

Ladders – Inspection

Falls from ladders are a leading cause of serious injuries and fatalities in construction and maintenance projects. Proper inspection and maintenance of ladders are critical to ensuring worker safety. This section outlines the requirements for ladder inspection, including specific guidelines for different types of ladders and recommended inspection procedures.

In Saudi Arabia, ladder safety must comply with Saudi Arabian Occupational Health and Safety Regulations and, where applicable, the specific standards of clients such as Saudi Electricity Company (SEC) and Saudi Aramco (SA).

General Requirements

All ladders must be maintained in a condition that does not endanger workers. Ladders must not be used under the following conditions:

- Defective or Hazardous: Do not use a ladder if it is defective or poses a hazard.
- Unsafe Weather or Conditions: Avoid using ladders in adverse weather or conditions that could endanger workers.
- During Repairs or Servicing: Do not use a ladder while it is being repaired or serviced, unless the repair or service requires its operation.

Specific Inspection Requirements

Wooden Portable Single Ladders

- Must be straight-grained and in good, sound condition.
- Must be free of loose knots, sharp edges, splinters, and shakes.
- Must not be painted or stained with opaque materials that obscure the grain and hide defects during inspection.

Fixed Access Ladders

- Must have an adequate landing surface at both the top and bottom, clear of obstructions.
- Must be free from defective or loose rungs.

Recommended Inspection Procedures

Before using a ladder, inspect it for the following:

- Splinters: Check for splinters on wooden ladders.
- Defects: Look for defects inside rails, rungs, or other parts.
- Missing or Broken Rungs: Ensure all rungs are present and intact.
- Damaged Rails: Check for broken, split, or cracked rails. Do not use ladders repaired with wire, sheet metal, or makeshift materials.
- Worn or Missing Feet: Inspect ladder feet for wear, damage, or absence.
- Ladder Locks or Pulleys: Ensure locks and pulleys are functional and not worn or damaged.
- Rope Condition: Check for worn, frayed, or deteriorated rope. Replacement rope must meet the manufacturer's requirements.
- Spreader Arms: Ensure spreader arms are not bent, worn, broken, or ineffective.
- Manufacturer's Labels: Verify that labels are readable and present.
- If any of these issues are found, tag the ladder as defective and do not use it. Destroy ladders that cannot be repaired.

NCC T&D Project Leaders Key Responsibilities

NCC T&D Project Leaders must ensure the following:

- Regular Inspections: Conduct regular inspections of all ladders to ensure they are in safe working condition.
- Training: Provide workers with training on ladder inspection, safe use, and hazard identification.
- Defective Ladder Removal: Remove and destroy defective ladders to prevent their use.
- Compliance: Ensure all ladder inspections and maintenance comply with Saudi Arabian regulations and client-specific standards.

Worker Responsibilities

Workers must:

- Inspect Ladders: Conduct pre-use inspections of ladders and report any defects or hazards.
- Follow Safety Protocols: Use ladders only in safe conditions and according to manufacturer guidelines.
- Report Hazards: Notify supervisors of any unsafe ladders or conditions.
- Attend Training: Participate in all required training sessions on ladder safety.

Additional Considerations for NCC T&D Projects

- Given the high-risk nature of NCC T&D's operations, the following measures are recommended:
- Pre-Work Inspections: Conduct pre-work inspections of ladders to ensure they are safe for use.
- Ladder Replacement: Replace old or worn ladders with new, compliant models.
- Emergency Preparedness: Train workers on emergency response procedures for ladder-related incidents.

Key Takeaways

- Ladder Safety: Falls from ladders are a leading cause of injuries and fatalities in construction.
- Inspection Requirements: Ladders must be inspected regularly for defects and damage.
- Defective Ladders: Tag and remove defective ladders from service immediately.
- Project Leader Duties: NCC T&D Project Leaders must ensure compliance with ladder safety standards.
- Worker Duties: Workers must inspect ladders before use and follow safety protocols.

For more information, refer to NCC T&D's relevant IMS procedures or consult our HSE Department for expert guidance and training resources aligned with Saudi Arabian regulatory requirements.