

CIC Safety Message No. 16/25



SAFETY SUGGESTIONS FOR PREVENTING THE "COMPOSITE SLABS" FROM COLLAPSING

"Composite Slabs" (Composite Slabs with Profiled Steel Sheets*) is used in specific types of buildings to separate floors and provide working platforms. To prevent the Composite Slabs from collapsing during construction or use, the construction team shall ensure the design and construction of Composite Slabs complying with standards. The Construction Industry Council (CIC) would like to deliver this safety message for your attention. It would be appreciated if you could distribute the message below to your fellow members, relevant personnel or other industry stakeholders where appropriate. Thank you very much.

Common Accidents

- 1. The quality of works for Composite Slabs (including its welding joints) are not in conformity with established standards.
- 2. The construction and strength for Composite Slabs (including its welding joints) fail to meet the specifications.
- 3. Failure to comply with the method statement and the drawings when constructing the Composite Slabs (including its welding joints).
- 4. The imposed load exceeds the allowable load carrying capacity of the Composite Slabs.
- 5. Failure to carry out the required inspections and tests for the Composite Slabs (including its welding joints).

Critical Control Measures

- Prior to the commencement of works, construction team shall conduct risk assessments to identify all potential hazards associated with the work with due consideration to the purpose, the weight of loads, and structural stability of the Composite Slabs; and formulate the safe working procedures.
- 2. Appoint a competent engineer with adequate qualifications, competence and experience to design the Composite Slabs that are in conformity with established standards and capable of sufficiently sustaining all loads to be applied to the Slabs.
- 3. Ensure the works are carried out by workmen with adequate training and experience under the immediate supervision of a competent person.
- 4. Ensure the Composite Slabs (including its welding joints) should be made of approved material, with good construction and adequate strength, free from patent defect and are securely supported to prevent it from collapse.
- 5. Ensure the Composite Slabs (including its welding joints) have been properly constructed in compliance with the drawings, specifications and the safe working procedures.
- 6. Ensure that the Composite Slabs (including welding joints) are inspected and tested as required before allowing workers to work on it, to ensure they are in good construction and safe for the work.
- 7. Establish and implement an effective monitoring and management system to ensure all safety measures are strictly followed.

*Source: The Buildings Department



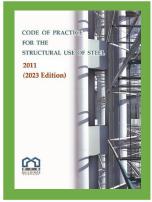
SAFETY ROLES AND RESPONSIBILITIES OF KEY STAKEHOLDERS IN THE HONG KONG CONSTRUCTION INDUSTRY



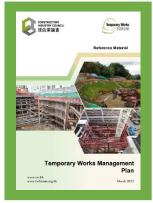
What if all stakeholders can act together and take one step further to fulfill their roles and responsibilities, can similar accidents be avoided?

- In the design stage, the designers and engineers should consider the purpose of Composite Slabs and adopt suitable design, jointing methods, temporary supports and construction methods, in order to reduce risks from the sources.
- During the construction stage, the work team should implement a Temporary Works
 Management Plan and adopt a permit-to-work system. The person in-charge of the work
 should only authorise workers to carry out the works and to impose load on the
 Composite Slabs after confirming that all necessary safety measures have been taken
 (e.g. its joints have been inspected and tested).
- The work team could constantly identify the changes in the process or the environment through dynamic risk assessment and apply control measures to eliminate the hazard.
- Workers should follow the developed safe working procedures, if any risks of collapse of Composite Slabs are identified, report it to their supervisors immediately.

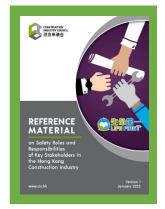
Reference Information



Code of Practice for the Structural Use of Steel 2011 (2023 Edition)



Temporary Works Management Plan



Reference Material on Safety Roles and Responsibilities of Key Stakeholders in the Hong Kong Construction Industry



