

# Slips and falls— Unloading structural steel

## Explain dangers

Unloading structural steel can be dangerous if not done properly. Slips and falls are common causes of injury. The risk is greater under the following conditions.

- There are no access points or the access points are in poor condition.
- It is wet or slippery outside due to snow, ice, or rain.
- The loads are unstable.
- You are working at heights.

*NOTE: Most loads do not exceed three metres in height. But if they do, fall protection must be used as per the construction regulations.*

## Identify controls

When climbing on or off a flatbed trailer:

- Remove any mud, snow, ice, grease, or any other substance from your boots.
- Make sure the flatbed's running board, tread, step, foothold, and platform are clean.
- Always face the flatbed and maintain 3-point contact.
- Don't climb down with anything in your free hand. Put it on the vehicle floor and reach for it when you get to the ground.
- Place the arc or middle of your foot onto the step or foothold with your heel just behind.
- Ensure that you have a solid grip on the handles before stepping up.
- Always be aware of your surroundings.
- Use an appropriate access ladder—some ladders are designed with hooks that attach to the sides of a flatbed.

If the load requires workers to be more than three metres from the ground, they must use fall protection. If possible, use a passive fall protection method rather than an active one such as fall arrest.

Fall arrest systems require workers to be anchored overhead, which can create other hazards such as lack of mobility. The load could shift and contact the fall arrest system, leaving the worker stuck. The rigged load or the crane could also contact the fall arrest system.



To control fall hazards using passive fall protection:

1. **Decrease the fall distances and allow for easier access.** Build two access scaffolds in the unloading area, leaving just enough room for the truck to pull through with the flatbed positioned between the scaffolding. Workers can access the load without active fall protection being anchored overhead. You can also use two stationary flatbeds instead of scaffolds. Make sure the gap between the platforms and the trailer doesn't become a tripping hazard.
2. **Ask the fabricator or supplier to place the steel on a lifting rack.** Workers can use a crane to unload the steel with the lifting points on the rack rather than climbing onto the flatbed. Ensure the crane is capable of hoisting the entire load. Spreader beams may be required to prevent damaging the rack.
3. **Create bundles from both sides of the trailer.** Position workers on ladders or access platforms on either side of the load and feed slings from one side to the other, creating a basket or bundle. With the shipping chains in place, use a crane to add tension to the slings. Do not hoist the load. Only put tension on the slings. If a competent worker determines that the load is stable, remove the shipping chains and perform the lift. If not stable, put the shipping chains back on the load under the bundle and repeat the steps.

## Demonstrate

For each of these procedures, place marker flags at the three-metre point in the unloading area as an indicator for workers. Remind workers that if they feel unloading the trailer is too dangerous, they have the right to refuse the work.