



# Work Safety Alert Electrical Safety on Construction Sites

## 1. Summary :

As at 11 October 2012, a total of seven suspected electrocution accidents happened on construction and renovation works sites. Among others, these mishaps occurred when live electrical work was conducted at unfavourable environment such as the void above the false ceiling or using a stepladder as a means of support.

# 2. Work Safety Alert for Proprietors/Employers :

To prevent recurrence of the above mishaps, contractors/employers should take the following safety precautionary measures:

- Electrical work on live circuit should be avoided. Before and during any electrical work, effective arrangements should be taken to ensure that the electricity source involved is safely isolated, for instance, by locking out the power supply source with testing performed to confirm the isolation. Suitable warning notices should be displayed.
- Electrical work should only be carried out by Registered Electrical Worker ("REW"). Under no circumstance should a non-REW be allowed to carry out electrical work without effective supervision of an REW.
- If works are to be carried out under unfavourable site conditions, such as wet environment, ceiling voids or situations with earthed structures/fittings in the close vicinity, a comprehensive risk assessment should be conducted by a competent person. A permit-to-work system should be adopted with appropriate safety precautions devised and implemented to eliminate or properly control the electrical hazards involved.





- Protective devices of the electrical installations, such as **suitable and adequate fuses and circuit breakers**, must be installed and kept in good order. Portable electrical apparatus must be either double-insulated or properly earthed.
- **Suitable working platforms** instead of ladders should be used for electrical work at height.
- Safety training on electrical safety and proper handling of electrical tools and their associated fittings should be conducted regularly.
- Electrical apparatus should be checked before use. Any damaged or faulty parts should be repaired or replaced immediately. Only plugs and sockets complying with the relevant safety standards should be used in conjunction with residual current device for earth leakage protection.
- Suitable personal protective equipment, such as insulating gloves and mat, should be provided for use if necessary.
- Adequate monitoring and effective supervision should be exercised to ensure that the above safety precautionary measures are strictly followed.

### 3. Reference :

- .<u>A Guide to the Factories and Industrial Undertakings (Electricity)</u> <u>Regulations</u><sup>1</sup>
- <u>Code of Practice: Safety and Health at Work for Manual Electric Arc</u> <u>Welding</u><sup>1</sup>
- Guide for Safety at Work Electric Shock Hazard of Manual Electric

<sup>&</sup>lt;sup>1</sup> Click to view the document





### Arc Welding Work<sup>1</sup>

- <u>Guidance Notes for The Safe Isolation of Electricity Source at Work<sup>1</sup></u>
- <u>Guide for Safety at Work Safe Use of Electric Plugs</u><sup>1</sup>
- <u>《地盤意外個案簡析系列</u> 水電維修》<sup>1</sup>(Chinese Version Only)
- <u>《電力工作意外致命個案集》</u><sup>1</sup>(Chinese Version Only)
- <u>Basic Electrical Safety Measures in the Workplaces</u><sup>1</sup>

#### **DISCLAIMER**

This Work Safety Alert ("the Alert") is issued at the earliest possible opportunity after a serious accident with a view to drawing the attention of interested parties to the general safety precautionary 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.