

MAPP

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| ASSURED GROUNDING | |
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| | | | |

1. PURPOSE:

The **purpose** of this policy is to specify procedures and guidelines to eliminate all injuries resulting from possible malfunctions, improper grounding and/or defective electrical tools.

2. GROUND FAULT PROTECTION:

MAPP will use ground fault circuit interrupters to protect all employees on the job site in accordance with **29 CFR 1926.404 (b)(1)(i)** The MAPP Safety Department is responsible for managing this program and it is the responsibility of the site MAPP Superintendent(s) and Project Manager to implement and enforce this program on each project site. All MAPP Superintendent and Project Management personnel shall be trained and designated as competent persons as defined by 1926.32(f). All GFCI devices shall be checked and prior to each use at least daily by the person(s) using that device.

3. GROUND-FAULT CIRCUIT INTERRUPTERS (GFCI) All 120 volt, single phase, 15 and 20 ampere Receptacle outlets on the job site, and cord sets which are not part of the permanent wiring of the building or structure and which are in use by employees, shall have approved ground fault circuit interrupters for personnel protection. Receptacles on a two wire, single phase portable or vehicle mounted generator rated not more than 5kw, where the circuit conductors of the generator frame and all other grounded surfaces, need not be protected with ground fault circuit interrupters.

4. ASSURED EQUIPMENT GROUNDING CONDUCTOR PROGRAM - Any deviation from the use of GFCI's subcontractors shall be covered under an approved assured grounding conductor program that is compliance with all federal, state, and local safety regulations. This program must be approved by the MAPP Safety Department and client representatives. It shall meet minimally the following:

4.1. GENERAL

4.1.1. The **Assured Grounding Program** shall be implemented if a circuit being used by portable electrical equipment is not protected by a GFCI or ELCB either at the panel box or wall receptacle.

4.1.2. Personnel using electrical tools and portable electrical equipment shall visually check each tool for external damage or defect before use.

4.1.3. This assured grounding and electrical inspection program and all documentation required to comply with it shall must remain on the jobsite and be readily available for audit or inspection.

4.2. INITIAL INSPECTION

4.2.1. Before any electrically powered tool, power cord, or portable electrical equipment is used for the first time, the subcontractor Designated Competent

Person shall:

- 4.2.1.1. Perform a visual check of the cord, case, plugs, and receptacles to determine if there is any damage or defect.

Verify that

- 4.2.1.1.1. The cord and plug are in good condition,
- 4.2.1.1.2. There are no exposed wires at plug or cord end(s),
- 4.2.1.1.3. All three prongs are intact, unless it is a UL listed double insulated tool,
- 4.2.1.1.4. All plugs for double insulated tools are polarized;
- 4.2.1.1.5. By using proper test equipment, a three-prong receptacle circuit tester, a tension tester, and a ground loop impedance tester or ohmmeter
- 4.2.1.1.6. Make sure that wires are electrically continuous;
- 4.2.1.1.7. Check extension cords to ensure that each prong on the male end of the cord corresponds to the same connection on the female end;
- 4.2.1.1.8. Make sure the case of a tool is electrically common to the ground prong and that neither of the other two prongs is electrically common to any part of the tool or case (assure that this test is conducted with the equipment's operating switch turned on, without it being energized);
- 4.2.1.1.9. Make sure that the case on double insulated tools is not grounded and that the polarized plug is in good condition;
- 4.2.1.2. Tag or mark tools and equipment to signify that inspections have been completed using the correct quarterly color code.
- 4.2.1.3. Verify that the on-off switch works and shuts off the motor when; and
- 4.2.1.4. Document electrical inspections using an Equipment Grounding Log.
- 4.2.1.5. Equipment found to be unsatisfactory on an initial inspection shall be
 - 4.2.1.5.1. Tagged with a "Danger – Do Not Use" tag until repairs are made,
 - 4.2.1.5.2. Returned to the vendor from which it was purchased, or
 - 4.2.1.5.3. Properly disposed of.

5. QUARTERLY INSPECTION

- 5.1. All Electrical tools and equipment shall be inspected every three months by a Designated Competent Person. The quarterly inspection shall include all items as provided in the initial inspection.
- 5.2. Equipment found to be unsatisfactory on a quarterly inspection shall be tagged with a "Danger – Do Not Use" tag until repairs are made or it is properly disposed.

6. REPAIRED TOOL INSPECTION

- 6.1. If repairs are made by qualified persons, the tool or equipment shall be retested as set forth above after repairs are complete. The re-test shall be documented on the Equipment Grounding Log.

7. INSPECTION COLOR CODING



7.1. Equipment requiring an assured grounding inspection shall be marked with electrical tape or equivalent means to signify that the inspection for the appropriate period was completed. This makes it easy to identify tools or equipment that are not current in the inspection cycle.

| Quarterly Inspections | Quarterly Color | Quarterly Inspections | Quarterly Color |
|-----------------------|-----------------|-----------------------|-----------------|
| January | White | July | Red |
| February | | August | |
| March | | September | |
| April | Green | October | Orange |
| May | | November | |
| June | | December | |

The equipment grounding log shall be maintained and kept on file by the subcontractor for review by MAPP or client personnel for the duration of the project

Equipment Grounding Log Sample

Jobsite:

Designated Competent Person(s):

| (1) Location and Equipment Number | (2) Serial Number | (3) Date Insp. | (5) SAT/ UNSAT | (6) Date Repaired if Nec. | (8) Date Retested | (9) Init. | (10) Remarks |
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