



Systemic Safety Alert **Falsework Safety**

Major systemic safety problems

Falsework collapse which may lead to multiple casualties is often attributed to improper design, use of sub-standard materials, missing bracing/lacing/wedging, misalignment of structural members, and/or improper concrete placing sequence thereon. Common systemic safety problems leading to collapse of falsework include:-

- failure to conduct task-specific risk assessment and to formulate method statements for the erection, alteration, use and dismantling of the falsework;
- lack of design drawings/specifications clearly specifying the method and sequence of erection/dismantling, number/locations of lacing/bracing, material standard, sequence of concrete placing thereon, etc.;
- failure to communicate the above essential information to site personnel and workers involved;
- lack of control and monitoring to ensure conformity with the falsework design/specifications and method statements;
- failure to formulate/implement an effective checking system for timely detection and prompt rectification of any irregularities such as missing essential falsework components, improper connections and misalignment, to ensure the mechanical integrity and stability of the falsework;
- lack of specific trainings for site personnel and workers involved; and
- lack of clear delineation of safety responsibilities and effective coordination and communication among the principal contractor, subcontractors, the design engineer and site personnel involved in the aforesaid activities.

Accident prevention measures

RSOs should advise their clients/employers to: -



- adopt task-specific approach in conducting risk assessment;
- formulate task-specific method statement detailing the proper sequence of work and appropriate safety control measures;
- ensure a professional engineer with adequate competence and experience be appointed to design a falsework that is in conformity with established standards, of sufficient load bearing capacity and stability;
- ensure that all site personnel and workers involved are competent by virtue of their knowledge, skills and experience with regard to their respective duties;
- ensure that the falsework is only erected, altered, used or dismantled under the direct supervision of a competent supervisor;
- ensure that the falsework is used only if it has been thoroughly checked by a competent person and further cross-checked by an independent checking engineer after erection/substantial alteration;
- ensure clear delineation of safety responsibilities and effective coordination and communication among the principal contractor, subcontractors and the design engineer; and
- suspend all work immediately in the event of any undue movement of the falsework until the irregularities causing the movement have been clearly identified and fully rectified, and the falsework has been certified safe by both the competent person and the independent checking engineer.

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

DISCLAIMER

This Systemic Safety Alert (the Alert) is issued to drawing the attention of interested parties to the relevant systemic safety problems and accident prevention measures necessary to protect people engaging in similar work activities. The material contained in the Alert constitutes general guidance only. It does not reduce, limit, or replace, any legal obligations upon any person to comply with any statutory duties under relevant legislation. Users such as Managers and Supervisors should make their own evaluation of the information contained in the Alert to determine if it can be applied to their own situations and practices. The Labour Department does NOT accept any responsibilities for any loss or damage resulting from the use of or failure to use of the information on the Alert.