



SITE SAFETY MEETING - TOOL BOX TALK

JOB SITE ELECTRICAL SAFETY

With the widespread use of portable electric tools on job sites, flexible cords are often used. Hazards are created when cords, receptacles, connectors, and electric tools are improperly used or maintained. Electrical shocks, including fatalities, may occur. When a connector is wet, leakage can occur to the equipment-grounding conductor and to people that pick up the connector (if they provide a path to ground). When leakage is less than one amp and the grounding conductor has low resistance, there should be no shock. However, if the grounding conductor's resistance increases, current passing through the body will too. If this resistance is significantly greater than one ohm, even small amounts of leakage can be dangerous. According to the Occupational Safety and Health Administration (OSHA), employers are responsible for providing Ground Fault Circuit Interrupters (GFCI) or an Assured Equipment Grounding Program.

1. A GFCI is a fast-acting circuit breaker that senses imbalances in the circuit caused by current leakage to ground and, in a fraction of a second, shuts off the electricity.
2. An Assured Equipment Grounding Program is a scheduled, recorded system for testing electrical tools, receptacles, and cords that are not part of the permanent wiring of the building or structure – to assure proper grounding, polarity, and resistance.

When must GFCI's be used on job sites?

- When electrical tools and extension cords are used in conjunction with the process of construction or alteration
- When 120-volt, single phase, 15-20 amp outlets are used, which are not part of the permanent wiring of the building/structure

When are GFCI's *not* required?

- When an Assured Equipment Grounding Program is in place
- When employees are prohibited from using any equipment that is not part of an Assured Equipment Grounding Program

When must electrical tools and extension cords be tested for grounding and continuity of the circuitry?

- Before they are used for the first time
- When they are returned to service, following repairs
- On a scheduled basis - at least once every three months

According to OSHA, when the general contractor *and* subcontractors are on a job site, which is responsible for GFCI or the Assured Equipment Grounding Program?

- Subcontractors may use their own program. However, the general contractor and subcontractor are responsible for having a program in place (preferably coordinated).
- Unless the general contractor provides GFCI's for central power and all portable power stations at a job site, subcontractors must provide their own GFCI's or Assured Equipment Grounding Program for all temporary power use.

What does the Assured Equipment Grounding Program's two-color coding system (usually colored tape applied to the cord) identify?

- The first color identifies the quarter that the equipment was most recently tested.
- The second color identifies the month within the quarter that the most recent test took place.

JOB SITE ELECTRICAL SAFETY (continued)

When should Assured Equipment Grounding Program training or GFCI training be provided to construction workers?

Train all new employees that use electrical tools on the electrical safety program.

As a minimum, training should include:

- The purpose of these safety measures
- The color-coding system used
- How to identify electrical hazards
- How to report electrical hazards
- How to troubleshoot a GFCI “trip”

Meeting Notes:

Employee Comments / Concerns: _____

Other Safety issues to be addressed on the job: _____

Training Record: Date: _____ Jobsite: _____ By: _____ Title: _____

Employee Name	Emp #	Signature	Employee Name	Emp #	Signature
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Tool Box Talks are employee safety meetings designed to serve as 15 minute on-site training sessions focused on key topics relative to your work. Site superintendents or foremen are responsible for holding meetings each week usually during a morning break. This important segment of your general safety program encourages open discussion on the topic of the week and allows employees to share their experiences about accidents and safe or unsafe work practices. Recordkeeping is mandatory and all involved must sign off on each session.

Topics for your company could include: electrical safety, excavation and trenching safety, fall protection, scaffold safety, stairway and ladder safety, hazard communication, fire safety, personal protective equipment, tool safety, materials handling, etc.

Sample Tool Box Talks are provided compliments of the Safety Committee of the Hartford County Homebuilders Association in cooperation with the credited source of this Tool Box Talk.

Tool Box Safety Talks can be purchased from the National Association of Homebuilders 1-800 368-5242, www.nahb.com or may be available through your business insurance provider. For more information on Tool Box Talks contact The HBA office 860 563-4212.

BUILD SAFELY – THINK SAFETY

Tool Box Talk Source: Ohio Casualty Insurance Company

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