

Scaffold Erection Safety

Safe scaffold erection is critical for NCC T&D's construction and maintenance activities. All scaffold erection must comply with NCC T&D HSE and client standards to ensure worker safety during substation and transmission line work.

NCC T&D Project Leaders Key Responsibilities

Project Leaders must ensure:

- Qualified Person oversees design and construction
- Competent Person supervises erection process
- Complete hazard assessment before work starts
- Proper training verification of erection crew
- Adequate equipment and materials available
- Implementation of fall protection measures

HSE Compliance Requirements

Base Requirements:

- Must support 4 times maximum intended load
- Platforms minimum 18 inches wide
- Maximum 14-inch gap from wall
- Guardrails at 42 inches (± 3 inches)
- Midrails at 21 inches (± 3 inches)
- Toeboards minimum 3.5 inches high
- Base plates and mudsills required

Fall Protection During Erection

Workers must use:

- Fall protection above 10 feet
- Full body harness with lanyard
- Proper anchor points
- Personal fall arrest systems
- Hook-on type platforms when needed
- Proper access ladders
- Approved climbing procedures

Worker Training Requirements

- Workers must be trained in:
- Recognition of fall hazards
- Fall protection systems
- Material handling procedures
- Tool management
- Maximum load capacities
- Emergency procedures
- Communication protocols

Competent Person Duties

Must perform:

- Daily inspections
- Load capacity verification
- Fall protection assessment
- Weather condition evaluation
- Hazard identification
- Equipment inspection
- Documentation review

Additional Considerations

Special requirements include:

- Minimum approach distances to energized equipment
- Grounding requirements
- Non-conductive materials where needed
- Lightning protection measures
- Emergency shutdown procedures
- Coordination with electrical operations

Inspection Requirements

Before Use:

- Foundation stability
- Plumb and level verification
- All connections secured
- Proper bracing installed
- Guard rail systems complete
- Access systems properly installed
- Base plate/mudsill contact

During Use:

- Daily inspection by Competent Person
- Connection integrity checks
- Platform condition assessment
- Fall protection verification
- Weather impact evaluation
- Changes in site conditions
- Load distribution review

Documentation Requirements

Maintain records of:

- Design drawings where required
- Load calculations
- Inspection records
- Training certifications
- Modification approvals
- Incident reports
- Daily inspection logs

Safe Work Practices

Mandatory procedures:

- Tag system for incomplete scaffolds
- Proper material handling methods
- Clear communication protocols
- Regular toolbox talks
- Emergency response plans
- Weather monitoring
- Proper tool management

Key Takeaways

- Qualified Person must design scaffold
- Competent Person must supervise
- Daily inspections required
- Fall protection mandatory above 10 feet
- Proper documentation essential
- Regular training required
- Electrical hazards must be addressed



For more information, refer to NCC T&D's relevant IMS procedures, OSHA standards (29 CFR 1926 Subpart L), or consult our HSE Department for expert guidance and training resources.

Note: All scaffold erection must fully comply with OSHA Standard 1926.451 and related regulations. This document serves as a guide but does not replace the need to review and follow all applicable OSHA requirements.

