



ELECTRICAL SAFETY



Why Electrical Safety Matters

Electricity is a part of nearly every job site, but it can cause serious injuries, burns, shocks, fires, and even fatalities if not handled properly. Many electrical incidents occur because of damaged equipment, improper use of cords, or failure to recognize hazards.

Common Electrical Hazards

- Damaged power cords or extension cords
- Exposed wires or missing insulation
- Overloaded outlets and power strips
- Wet or damp working conditions
- Contact with overhead or underground power lines
- Improper grounding of equipment
- Unauthorized repairs to electrical equipment

Safe Work Practices

1. Inspect Before Use

- Check cords, plugs and tools before each use.
- Remove damaged equipment from service immediately.
- Never use equipment with exposed wires or missing ground pins.

2. Keep Electricity Away from Water

- Water increases the risk of electrical shock.
- Keep hands dry when operating electrical equipment.
- Use Ground Fault Circuit Interrupter (GFCI) protection in wet or outdoor locations.

3. Use Extension Cords Properly

- Use cords rated for the job and environment.
- Do not run cords through doorways or under carpets.
- Never use extension cords as permanent wiring.

4. Avoid Overloading Circuits

- Plug only the recommended number of devices into outlets and power strips.
- Watch for signs of overload such as warm outlets, tripped breakers, or burning odors.

5. Stay Clear of Power Lines

- Maintain safe distances from overhead power lines.
- Treat all power lines as energized.
- Use spotters and proper planning when operating equipment near power lines.

6. Lockout/Tagout

- Never work on electrical equipment unless it has been properly de-energized and locked out by authorized personnel.
- Verify equipment is de-energized before beginning work.

If Someone Receives an Electrical Shock

1. Do not touch the person if they are still in contact with the electrical source.
2. Shut off power if it is safe to do so.
3. Call emergency services immediately.
4. Provide first aid/CPR only if trained and the area is safe.

Key Takeaway

Always inspect electrical equipment, keep electricity away from water, use GFCI protection when needed, and never attempt unauthorized electrical repairs. If you see an electrical hazard, stop working and report it immediately.

Discussion Question

What electrical hazards have you noticed on our job site, and what can we do to eliminate them before someone gets hurt?

For more safety tips and courses, visit ndsc.org

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