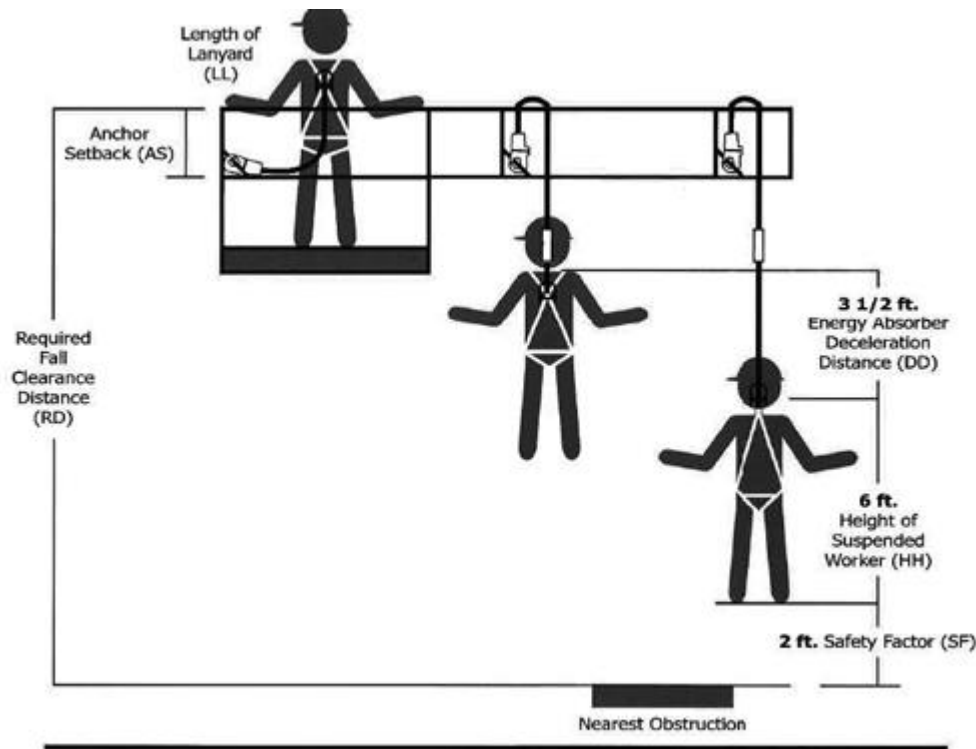


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Global Significant Risk Assessment – Working at Heights



Potentially Fatal Risk	Critical Controls to Reduce or Eliminate
Fall From Height/Fall to Ground	Utilized working platform for safe access (handrails, scaffolding, pipe crossovers, scissor lifts and man-lifts)
	Use substantial barricades and guards around openings or fall hazards
	Inspect PPE/Restraint System
	Pre-job planning and evaluation of scope of work
	Fall Arrest and Restraint (i.e., Safety nets, self-retracting lanyard, air bags)
	Use of 100% tie off - use of two lanyards to allow for at least one connection at all times
	Training in use of fall protection systems and devices

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	<p>In field observation of work at heights</p> <p>PM process for critical tie-off point inspection</p> <p>Use of fall arrest equipment (lanyards, body harness, etc.)</p> <p>Critical Behaviors – placing body appropriately, use of fall arrest equipment, avoiding complacency in routine work, use of engineered tie –off points, being prepared for task with appropriate PPE and equipment, coming to work fit for duty, participating in pre-job planning and tailgate meetings, stopping when work changes to re-evaluate the safety aspects, stopping unsafe work</p>
Suspension Trauma	<p>Rescue plan that includes a way for safe/fast rescue (i.e., Man-lift, scissor lifts)</p> <p>Suspension trauma straps</p> <p>Pre-job planning and evaluation of scope of work</p> <p>Quick response to lower a person from suspension</p> <p>Critical Behaviors – using the suspension trauma straps provide, reviewing and understanding the rescue plan</p>
Free Fall or Swing Radius	<p>Lanyard with appropriate length</p> <p>Use of self-retracting lanyard</p> <p>Pre-task review to determine fall potential and plan to prevent free-fall or swing radius issues</p> <p>Critical Behaviors – position body appropriately to avoid entanglement of lanyard on other objects or other lanyards in the area, complete a pre-task risk review to identify potential issues and mitigate risk.</p>
Improper Use/Defective Fall Protection Equipment	<p>Training on proper equipment and donning and doffing of harness</p> <p>Proper pre-use inspection of harness and lanyards</p> <p>Use of Fall Protection procedures</p> <p>Monthly documented inspection of lanyards and other equipment</p> <p>Process for removal and proper disposal of defective equipment</p> <p>Critical Behaviors – inspect harness and lanyards prior to every use, properly dispose of defective equipment, avoiding complacency to routine tasks, avoiding cultural influences or social norms to take shortcuts</p>
Fall into rotating or moving parts	<p>Design an engineered working platform for safe access</p> <p>Ensure safe access methods are provided (man-lift, scissor-lift, scaffolding)</p> <p>Use of proper handrails or other substantial guards or barricades</p> <p>Pre-job evaluation/planning to review risks in the area</p> <p>Proper lock out of machinery within working area or potential fall area</p>

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	Critical Behaviors – use appropriate length of lanyard to avoid fall into lower level equipment, follow proper LOTOTO policy, conduct a pre-job safety analysis to mitigate hazards
Fall from or Failure of Work Platforms	Handrails or other barriers
	Engineering and proper design of work platforms to withstand load
	Preventative maintenance of work platforms and scaffolding
	Pre-shift inspection of platforms, scaffolding
	100% tie-off to engineered and approved points (NOTE: tie-off to the scaffolding structure is not permitted)
	Critical Behavior – inspect working platforms prior to use, use the system per design specifications, utilize the proper fall protection for the work being performed, complete a pre-job risk evaluation prior to starting work, ensure controls are in place to perform the work safely.

Red Flags – Indicate potential unsafe behavior or lack of controls
Housekeeping issue/unclean work area
No pre-job risk assessment
Poor anchor point location
Absence of supervision
Absence of Rescue Plan
No clear access method
Using incompatible components in fall system
No barricading around work area
Placement of material in proximity to people working creating trip hazards
Misuse of fall protection equipment
Emergency work/unplanned work
Employees appear to be nervous, not fit for duty
When asked, employees are unsure of proper procedure or the work plan
Using fall protection when other controls could be applied
Employees tied off below feet, using wrong lanyard, no D-ring or proper tie-off point
Fall arrest system being used when fall potential less than 6’ to ground
Temporary ladder not tied to anything
Fall arrest gear not stored properly or in poor condition
Inspection of equipment not complete

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People working at heights during high winds or other weather conditions
Supervisor involved in or doing the work rather than supervising or absence of a supervisor
Lack of understanding of controls by employees doing the work

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