Connecting Steel Members

TRADE: STEEL ERECTION & IRONWORK | **LEADER GUIDE: 8-12 MINUTES** | **USE WHAT FITS TODAY**

LEADER NOTE
Do not read this sheet word-for-word. Pick the sections that match today's task, point to the actual equipment/work area, and get the crew to answer the questions out loud.

WHY THIS MATTERS

Today's topic is Connecting Steel Members. Focus on suspended steel, pinch points and unstable members, then walk the crew through the actual setup, work area and stop-work conditions. A lift can look controlled until the load shifts, the radius changes, the ground settles or communication breaks down. Nobody should be guessing about load weight, rigging, travel path, exclusion zones or who is giving the signal.

A SCENARIO TO DISCUSS
During Connecting Steel Members, the load begins to rotate or hang differently than expected. A worker moves closer to steady it by hand while the operator is still holding the load. What is the safer reset before the lift continues?

BEFORE WORK STARTS

- Confirm load weight, pick points/center of gravity, equipment capacity and rigging configuration before the lift.
- Inspect rigging, hooks, hardware and lifting equipment and remove questionable components from service.
- Walk the load path, landing area and exclusion zone and assign the signal/spotter roles.
- Confirm the erection sequence, temporary stability and connection requirements before releasing a member from the crane.
- Keep workers outside the swing and suspended-load zone unless their task requires controlled access.

SAFE WORK SEQUENCE / CONTROLS

- Confirm the erection sequence, temporary stability and connection requirements before releasing a member from the crane.
- Keep workers outside the swing and suspended-load zone unless their task requires controlled access.
- Use the required fall protection and protect deck/opening hazards as steel and decking progress.
- Inspect rigging, connectors and tools before use and secure tools against dropping when needed.
- If the setup changes or the control for suspended steel, pinch points and unstable members is not working, stop the job and fix it before continuing.

COMMON FAILURE POINTS

- Starting before the load weight/center of gravity and capacity at radius are understood.
- Allowing people into the fall zone or swing radius because the load "is only moving a little."
- Continuing after communication, ground support, rigging condition or load control changes.

STOP AND RESET IF...

- Load weight, center of gravity, rigging configuration or equipment capacity is unknown or different from the plan.
- Ground, outrigger support, wind, visibility or communication conditions are not acceptable.
- A worker enters the fall zone, pinch zone or swing radius without the lift being stopped and controlled.

QUESTIONS THAT SHOULD CHANGE THE JOB

1. What is the load weight/configuration, and how do we know the equipment, rigging, and attachment points are within capacity?
2. Where are the fall zone, swing radius, and pinch/crush areas, and how will people be kept out for the entire lift?
3. Who is giving signals, what communication method are we using, and what happens the instant communication is lost?
4. What change in ground, wind, rigging, load control, or travel path would make us set the load down and re-plan?
5. What is the safer reset before the lift continues?

MAKE IT REAL ON THE JOB
Point out the fall zone, rigging connection and signal person before the load leaves the ground.

BEFORE YOU RELEASE THE CREW
Before the crew starts, everyone should be able to explain the hazard, point to the control being used today, and name the condition that would make the work stop.

Reference: 29 CFR 1926.756 - Beams and Columns / Steel Connections

LidLog

ATTENDANCE & SIGN-OFF

Connecting Steel Members

Project / Job:		**Date:**	
Talk leader:		**Location:**	

CREW ACKNOWLEDGMENT

By signing, attendees confirm they participated in this toolbox talk and had the opportunity to raise job-specific questions. Signatures do not replace required training, qualifications, permits or certifications.

#	Name	Company / Trade	Signature
1			
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QUESTIONS / CONDITIONS / CORRECTIVE ACTIONS

END-OF-TALK CHECK

[ ] Crew can point to the main hazard.	[ ] Critical control is in place and usable.
[ ] The responsible person/check is clear.	[ ] Stop/re-brief conditions were discussed.