Can the work be conducted from a fixed platform
- Minimization of the height, and fall protection systems to be used, example platforms, scaffolds, fixed rails etc.
- Use of personal fall protection (harness, etc.)

### 6.3 Safe Working Instructions

Specific working instructions will be developed or incorporated into existing procedures and shall be based on the fall risk assessments.

Items that could be included in the specific instructions include: type of Fall Protection to be utilized (e.g. fall arrest, fall restraint, and anchorage points), training, equipment inspections, handling of tools in height, signalling, and all other means for working safely.

## 6.4 Requirements concerning planning and execution of work

- 1. Work planning is done properly in advance
- 2. Written work permit shall be issued
- 3. Temporary openings, and excavations must be fenced off or covered
- 4. Procedures exist to prevent/minimise traffic in the hazard area when working in heights or during lifting
- 5. Written work plan is made in case of demanding lifting work (like lifting of heavy objects, lifting with two or more lifts, lifting people)

### 6.5 Training and Practice

All employees who work at height shall be initially trained on proper use of fall protection equipment and all elements of this Standard and local Plan. All training shall be documented and must include:

- 1. When Fall Protection is needed
- 2. Type of equipment available and it's limitations
- 3. How to use the equipment
- 4. Emergency rescue planning

Refresh training is to be done minimum every three years. Training needs are to be reevaluated in case of changes in work positions or tasks, new fall arrest equipment or processes are introduced that present a new hazard for which the previous training did not address. Training needs related to this standard requirements must be assessed and different level of needed competencies taken into account in training plans (e.g. awareness, basic, advance).

Training/refresh training level is to be adjusted to the needs of position based competency requirements

Employees operating man-lifts or similar equipment shall have a valid training certificate from authorized training instructor/company.

Important: This is a controlled document. The issue of printed and electronic copies is permitted but they are not controlled documents Users will be alerted to changes in the controlled version.



Standard nr: UPM OHS	S 00900	Owner: Jaakko Nikkilä	Review date: 15.2.2016
Document name	Working at Height		

### 6.6 Technical

#### 6.6.1 Scaffolds

Shall be designed by a qualified person and constructed by authorised personnel.

All scaffolds shall be tagged with the appropriate colour tag indicating it is safe or not to use and should also indicate max load info and signature of responsible person.

Scaffolds when possible shall always be built with handrails, kick plates, and access stairs.

#### 6.6.2 Ladders

Ladders are not considered as working platforms, but as a means of access from one level to another, and only to be authorized for jobs of short duration (e.g. change bulb or similar).

Each unit shall define internal procedures about the use of ladders indicating authorised types, max height, fixing points, and recommendations for their use.

#### 6.6.3 Crane Baskets – Aerial Man Lifts

When personnel must be lifted via a crane basket a Lifting Plan must be prepared. The Plan must be developed by a Competent Person. The plan shall define the working procedure, potential risks and prevention measures, signalling and closing of the area.

When operating aerial man lifts, operators must utilize a fall restraint system.

#### 6.6.4 Mobile elevated work platforms

When operating mobile elevated work platforms, operators must utilize a fall restraint system.

### 6.7 Inspection of Fall Protection Equipment

Annually or according to manufacturer guidelines or local specific requirements, each unit shall formally inspect all fall protection equipment for proper condition. This inspection shall be documented and performed by a Competent Person.

Only authorized person shall inspect all fall protection equipment prior to each use. This inspection process is taught in the initial and periodic training.

In no case shall faulty equipment be used.

#### 6.7.1 Equipment Maintenance

Fall protection equipment shall be maintained and certified according to manufacturer guidelines or local specific instructions.

All equipment used for man lifts shall be inspected, maintained and certified for such use.

Important: This is a controlled document. The issue of printed and electronic copies is permitted but they are not controlled documents Users will be alerted to changes in the controlled version.



Standard nr: UPM OHS	S 00900	Owner: Jaakko Nikkilä	Review date: 15.2.2016
Document name	Working at Height		

#### 6.7.2 Means of Rescue

All units shall establish timely and effective rescue plans for activities where people work at height.

#### 6.7.3 Safety Equipment Design

Each unit shall ensure fall protection is considered for new and modified installations and shall be designed by a Qualified Person.

Passive systems, such as hand rails should always be considered the preferred method of protection during the design phase of new installations.

## 7 References

### 8 Implementation

The requirements set by this standard shall be used together with local legal requirements. In case of contradiction to the legal requirements, legal requirements shall always be followed.

The line management in each BA/SBU is responsible for the communication, training and implementation of this standard. The implementation shall be ensured by regular compliance reviews and audits in site level. The line management ensures that corrective actions are defined and implemented when non-compliances are noticed.

It is recommended to include the requirements set by this standard into the already existing local documentation e.g. procedures and instructions.

Each unit must periodically (at least once every three years) conduct a program assessment to ensure the Plan is properly functioning and to ensure that working instructions are being complied. The periodic assessments shall be documented and corrective actions taken for any discrepancies noted.

## Appendices

Important: This is a controlled document. The issue of printed and electronic copies is permitted but they are not controlled documents Users will be alerted to changes in the controlled version.

Page 7 of 7