Steel Erection Safety and Safe Rigging Practices

To emphasize the importance of proper rigging techniques to prevent accidents and injuries during steel erection, in compliance with OSHA 29 CFR 1926 Subpart R and Subpart H, and ANSI/ASSP A10.48 standards.

Key Points:

1. **OSHA and ANSI Requirements for Rigging**
    - OSHA 29 CFR 1926.753 mandates that all rigging operations during steel erection be performed by qualified riggers under the supervision of a competent person.
    - OSHA 1926.251 requires that rigging equipment be inspected before each use and meet manufacturer specifications for load capacity.
    - ANSI/ASSP A10.48-2016 emphasizes safe rigging practices, including proper selection, inspection, and use of rigging hardware to ensure structural stability and worker safety.
2. **Pre-Use Rigging Inspection**
    - Inspect all rigging equipment (slings, shackles, hooks, wire ropes, etc.) for wear, cuts, corrosion, or damage before each use. Remove defective equipment from service immediately and tag it as “Do Not Use.”
    - Ensure rigging components are rated for the load and marked with their capacity, per OSHA 1926.251(a)(2).
    - Verify that hooks have safety latches and that slings are free of knots or twists.
3. **Safe Rigging Practices**
    - **Load Control**: Calculate the load weight and center of gravity before lifting. Never exceed the working load limit (WLL) of any rigging component.
    - **Sling Angles**: Use proper sling angles to avoid overloading. A sling angle of 60° or greater is ideal; angles less than 30° significantly reduce capacity.
    - **Tag Lines**: Use tag lines to control swinging loads and keep workers clear of the load path.
    - **Clear Communication**: Ensure clear communication between the crane operator, rigger, and signal person. Use standardized hand signals or radios, per OSHA 1926.1428.
    - **No Riding Loads**: Never ride a load or allow workers to be hoisted by rigging equipment unless specifically designed for personnel lifting.
4. **Hazards to Avoid**

- Avoid lifting loads over workers or allowing workers to stand under suspended loads, per OSHA 1926.753(c)(2).
- Do not use damaged or mismatched rigging components (e.g., mixing synthetic slings with wire rope).
- Prevent shock loading by avoiding sudden jerks or drops during lifting.

5. **Compliance with Standards**
    - Rigging equipment must comply with OSHA 1926.251 and ANSI/ASSP A10.48 standards for material handling and steel erection.
    - Follow AISC guidelines for rigging to ensure safe load handling and structural stability during steel erection.
    - Ensure a qualified rigger oversees all rigging operations, as required by OSHA 1926.1404.

Worker Responsibilities:

- Inspect all rigging equipment before use and report any issues to the supervisor.
- Follow proper rigging techniques and never exceed load capacities.
- Stay clear of suspended loads and use tag lines to control movement.
- Speak up if you observe unsafe rigging practices.

Supervisor Notes:

- Verify that only qualified riggers perform rigging tasks and that a competent person oversees operations.
- Ensure all rigging equipment meets OSHA and ANSI standards and is inspected daily.
- Include rigging safety in the site-specific safety plan, per OSHA 1926.752.
- Document this toolbox talk and collect worker signatures for attendance.

Safe rigging is critical to preventing accidents during steel erection. Inspect your gear, know your load, and communicate clearly to keep everyone safe. Let’s rig it right and go home safe every day.

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Safety Meeting
Sign-Off Sheet

Date: _____

Job Name: _____

Competent Person Name: _____

Competent Person Signature: _____

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Attendees:	