

TOOLBOX TALK: STEEL ERECTION

Job or site _____

Date _____

Led by _____

Open with this

What is the fall protection trigger height on this job? If anybody said six feet, this talk is for them, because subpart R is a different rule and we are working under it.

The talk

Start with the number, because it is the source of every argument. In steel erection, each employee on a walking or working surface with an unprotected side or edge more than 15 feet above a lower level shall be protected. Fifteen, not six. Subpart R, not subpart M.

That does not make 15 feet safe. It is a rule written around the reality that a connector cannot always be tied off to steel that is not there yet, and it comes with conditions attached to buy that. The conditions are the rest of this talk.

The protection itself is the normal list: guardrail systems, safety net systems, personal fall arrest, positioning device systems or fall restraint systems. And all of it has to meet the criteria in 1926.502, which is subpart M. The equipment standard does not change. Only the trigger height does.

Perimeter safety cables. On multi story structures, perimeter safety cables shall be installed at the final interior and exterior perimeters of the floors as soon as the metal decking has been installed. As soon as. That is a same day duty, not a snagging item.

Connectors get their own rule and it is narrow. A connector is protected from fall hazards of more than two stories or 30 feet above a lower level, whichever is less. Between 15 and 30 feet a connector must be provided with a personal fall arrest, positioning device or fall restraint system and must wear the equipment necessary to be able to tie off. Provided with it and wearing it. Whether every steel gives him somewhere to clip is the argument, and the kit being on him is not.

And a connector has to have completed connector training in accordance with 1926.761. The exemption belongs to a trained connector doing connecting work. It does not belong to anybody who happens to be up there.

The controlled decking zone is the other exception and it has hard edges. A CDZ may be established over 15 and up to 30 feet above a lower level where metal decking is initially being installed and forms the leading edge. Access is limited to employees engaged in leading edge work, everybody in it has completed CDZ training, and the boundaries are designated and clearly marked with control lines.

The CDZ has three numbers worth memorising. It shall not be more than 90 feet wide and 90 feet deep from any leading edge. Unsecured decking in it shall not exceed 3,000 square feet. And safety deck attachments run from the leading edge back to the control line with at least two attachments for each decking panel. Final deck attachments and shear connectors are not done in the CDZ at all.

Last one, and it is the one that catches the trades who come after us. Fall protection the steel erector put up stays for other trades only if the controlling contractor has directed the steel erector to leave it, and has inspected and accepted control and responsibility for it before anybody other than steel erectors works in that area. Nobody inherits a guardrail by finding it there.

Point at these before anybody starts

- The trigger height everybody on this job thinks applies, asked out loud.
- Perimeter cables on every floor where the decking is already down.
- Who is a trained connector today, by name, and who is just working at height.
- Whether the men between 15 and 30 feet are wearing the kit, not whether it is in the gangbox.
- The CDZ control lines, and whether the zone is still inside 90 by 90.
- How much unsecured decking is out there right now against the 3,000 square foot limit.

The rules that apply

- Each employee engaged in a steel erection activity on a walking or working surface with an unprotected side or edge more than 15 feet above a lower level shall be protected by guardrail, safety net, personal fall arrest, positioning device or fall restraint systems, except for connectors and employees in controlled decking zones.
- On multi story structures, perimeter safety cables shall be installed at the final interior and exterior perimeters of the floors as soon as the metal decking has been installed.
- Each connector shall be protected from fall hazards of more than two stories or 30 feet, whichever is less, shall have completed connector training in accordance with 1926.761, and at heights over 15 and up to 30 feet shall be provided with and wear equipment necessary to be able to tie off.
- A controlled decking zone shall be no more than 90 feet wide and 90 feet deep from any leading edge, shall be clearly marked by control lines, shall be entered only by trained employees engaged in leading edge work, and shall contain no more than 3,000 square feet of unsecured decking.
- Guardrail, safety net, personal fall arrest and positioning device systems used in steel erection shall conform to the criteria in 1926.502.
- Fall protection provided by the steel erector remains for other trades only if the controlling contractor has directed that it be left in place and has inspected and accepted control and responsibility for it beforehand.

Ask the crew

- What is the trigger height in steel erection, and what is it under subpart M?
- What are the two things a connector between 15 and 30 feet must have?
- The steel is done and the guardrail is still up. Can the next trade use it?

Close with this

Fifteen feet is not a license, it is a trade off with conditions. Know which of them apply to you today.

Attendance

Everybody who was present signs, including subcontractors and anybody visiting the site.

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This talk is general safety information for a crew briefing, not legal advice and not a substitute for the training your employees are required to have. Standards are quoted for orientation only. Check the current text of the standard and your own state plan, which may be stricter than the federal rule.