

ACCESSING SAFETY KNOWLEDGE (ASK) SHEET: *Assured Equipment Grounding Conductor Program*

Assured Equipment Grounding Conductor Program (AEGCP) is specifically designed to cover all electrical cord sets and electrical receptacles that are **not a part of the permanent wiring of the building**; including, any power tools and equipment that may be connected by an electrical cord and plug and made available for use by your employees. For example: When an employee plugs a power tool into a permanent electrical receptacle... this is considered by OSHA as “**temporary use**” and the employee must be protected by a GFCI System or by the a scheduled and recorded assured equipment conductor grounding program of all power tools and equipment to ensure electrical **corded** power tools are safe for use (double insulated) and their cord sets are free of any damage or defects. Not applicable on cordless equipment... but chargers YES.

EQUIPMENT GROUNDING CONDUCTOR PROGRAM	
	1. Written Description 2. Competent Person to Implement 3. Inspection & Tests 4. Record of Tests
INSPECTIONS	TESTS

Employers are required to provide approved *ground-fault circuit interrupters* for all 120-volt, single-phase, 15-20 ampere receptacle outlets on construction sites which are not part of the permanent wiring of the building or structure. A **Ground Fault Circuit Interrupter (GFCI) System** is a system designed to interrupt the flow of electricity to the powered tool or electrical equipment being used and will send the electrical current to ground should there be short circuit or power surge thus protecting the employee from an electric shock. Electrical outlets with internal GFCI sensors should always be used instead of plain electrical outlets for employees to plug into. This type of temporary power system is commonly used on the startup of new construction projects until permanent power is established. This system can be used in place of an equipment inspection, testing and labeling system. Only one or the other is required... not both. Should an employee plug in to a regular outlet that is not GFCI protected, they must use a temporary GFCI adapter between the wall outlet and their power tool. GFCI adapters will have RESET and TEST buttons.



AEGC Written Program. OSHA requires that a written AEGCP be developed and written that identifies the specific electrical tools, equipment and/or machinery that will be affected under the program; the specific grounding procedure (either GFI or labeling); the frequency of inspections and testing. Some of the basic requirements your written program must meet are identified in [29CFR§1926.404\(b\)\(1\)\(iii\)](#).

All testing must be recorded, with logs and records maintained until they can be replaced by a more current record. The written program description and the recorded tests must be made available, at the jobsite for inspection purposes, to OSHA and to any affected personnel. A “**competent person**” must be trained and designated to implement this program.



Continuity Testing

Equipment Inspections. All electrical equipment subject to the AEGC Program must be visually inspected daily for damage or defects or removed from service until repaired.

Testing. When checking electrical equipment, **2 Tests** are required by OSHA. One is a **Continuity Test** to ensure that the equipment grounding conductor is electrically continuous. It must be performed on all cord sets, receptacles which are not part of the permanent wiring of the building or structure, and on cord- and plug-connected equipment which is required to be grounded. This test can

be performed using a simple continuity tester, such as a lamp and battery, a bell and battery, an ohm meter, or a receptacle tester. The other test is a **GFI Test** that must be performed on receptacles and plugs to ensure that the equipment grounding conductor is connected to its proper terminal. This test can be performed with the same equipment used in the first test.



GFCI Testing



These tests are required before the first use, after any repairs, after damage is suspected to have occurred, and at every annual quarter or 3-month intervals thereafter. Cord sets and receptacles which are essentially fixed and not exposed to damage must be tested at regular intervals not to exceed 6 months. Any equipment which fails to pass the required tests shall be placed out of service and not be made available for use by employees.

AEGC Labeling Program. Once all cord sets, corded power tools and equipment has been inspected and tested, they should be tagged as to when the testing was conducted to track frequency. Below is a recommended color code labeling system using colored tape to mark equipment. The table is a recommended color code scheme that shows how employers can track inspections and testing on a **Quarterly, Monthly** and or **Numeric** tracking basis:

ASSURED EQUIPMENT GROUNDING CONDUCTOR PROGRAM			
MONTH/QUARTER WHICH TEST IS PERFORMED	QUARTERLY CODING SCHEME	MONTHLY CODING SCHEME	NUMERIC CODING SCHEME
MONTH	QUARTERLY	MONTHLY	MONTHLY
January	WHITE (Winter)	White	1
February		White & Yellow	2
March		White & Blue	3
April	GREEN (Spring)	Green	4
May		Green & Yellow	5
June		Green & Blue	6
July	RED (Summer)	Red	7
August		Red & Yellow	8
September		Red & Blue	9
October	ORANGE (Autumn)	Orange	10
November		Orange & Yellow	11
December		Orange & Blue	12
Repair or Incident	BROWN	Brown	0

PROVIDED BY ASA-HOUSTON CHAPTER SAFETY COMMITTEE – MARCH 2014

P.O. Box 924943 • Houston, Texas 77292 • 281.679.1877 • asahouston.org

American Subcontractors Association-Houston Chapter is a collective voice for a diverse membership committed to quality, safety, and ethics in construction. ASA-HC advocates for legislative reform and provides educational opportunities for the subcontracting community.