

WEEKLY SAFETY MEETING

Electrical Safe Work Practices - GFCIs, Temporary Power & Temporary Lighting

It is Winger policy that whenever any employee is using any power tool or extension cord they MUST be used with a Ground Fault Circuit Interrupter (GFCI). GFCI's MUST be tested before work commences. GFCI's MUST be installed at the power source. All 120-volt, single phase, 15 and 20 ampere receptacle outlets of construction sites, which are not a 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 or the generator are insulated from the generator frame and all other grounded surfaces, need not be protected with GFCI's. Remember, these Ground Fault Circuit Interrupters were bought for YOUR protection. Use them!

Temporary Power and Temporary Lighting

- Visually inspect each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug before each day's use for external defects, such as deformed or missing pins or insulation damage, and for indications of possible internal damage.
- If any electrical equipment needs to be repaired, remove it immediately from service, tag it as "DAMAGED EQUIPMENT" or "OUT OF SERVICE", and notify your supervisor.
- Extension cords MUST meet OSHA standards for construction.
- All extension cords and receptacles MUST be of three-pronged type.
- Verify that the extension cord you will be using is rated to accept the maximum current (amps) pulled by the portable power tool or equipment being used.
- **DO NOT** lay electrical and extension cords or cables on floors, in walkways, etc., unless it is impractical to do otherwise. They should be suspended or secured in such a way as not to block or hang in walkways, doorways, or work areas. If possible, hang all extension cords above the floor to prevent damage and trip hazards.
- When cords and cables have to pass through doorways, windows, and holes or any other areas subject to pinching or abrasion, they **MUST** be protected. Some locations have Knapco doors available to run extension cords or welding leads through.
- Cords and cables MUST not run through fixture, cabinet or panel knockouts without bushing and strain relief.
- Extension cords MUST not be fastened with staples, hung by nails, or suspended by any un-insulated wire.
- **DO NOT** use extension cords to raise and lower tools or materials like a rope or a tagline.
- 4 All electrical cords not essential to plant operations MUST be unplugged when not in use.
- 4 All cords should be wrapped and stored properly when not in use.
- Non-metallic cable used to feed receptacles or light fixtures, MUST be secured at regular intervals, (no more than ten [10] ft. apart) to prevent twisting or flexing.
- Splices in cable assemblies MUST be made with connecting devices such as wire nuts or capped crimp-on connectors. Tape alone is not acceptable. Splices MUST be provided with strain relief to prevent the splice from separating. This may be accomplished by taping well back from the connecting devices.
- Repairs made to 110 volt cords, 240/480 cords, welding leads, or any other electrical cords, by qualified personnel are permitted using the following guidelines.
 - Only appropriate shrink wrap material will be used to repair cords.
 - Only one (1) repair in 10' of cord is allowed.
 - No more than three (3) repairs within 50' of cord will be allowed.
- 4 All plates and covers on electrical equipment MUST be closed and secured at all times unless necessary to open for repairs.
- 4 Direct connections to permanent building wiring MUST be made within boxes and MUST be provided with strain relief.
- Ground wires **MUST** be kept intact. Loose conduit and ground wires should be reported to your supervisor immediately.
- Receptacle boxes MUST be attached to fixed objects, or supported, and SHALL NOT be suspended by energized cables.
- **DO NOT** use knockout boxes as a receptacle on the end of extension cords.
- All receptacles and wall switches MUST have plates installed when energized.
- Panels MUST ALWAYS be covered when not attended to. Missing knockouts and blanks MUST be replaced with approved covers. Allow three (3) feet in front of electrical panels for emergency access.
- Electric rooms and other hazardous areas in construction areas (where exposed conductors are present) MUST be barricaded and appropriate warning signs displayed.
 All live conductors MUST be protected from unqualified personnel.
- Recognize and respect approach distances for high voltage. DO NOT CROSS red barricades unless you have permission from the qualified electrician.
- Bulbs on approved types of temporary lighting MUST be protected by a guard.
- Missing, broken and burned out lamps MUST be replaced immediately.
- Light strings MUST be suspended by their sockets. Supplemental support to keep strings from damage may also be used. Suspension material may include pull string, cable ties or insulated wire. Conductive materials will not be utilized for supportive means.
- Light strings MUST be suspended off the floor (above head height), and away from potential damage.
- Barn lights and other types of lighting with metal cases or metal guards, MUST be grounded.
- Individual pig-tails, connected to permanent boxes MUST be suspended by the socket or bulb guard to eliminate strain on connections. Connections MUST be made with wire nuts.
- In any type of permanent light fixture used on a temporary basis, open conductors, **MUST** be connected inside the fixture case and a suitable cable brought into the case through a bushing with strain relief.
- 4 All temporary lighting, except supplemental task lighting, MUST be installed on dedicated circuits. No other equipment may be connected to the same branch circuit feeding temporary lights. Light strings MUST not be plugged into outlets unless the outlet is on a separate circuit from other equipment and the unused outlet covered to prevent tools from being plugged in.
- **NEVER** modify approved or listed equipment with the manufacturer's permission.
- ♣ NEVER plug in cords that are wet or touch electrical equipment with wet hands.

Meeting Date: Supervisor:	Attendees: (Please print clearly)	Trainer: Location:	



WEEKLY SAFETY MEETING

Electrical Safe Work Practices – GFCIs, Temporary Power & Temporary Lighting

1.	It is Winger policy that whenever any employee is using a power tool or extension cord, they MUST be used with a Ground Fault Circuit Interrupter (GFCI). True or False?				
2.	GFCIs MUST be tested before use. True or False?				
3.	3. Visually inspect each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug before each day's use for external defects, such as deformed or missing pins or insulation damage, and for indications of possible internal damage. True or False?				
4.	If any electrical equipment needs to be repaired, you need to: A. Tag it as "DAMAGED EQUIPMENT" B. Remove it immediately from service C. Notify your supervisor. D. All of the above				
5.	Cords and cables MUST not run through fixture, cabinet or panel knockouts without bushing and strain relief True or False?				
6.	Extension cords can be fastened with staples, hung by nails, or suspended by any un-insulated wire. True or False?				
7.	. All electrical cords not essential to plant operations MUST be unplugged when not in use. True or False?				
8.	When cords and cables have to pass through doorways, windows, and holes or any other areas subject to pinching or abrasion, they MUST be protected. True or False?				
9.	O. Cords and cables MUST be protected at all times. DO NOT drive over extension cords. True or False?				
10.	 Repairs made to 110 volt cords, 240/480 cords, welding leads, or any other electrical cords, are permitted using which of the following guidelines. A. Only appropriate shrink wrap material will be used to repair cords. B. Only one (1) repair in 10' of cord is allowed. C. No more than three (3) repairs within 50' of cord will be allowed. D. All of the above 				
11.	All plates and covers on electrical equipment MUST be closed and secured at all times unless necessary to open for repairs. True or False?				
12.	It is ok to use knockout boxes as a receptacle on the end of extension cords. True or False?				
13.	13. It's acceptable to use a cord or tool that is missing a ground prong. True or False?				
14.	Bulbs on approved types of temporary lighting MUST be protected by a guard. True or False?				
15.	Allow feet in front of electrical panels for emergency access.				
Pri	nted Name: Trained by:				
		Trained by Signature:			
Dat	te: Location:	Location:			