

REBAR CAPS DO NOT PREVENT IMPALEMENT



The purpose of this alert is to advise employers and employees of the dangers of falling against exposed reinforcement bars, even if they have plastic protective cover, (rebar-caps) attached. It also provides advice to suppliers of rebar-caps.

BACKGROUND

An incident occurred in NSW in which a person stumbled and fell, impaling himself on an exposed reinforcement bar. The bar had a rebar-cap on it, but the cap offered no protection against impalement as the weight of the worker was sufficient to be pierced by the bar.

Research carried out following the incident included tests that involved dropping a 20kg bag of sand one metre onto a vertical reinforcement bar. This showed that standard rebar-caps provide little, if any, protection against impalement by falling against them or even a fall from the same level. Any protection offered by the caps, no matter how slight, was greatly reduced if they were the wrong size for the bar, or were incorrectly fitted.

These findings were supported by information obtained from a number of suppliers who stated that the caps are only intended to provide visual warning of a hazard, and

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protection against brush contact with burred ends. They are not a sufficient means to control the risk of impalement.

WHAT WORKSAFE EXPECTS

Where possible, working adjacent to exposed reinforcement bars should be eliminated.

For example, work activities should be relocated away from areas with exposed reinforcement bars.

Where this is not possible, workers should be effectively separated from the exposed bars by guardrails, screens or other means. Where workers are on scaffolds adjacent to exposed reinforcement bars, the scaffold should be fitted with edge protection regardless of their height.

Where it is necessary for work to be done adjacent to exposed reinforcement bars, rebar-caps should be fitted on top, taking into account the following;

- use rebar-caps offering some level of protection against impalement;
- use the correct rebar-cap for the size of the bar;
- fit rebar-caps properly in accordance with the supplier's instructions;
- check the condition of the rebar-caps, especially for deterioration from exposure to UV light; and
- regularly check the rebar-caps are still in place and correctly fitted.

PRODUCT INFORMATION

Suppliers of rebar-caps must ensure that relevant information is provided so they can be properly used for their intended purpose.

This information should include;

- whether the rebar-caps are simply intended to be visual warnings and offer protection against brush contact, or if they are intended to offer any degree of protection against impalement;
- their correct fitting to the bars;
- the size of range of reinforcement bars to which the rebar-cap can be fitted; and
- possible degradation under exposure to direct sunlight, and means to detect this.

ACKNOWLEDGEMENT

This alert is based on an Industry Safety Alert (Risks from exposed reinforcement bars, April 2006). It was published by the NSW Industry Plant Consultative Committee that includes WorkCover NSW, MBA NSW and the NSW branch of the CFMEU Construction and General Division.

This guidance material has been prepared using the best information available to WorkSafe Victoria.

Any information about legislative obligations or responsibilities included in this material is only applicable to the circumstances described in the material.

You should always check the legislation referred to in this material and make your own judgement about what action you may need to take to ensure you have complied with the law.

Accordingly, the Victorian WorkCover Authority extends no warranties as to the suitability of the information for your specific circumstances.