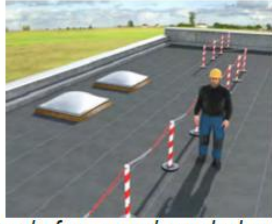


## Altia Minimum Requirement for Work at Heights

<p><b>Introduction</b></p>	<p>The purpose of this document is to ensure that all risks associated with working at heights are identified and managed at Altia. Procedures must safeguard employees and contractors from potential injuries related to working at heights.</p> <p>Work at heights includes all activities performed by an employee in a position with a risk of falling. A risk of falling also includes breaking through an area not able to withstand a load as well as falling into and sinking into a liquid.</p> <p>Possible Work at height could, i.e., be:</p> <ul style="list-style-type: none"> <li>• Working on roofs,</li> <li>• Working on ladders or scaffolds,</li> <li>• Working on personnel lifting equipment, etc.</li> </ul> <p>Work at heights less than 2 metres must be risk-assessed if the surfaces below, the use of machinery or weather conditions create a risk.</p> <p>Work at heights over 2 m high (falling height 2 m) are described in this minimum requirement.</p> <p><b>NOTE:</b> Additional stricter local requirements must still be adhered to. A workplace assessment is required to determine the potential hazards and to define all required safety measures (technical, organisational and personal) for adequate fall protection.</p> <p>Employees must receive introduction which includes work areas and tasks with a risk of falling, the relevant measurements to avoid injuries and rescue measures in case of an accident.</p> <p>Whenever work at heights has to be performed, the following order of preventive actions should be adhered to:</p> <ul style="list-style-type: none"> <li>• Fall protections (technical, e.g., railing, enclosures)</li> <li>• PPE against fall from heights – fall arrest or fall restraint systems (harness, lanyard, anchor point)</li> </ul> <p><b>NOTE:</b> PPE against fall from heights – or PPE in general – must meet standard/legal requirements.</p>
<p><b>Responsibility</b></p>	<p>It is the responsibility of the <b>manager</b> to ensure that:</p> <ul style="list-style-type: none"> <li>• the requirements in this document are implemented</li> <li>• all areas with a risk of falling are identified and hazard assessments are conducted</li> <li>• tasks at heights are avoided whenever possible</li> <li>• all necessary technical, organisational or personal safety measures are implemented and followed</li> </ul>

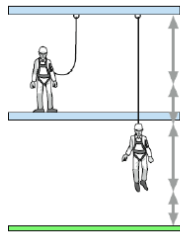
	<ul style="list-style-type: none"> <li>• if required – PPE against falls is provided and chosen according to hazard assessments</li> <li>• the employees are introduced and instructed properly</li> </ul> <p>It is the responsibility of the <b>employees</b> to:</p> <ul style="list-style-type: none"> <li>• follow the rules, instructions and arrangements when work at heights is required</li> <li>• report potential hazards or insufficient protection concerning work at heights to the supervisor/manager</li> <li>• inspect personal fall protection equipment prior to use</li> <li>• perform the work in a safe manner</li> </ul>
<p><b>External Contractors</b></p>	<p>Above requirements must be complied with by all external contractors working for Altia at heights.</p>
<p><b>Minimum Requirements</b></p>	<p>All personnel involved in working at heights must adhere to the requirements and procedures contained in this document. The minimum global requirements in Altia are and will be part of any internal audit or safety assessment.</p> <p><b>IMPORTANT:</b> These are the global minimum requirements – additional stricter requirements must still be enforced in areas where this is required.</p>
<p><b>Working at Heights</b></p>	<p>Before performing work at heights, a hazard assessment including at least the following factors must be conducted:</p> <ul style="list-style-type: none"> <li>• Fall height</li> <li>• Type and duration of the activity, physical strain</li> <li>• Distance to falling edge</li> <li>• Conditions of the work area (i.e., tilt angle, slip resistance, safe stand of, i.e., ladders, etc.)</li> <li>• Conditions below the working level (liquids with risk of sinking, hard surfaces, etc.)</li> <li>• Conditions of the surrounding area and endangering influences (i.e., lighting, space, falling objects, etc.)</li> <li>• Constitution of safety equipment (e.g., ladders, scaffolds, platforms, PPE)</li> <li>• Identification of all required safety measures</li> <li>• The area with a hazard of falling has to be secured (barrier, markings).</li> <li>• Isolate the area below from falling objects (barrier, markings)</li> <li>• Can the work be done alone or has risk evaluation showed a need for two persons</li> <li>• Specification of all needed safety activities.</li> </ul>



*Example for secured area by barriers*

For all work areas whose hazard assessments have revealed work at heights hazards, the hierarchy of hazard control must be followed.

1. The fall hazard should be eliminated. If hazard elimination is not possible, then technical/engineering controls must be installed. Examples of technical/engineering controls are permanent or temporary railing, etc.
2. If technical/engineering controls are not feasible, then administrative/organisational controls should be implemented. Examples of administrative controls include restricting access, changing procedures, placing signs, etc.
3. PPE is the last line of defense against a work at heights hazard. PPE includes a harness, lanyard, hard hat, etc. There must be careful planning and selection of a proper anchor point to ensure that an operator will not fall and strike the ground/lower level.




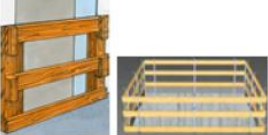

*PPE against falling; proper selection of anchor point*


**NOTE:** Administrative/organisational controls and PPE do not eliminate the fall hazard.

If fall protection such as fencing or cover is removed in order to perform work, PPE must be used as fall protection during the operation. Temporary fencing and covers must be replaced immediately after the work has been conducted and the area must not be left open/unsecured, e.g., during breaks and after hours.


The above also applies to fixed fall protection that needs to be removed while working. They must be reinstated when work is completed.

<b>Fall Protections</b>	Type of fall protection	Comments

	<p>Fencing (technical fall protection)</p>  <p><i>Example for fencing</i></p>	<p>protections, the fencing needs to be designed according to the workplace areas, use and mechanical burdens. Fall protection or parts of it must only be removed in special cases and only when additional safety measures are in place.</p>
	<p>Protection on floor openings/wall openings</p>  <p><i>Example for protection on floor/ wall openings</i></p>	<p>Working areas where the work place hazard assessments have revealed the need for protections for floor or wall openings – the openings must be protected by fencing or covering suitable for the workplace areas, use and mechanical burdens. <b>NOTE:</b> It must not pose a risk of stumbling.</p>
	<p>PPE against falling from height</p>  <p><i>Example for PPE</i></p>	<p>E.g., full body harnesses, connectors, mobile/retractable fall arresters, shock absorbing lanyards, belts and lanyards for work positioning, anchorage devices, rope access systems, etc.</p> <ul style="list-style-type: none"> <li>• The personnel protection equipment must be approved.</li> <li>• Evaluate the condition of personnel protection equipment before use.</li> </ul>

<p><b>Ladder</b></p>	<p>Ladder</p> 	<p>Comments</p> <p><b>Use A ladders</b></p> <ul style="list-style-type: none"> <li>• Make sure that the surface below the ladder is clean and solid.</li> <li>• If necessary, secure the ladder with anti-tip, anti-slip and rocking aids.</li> </ul> <p><b>Lean ladder</b></p> <ul style="list-style-type: none"> <li>• Lean ladder must not be used as work platform.</li> <li>• One-time and short duration use only as a temporary passage is allowed.</li> </ul>
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<p><b>Personnel lifting</b></p>	<p>Platforms, scissor lift, forklift</p> 	<p>Comments</p> <ul style="list-style-type: none"> <li>• Any equipment using personnel lifting must be approved.</li> <li>• The introduction of such equipment must be documented.</li> <li>• It is not allowed to use the personnel lift to lift garco.</li> <li>• Evaluate device condition, perform test of operations and safety equipment before use.</li> <li>• Personnel safety equipment must be used when working on personnel lift.</li> </ul>
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<p><b>Introduction requirements</b></p>	<p>It is important that tasks at heights are only performed by competent personnel. Introduction is vital for raising awareness and reducing risk. However, introduction alone will not ensure safe working at heights, it should be supplemented with monitoring (safety observations) and reviews of employees working at heights to ensure that the training is understood and applied.</p> <p>Whenever the hazard assessment identifies the need for additional introduction, this has to be conducted.</p> <p>Introduction should cover:</p> <ul style="list-style-type: none"> <li>• Working at height risk factors and how injuries can occur</li> <li>• How to carry out safe working at height; safe use of technical safety measures</li> <li>• Rescue measures in case of an accident</li> </ul> <p>Using some related equipment (e.g., aerial work platform, scissor lift) requires specific training. The frequency of the training depends on national requirements.</p> <p>The introduction must be documented.</p>
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<p><b>Revision</b></p>	<p>This is a new document.</p>
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