

Structural Steel Erection & Bolting Safety Checklist

Site / Project	_____	Address	_____
Inspector name	_____	Company	_____
Date	_____	Time	_____

Documentation aid only. Adapt this resource to the site, manufacturer instructions, and applicable local requirements. It does not replace a competent person, professional judgment, legal advice, or a required statutory form.

Inspection checklist

Fall Protection Systems

☐ Are all fall protection anchor points inspected and certified by a qualified person before use, with documentation available on site? (1926.760(d))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Are Connectors 100% tied off above 15 and below 30 feet, or using controlled decking zone (CDZ) procedures? (1926.760(b)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ If using a Controlled Decking Zone (CDZ), is it properly designated and are all requirements met, including maximum size and qualified personnel? (1926.760(c))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Is leading edge fall protection (guardrails, safety nets, or personal fall arrest systems) in place during decking operations? (1926.501(b)(2))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Are all personal fall arrest systems (harnesses, lanyards, self-retracting lifelines) inspected daily for damage or defects by a competent person? (1926.502(d)(21))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Are horizontal lifelines installed and used according to manufacturer's specifications and engineered for the intended load? (ANSI Z359.6)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Is a written rescue plan in place and communicated to all workers in case of a fall? (1926.502(d)(20))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Have fall distances been calculated to ensure adequate clearance below the worker to prevent contact with lower levels? (1926.502(d)(16)(iii))	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Are controlled load lowering procedures in place to prevent uncontrolled descent of materials? (1926.753(c)(5))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are bolt bags secured to prevent dropping hazards? (Good practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Structural Stability & Connections

☐	Are double connections at each column/beam verified to ensure proper load distribution and stability? (1926.756(c)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are columns adequately anchored to prevent displacement during erection? (1926.755(a))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are shear studs installed per approved drawings and welding procedures? (AWS D1.1)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the bolting sequence followed as per the engineered drawings to ensure proper stress distribution? (Good practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is temporary bracing installed and maintained until permanent connections are completed? (1926.757(a)(8))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are columns plumb within the specified tolerance before final bolting? (AISC Code of Standard Practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are bolts tightened to the required torque using calibrated torque wrenches? (RCSC Specification for Structural Joints)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are bolts inspected for proper grade, size, and condition before installation? (ASTM A325, A490)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are approved erection drawings readily available and followed by the erection crew? (1926.752(a))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the crane positioned on stable ground and away from overhead power lines? (1926.1407)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are tag lines used to control the movement of steel members during lifting? (Good practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Personal Protective Equipment (PPE)

☐	Are all workers wearing hard hats that meet ANSI Z89.1 standards? (1926.100(a))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all workers wearing safety glasses with side shields that meet ANSI Z87.1 standards? (1926.102(a)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Are all workers wearing high-visibility clothing (vests or jackets) that meet ANSI/ISEA 107 standards? (1926.760(a)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are workers wearing appropriate gloves for the task (e.g., leather gloves for handling steel)? (Good practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all workers wearing steel-toed boots that meet ASTM F2413 standards? (1926.96(b))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are workers using appropriate impact protection when using impact wrenches? (Good practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is hearing protection available and used when noise levels exceed 85 dBA? (1926.52(b))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are welders using appropriate welding helmets, gloves, and protective clothing? (1926.350)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Site Conditions & Housekeeping

☐	Are access and egress pathways clear of obstructions and tripping hazards? (1926.760(h))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is material stored in a safe and organized manner to prevent falling or collapse? (1926.250(a)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are ground conditions stable and capable of supporting the weight of equipment and materials? (Good practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are weather conditions (wind, rain, snow) being monitored and work adjusted accordingly? (1926.752(e))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is adequate lighting provided for all work areas? (1926.56(a))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are fire extinguishers readily available and inspected regularly? (1926.150(c)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a first-aid kit readily available and adequately stocked? (1926.50(d)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the work area kept clean and free of debris? (1926.25(a))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are overhead hazards (power lines, cranes) identified and mitigated? (1926.1400)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Training & Documentation

☐	Is a competent person designated for steel erection activities? (1926.751)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
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☐	Are connectors trained and qualified for their specific tasks? (1926.761(c)(3))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Have all workers received fall protection training that meets the requirements of 1926.503? (1926.503)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the crane operator certified and qualified to operate the crane being used? (1926.1427)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are rigging equipment (slings, shackles) inspected before each use, and are inspection records maintained? (1926.251(e)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a site-specific erection plan developed and followed? (1926.752(a))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are pre-shift safety meetings conducted to discuss hazards and safe work practices? (Good practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are Material Safety Data Sheets (MSDS) readily available for all hazardous materials on site? (1926.59(g))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is emergency contact information posted in a conspicuous location? (Good practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Findings

#	Item	Location	Severity	Action required
1				
2				
3				
4				
5				
6				
7				
8				

Signature

Inspector signature _____

Name _____

Date _____