



Systemic Safety Alert **Good Housekeeping on Site –** **Protection of Workers against Protruding Rebars**

Major systemic safety problems

Protruding rebar is commonly found on construction sites. It poses tripping, scratching, cutting and impalement hazards when it is exposed without adequate protection. Serious bodily injuries or even fatalities caused by striking against protruding rebars, especially when workers working at height above exposed protruding rebars, on construction sites are not uncommon. The underlying systemic safety problems leading to the recurrence of these accidents mainly include: -

- undesirable layout design and sequencing of work processes which might lead to higher possibility of requiring workers to work above areas with protruding rebars;
- failure to provide adequate fall prevention measures to protect workers who are inevitably required to work above areas with protruding rebars;
- poor housekeeping, insufficient lighting and slippery floors on site such that workers may slip, trip and fall onto protruding rebars; and
- failure to safeguard all projecting ends of rebars to eliminate tripping, scratching, cutting and impalement hazards.

Accident prevention measures

RSOs should advise their employers/clients to: -

- adopt a systemic approach at planning stage to evaluate the work processes at different work phases, properly plan the workplace layout and work sequence in order to eliminate the hazard of impalement at source (e.g. change of work sequence to avoid workers working above areas with protruding rebars);
- adopt task-specific approach in conducting risk assessments, and devise and



implement appropriate task-specific safety measures for the work;

- if the risk cannot be designed out, exercise stringent access control to the restricted work zone associated with hazards of protruding rebars in order to minimize the number of workers exposed to the hazard (e.g. only those workers directly involved in the concrete pouring or in management of the rebar and formworks are allowed to enter the restricted work zone) and no unauthorized entry to the restricted work zone is allowed;
- provide and maintain suitable and adequate safe access to and egress from every place of work so as to avoid unnecessary access to areas with protruding rebars;
- provide and ensure the use of suitable working platforms (e.g. those with proper guard-rails and toe-boards) to prevent accidental fall onto the protruding rebars;
- ensure good housekeeping, sufficient lighting and non-slippery floors on site to prevent falling, tripping or slipping of workers;
- safeguard all projecting ends of rebars to eliminate any hazards to workers, e.g. provision of suitable protection caps; and
- put in place stringent monitoring and control to ensure the safety measures continue to be effective, such as by developing and implementing effective proactive inspection programme, timely reporting any violations to employers, and taking appropriate follow-up actions for prompt rectification.

RSAs should take into account these systemic safety problems and accident prevention measures in executing safety audit functions.

DISCLAIMER

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