



Working and Traveling on Skeleton Steel

The procedures and fall prevention methods for traveling and working on skeleton steel structures change depending on the type of travel and work task. A qualified person must assess the structure to identify the safe working procedures for steel workers.

Considerations include:

- Type and configuration
- Work task
- Potential fall distance
- Other surrounding hazards

While performing any work tasks other than connecting, steel workers need to use personal fall protection when the fall distance is greater than 15 feet. Workers require protection from impalement hazards like reinforcing steel and other types of projections. Training includes fall hazards and the proper use of fall protection equipment. A qualified person must instruct workers on their site-specific safety plans to ensure safe work practices for each task type.

Fall Protection Requirements

Connecting work involves hoisting, placing, and connecting beams or other structural members on a multistory building or structure. When conducting this work, follow these requirements:

- At heights of two stories or 30 feet (whichever is less), workers need a personal fall protection system tied off to columns, pendant lines secured at the tops of columns, catenary lines, or other secure anchorage points.
- At heights between 15 and 30 feet, workers need a personal fall arrest system, positioning device system, or fall restraint system along with equipment that allows them to tie off.

Shinning is climbing vertically up and down columns in a building or structure to connect beams or other structural members to the columns. Follow these fall prevention requirements when shinning:

- For heights up to two stories or 30 feet (whichever is less), shinning is allowed.
- For heights greater than two stories or 30 feet (whichever is less), workers should use a personal fall protection system tied off to columns, pendant lines secured at the tops of columns, catenary lines, or other secure anchorage points.

If the protections above for connecting or shinning work are not practical to implement, perimeter safety nets must be installed. These nets extend out eight feet beyond the building perimeter at no more than 25 feet below the work surface to limit fall distances.

Traveling means moving from work point to work point. Special fall protection methods are required when workers travel or release slings at the periphery or interior of a building. Connectors trigger these requirements at fall distances greater than two stories or 30 feet (whichever is less).

For fall distances greater than 15 feet, use these requirements:

- Workers must crouch or walk the bottom flange (inside flange of peripheral beams).
- They may walk the top surface of securely landed decking bundles.
- They may walk the top flange if they are tied-off to catenary lines or using other fall protection means.

Attention to detail for proper fall protection methods can prevent disabling and/or deadly falls while workers perform tasks and travel on skeleton steel structures.

Note: This article is a summary of the traveling safety requirements on skeleton steel. The full Cal/OSHA regulation, 8 CCR Section 1710, Erection and Construction, is available online at <https://www.dir.ca.gov/title8/1710.html>.

Instructor: _____

Date: _____

Location: _____

Attended by: _____