

Rebar and Impalement Hazards

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Rebar/Impalement Protection

Steel reinforcing bars—rebar—are a common safety hazard on construction sites. These steel bars have the ability to cut, scratch, pierce, and impale workers, which can result in serious internal injuries and death. In order to eliminate the hazard of impalement, rebar and other projections on a worksite should be guarded, or covered. Regardless of the impalement protection method used, It is crucial to always wear proper fall protection equipment when working above rebar or other sharp protrusions.

Protective Guard Systems

Guarding from rebar impalement hazards is important when rebar is situated around, below, or above any working areas. Using steel-reinforced rebar caps to cover the protruding ends of rebar are a highly-effective method of reducing the danger of worker impalement. It is important to make sure rebar caps are sturdy and level when they are applied.

Types of Rebar Caps



★ Square Rebar Caps:

Protection is provided by the metal plate inside the flat part of the caps. They should be at least 4" square.



★ Round Rebar Caps: Also known as "mushroom" caps or "scratch" caps as they provide scratch protection when working around in-place rebar. They should have a 4.5" diameter.

★ Wood Troughs: Lumber, or similar materials, can also be manufactured to build a continuous cap for an entire row of rebar.



Bending Rebar to Avoid Impalement

Another way to protect workers from impalement hazards on site is by bending, or using pre-bent rebar. This typically means that the rebar is bent in such a way that the protruding end of the rebar is pointing toward the ground. If this is an option on your worksite, find the proper materials if available, or the tools along with someone who is qualified to bend rebar, in order to eliminate the hazard. Pre-bent/bending rebar is a somewhat permanent solution as it does not easily bend back into a vertical position.

How to Avoid Rebar/Impalement Hazards

- ★ Guard all protruding ends of steel rebar with rebar caps or wooden troughs
- ★ Bend rebar so exposed ends are no longer upright
- ★ Flag rebar with bright tape or spray paint it with fluorescent paint. This is for rebar that cannot be covered at the end (ex. Horizontal rebar protruding from a wall)
- ★ Fall protection equipment should always be worn when working above rebar or other sharp protrusions





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