

Safety & Health Alert No. 25 / 2016

Safety Precautionary Measures for Lifting Operations

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Lifting operation is one of the high risk activities on-site, improper lifting operations had caused safety hazards on sites in the past and they are worth every contractor's concern. To improve the site safety performance, contractors are strongly advised to take the following immediate actions and measures, which are not meant to be exhaustive:-

- a. Review overall safety management and control to ensure all lifting operations are carried out in accordance with approved method;
- b. Strengthen site management, site control and supervision of sub-contractors;
- c. Foster proper site safety awareness and enhance safety training to all supervisors, sub-contractors and workers;
- d. Enhance the use of BIM model for site planning for early detection of clash of design elements and enhancement of site safety;
- e. Implement the following on-site enhancement measures and monitor the implementation of the relevant enhancement measures, review the effectiveness of such measures and further enhance as appropriate:-
 - i. Carry out site demonstration on safety operation system of tower cranes.
 - ii. Carry out weekly inspection of tower crane by competent person.
 - iii. Enhance site supervision team to strengthen the site supervision and communication between site management team and frontline workers on site.
 - iv. Assign full time lifting supervisors for enhancement of full time supervision of all lifting operations.
 - v. Deploy additional safety officer to enhance the frequency of lifting inspection by safety officer.

- vi. Arrange field control briefing to all sub-contractor riggers and lifting supervisors to reinforce their safety awareness.
- vii. Arrange refresher training to tower crane operators as appropriate.
- viii. Proper lifting frame is required for lifting of precast element.
- ix. Implement colour code mechanism to distinguish different lifting frames for lifting designated precast elements.
- x. Installation of CCTV system with recording function for lifting zones with camera at the jib of tower crane and at low level of lifting zone and monitor at the control cabin for close monitoring by tower crane operator for ease monitoring.
- xi. Steel containers with covers and locking devices for proper storage of tie rods and small parts such as bolts & nuts, proper device for tie rods and steel containers of adequate height for storage of long bolt and shaft are required on the large metal formwork to avoid falling objects.