Work at Heights
Field Reference Tool

Life Critical Expectations

WORK AT HEIGHTS

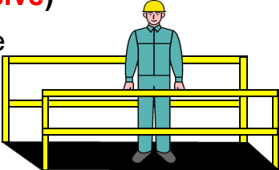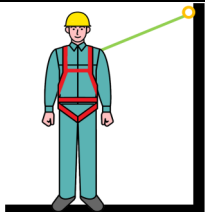**Protect yourself from falls when working unprotected at or above 4'**

- I use appropriate fall protection equipment.
- I use sufficient anchor points.
- I maintain 100% tie-off.

Life Critical Failure Examples

- While conducting work on a compressor engine 9' above the ground, a technician tied off to the engine using a 6' shock- absorbing lanyard. While repositioning himself, he slipped and fell, striking the ground below.
- A sand chief truck driver climbed on top of a trailer (14' above the ground) to raise the guardrails, but failed to tie off while performing the task.
- A construction worker was performing work at heights and knew that he was required to wear a fall arrest harness. While looking for a designated anchor point, he tied off to a PVC pipe, which was not a sufficient anchor point.

Most Preferred ▬▬▬▬▬▬ **Fall Protection Systems** ▬▬▬➤ **Least Preferred**

Guardrail (passive)	Fall Restraint (active)	Fall Arrest (active)
Does not require the use of personal fall protection equipment.	Secures the person to an anchor point to keep the person from reaching the fall hazard.	Stops a person after a fall has begun.

Examples of Work Requiring Fall Protection

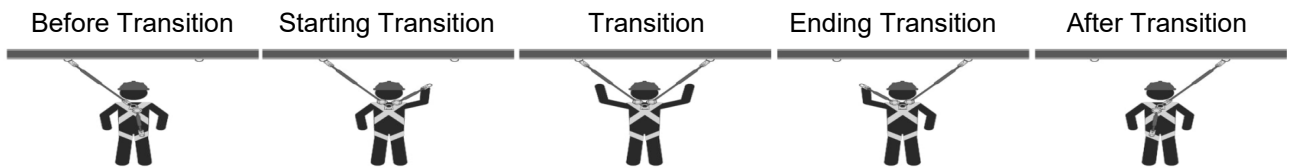| Work Activity	Fall Protection Method Options
Working on any surface that is 4 feet or more above the lower level.	Passive (guard rails, covers, etc) or Active (Personal Fall Arrest System or Fall Restraint System.)
Working on flat bed trailers used for movement of materials/equipment that are at or greater than 4 feet above the lower level.	Fall hazards addressed through job and rescue planning.
Work on top of tanker vehicles used for fluid hauling (such as water, oil, chemical or fuel) at or greater than 4 feet above the lower level.	Active (Personal Fall Arrest System, Fall Restraint System) or Passive (Guardrail System.)
Working on vehicle mounted platforms on heavy equipment such as dump trucks, bulldozers, cranes that are at or greater than 4 feet above the lower level.	Fall hazards addressed through job and rescue planning. **Note:** If work is limited to inspection (such as checking oil prior to starting equipment) fall protection not required.
Work on platforms, walkways, or scaffolding with incomplete guardrails.	Active (Personal Fall Arrest System, Fall Restraint System,) or Administrative Controls with proper approval.
Erecting guardrail systems on mobile equipment or vehicles which requires accessing work surfaces or platforms at or greater than 4 feet above the lower level.	Active (Personal Fall Arrest System or Fall Restraint System.) **Fall protection is required when raising or lowering guardrail systems on equipment.**
Work from approved mobile elevated work platform such as man lift, scissors lift, etc.	In addition to the guardrails provided by the lift basket, personnel **MUST** use a Fall Restraint System or a Personal Fall Arrest System anchored to a point inside the lift basket. Personal Fall Arrest System, if used, is verified as appropriate for the fall distance.

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Anchor Point Selection

If the Anchor is Used For:	Then it is…		Certified by a Fall Protection Qualified Person
	Non-Certified		
Fall Arrest	Able to support 5,000 pounds of static load applied in the directions permitted by the Personal Fall Arrest System, inspected by the user before each use; and located to prevent pendulum swing falls.		2 times max arresting force
Restraint	Capable of sustaining static loads applied in the directions permitted by the systems of at least 1,000 pounds.		2 times the applied load
Rescue	Capable of sustaining static loads applied in the directions permitted by the systems of at least 3,000 pounds.		5 times the applied load

100% Tie-Off

Before Transition	Starting Transition	Transition	Ending Transition	After Transition

Fall Hazard Risk Control Hierarchy

Most Preferred

Elimination

Preferred solution is to eliminate the exposure to the fall hazard.

Passive Fall Protection

Physical barriers, like guardrails, around unprotected edges and covers for holes.

Fall Restraint Systems

Use of PPE to restrict the worker's range of movement so they cannot fall.

Fall Arrest Systems

Designed for situations where exposure to a fall is not preventable. A fall is arrested within acceptable force and clearance margins.

Least Preferred

Start

Can the work be performed at ground level? — Yes → Complete pre-job planning and proceed

No ↓

Are passive fall protection measures in place? — Yes → Complete pre-job planning and proceed

No ↓

- - - Below this Line
Fall Protection Training is Required - - -

Can the job be performed using fall restraint measures? — Yes → Inspect equipment, complete pre-job planning and proceed

No ↓

Is the work taking place at a height of 18 feet or more?

Yes → Select Self Retracting Lanyard (SRL) or shock absorbing lanyard → Inspect equipment, complete pre-job planning and proceed

When using a shock absorbing lanyard, document rescue plan on PJSM, JSA, or detailed rescue plan and proceed

No → Select Self Retracting Lanyard (SRL.) 6' shock absorbing lanyard not permitted → Complete pre-job planning and proceed