

## SAFETY MATTERS CONSTRUCTION SERIES



**ELECTRICAL  
INCIDENTS**

### Missing or Discontinuous Path to Ground

#### Understanding the Danger

If the power supply to the electrical equipment at your site is not grounded or the path has been broken, fault current may travel through a worker's body, causing electrical burns or death. Even when the power system is properly grounded, electrical equipment can instantly change from safe to hazardous because of extreme conditions and rough treatment.

#### Avoiding the Hazards

- Ground all power supply systems, electrical circuits and electrical equipment.
- Frequently inspect electrical systems to insure that the path to ground is continuous.
- Visually inspect all electrical equipment before use. Take any defective equipment out of service.
- Do not remove ground prongs from cord- and plug-connected equipment or extension cords.
- Use double-insulated tools.
- Ground all exposed metal parts of equipment.
- Ground metal parts of the following non-electrical equipment, as specified by the OSHA standard [29 CFR 1926.404(f)(7)(v)]:
  - Frames and tracks of electrically operated cranes.
  - Frames of non-electrically driven elevator cars to which electric conductors are attached.
  - Hand-operated metal shifting ropes or cables of electric elevators.
  - Metal partitions, grill work and similar metal enclosures around equipment of over 1kV between conductors.



Safety Matters Construction Series information is extracted directly from OSHA safety materials. For additional information consult [www.OSHA.gov](http://www.OSHA.gov)