



Prevention of Falls & Dropped Objects

Intent: To eliminate or minimise the risks of fatalities, injuries and events arising from working at height and using elevated work platforms. Working at Heights is defined as works where the requirement exists to wear a fall arrest/restraint harness as a primary control.

Engineered Safety in Practice (examples):

- Eliminate or reduce working at height via construction techniques and prefabrication on ground
- Integrate engineered edge, fall arrest anchors and falling object protection (e.g. dropped objects barriers) into structures
- Eliminate or reduce work in harness under fall protection or restraint
- Consider location of any required fall arrest anchor points and engineer required solution
- Eliminate or reduce exposed penetrations
- Consider accessibility of equipment and emergency retrieval (EWP etc).
- Incorporate exclusion zone requirements, work area encapsulation and tool tethering solutions for overhead work
- Consider full encapsulation of the work area to capture dropped objects and mitigate impact risks

FSR Controls

1. Identify potential for falls and dropped objects during Safety in Design, constructability assessments and work planning, eliminating or engineering out the risk where possible.
2. EWP operators must assess ground conditions before operating to confirm stability and suitability for load-bearing.
3. A Permit to Load must be in place before an EWP is set up for operation.
4. Edge protection and handrail system designs must be approved by the Temporary Works Coordinator.
5. Edge protection and handrail systems are installed as per the design by competent persons and inspected at required intervals by the Temporary Works Supervisor.
6. Personnel using fall arrest or restraint systems must be trained, competent, and hold industry-recognised qualifications.
7. A work at height permit must be in place where fall arrest or restraint systems are the primary fall prevention control.
8. Physically prevent objects from falling or people from being exposed to a fall by:
 - Use of fully encapsulated work areas (e.g. scaffold sheeting, mesh barriers).
 - Installing toe boards, netting, tool lanyards, and debris containment systems.
 - Designing catch platforms or hard barriers below elevated work zones.
 - Securing stored materials with restraining systems.
9. Where full encapsulation is not in place, establish exclusion zones beneath and adjacent to work at height, using linked physical barriers, clear signage, access approval procedures, and contact details for the responsible person.
10. Delineation controls (e.g. flagging), in combination with spotters, may only be used to manage exclusion zones for continuously moving *OHLE* operations in the rail environment.
11. EWP operators (including scissor lifts) must hold the nationally recognised competency for the equipment being used.



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12. An emergency plan is in place, equipment available, and the team are trained in the response process.
13. Inspect and verify that fall protection anchor points are certified, fit for use, and rated to 15kN for single-person and 21kN for two-person use.
14. Cover all penetrations or gaps greater than 50 mm × 50 mm before work begins, where there is a risk of objects falling onto people below.
15. For any penetration that may need to support the weight of personnel or plant, install engineered covers or rated fall-protection measures approved by Temporary Works Coordinator.
16. Non-proprietary penetration covers must have a temporary works design and be inspected by the Temporary Works Coordinator.
17. Secure all penetration covers, clearly mark them with "DANGER Hole Below" or "WARNING Penetration Below," and display the Safe Working Load (SWL).
18. Designs for voids and penetrations in concrete slabs must consider cast-in mesh/reinforcement to prevent fall.
19. Safe access and egress to working at height areas are in place, considering emergency response requirements.
20. Obtain a Crane Workbox Permit before commencing any workbox operations.
21. Verify that secondary anti-crush guarding and/or systems are installed and functional on telescopic EWPs and scissor lifts.
22. When operating boom-type EWPs, wear a full body harness with a suitable lanyard securely attached to the approved anchorage point.
23. Verify that all fall protection equipment is certified, tagged, and fit for use before work begins.
24. If access is required to areas beneath elevated work zones (e.g. under viaducts), stop overhead work or manage dropped object risks using encapsulation systems or exclusion zone.

DEFINITIONS

EWP: Elevated Work Platform

OHLE: Overhead Line Equipment

