

ELECTRICAL SAFETY

TABLE OF CONTENTS

Purpose	1
Hazards	1
Grounding	2
Electrical Emergencies	2
Lockout/Tag out and Electrical Repairs	2

1. PURPOSE

Belmont Abbey College provides Electrical Safety to ensure that one should be able to identify its common hazards, which exist virtually in every BAC building, shop, lab, or office. All employees should be able to identify potential electrical hazards and report those hazards to their supervisor for correction. Electrical repairs are to be performed only by trained personnel, qualified outside contractors, or instructors in the technical programs that use electricity as a teaching tool.

2. HAZARDS

Employees should be aware of and look for the following common electrical hazards in their work area:

- Cords that are frayed or missing insulation.
- Cords that are missing grounding pin (3rd prong) on attachment plugs.
- Loose electrical connection.
- Electrical cords that are near or in water.
- Electrical cords used near flammable materials.
- Sparks, smoke, smell, or shock coming from equipment.

Should you find any electrical hazard, do not touch anything! Contact trained personnel immediately and a qualified electrician will make the repairs.

Shop supervisors should pay particular attention to the preceding common hazards as OSHA frequently cites electrical violations during inspections. OSHA will write citations for storage of equipment/materials in electrical rooms and/or for not maintaining a clearance of three (3) feet around any electrical panel box or electrical room.

Safety procedures to prevent electrical accidents:

- Regularly inspect equipment and wires for proper insulation and connections.
- Inspect receptacles for burns, cracks, or broken insulation.
- Inspect extension cords and portable equipment for damage.
- Never use extension cords as permanent wiring for equipment.
- Do not alter plugs; electrical plugs should match the receptacle.
- Do not “yank” them out; disconnect cords by grasping the plug.
- Follow the manufacturer’s instructions for equipment.
- Never use metal ladders around electricity.

- Never store flammables or combustibles near electricity.
- Never work with or around electricity in wet conditions.
- Power equipment should be plugged into wall receptacles with power switches in the off position.
- Any electrical equipment causing shocks or which has high leakage potential must be tagged with a DANGER-DO NOT USE label or equivalent.

3. GROUNDING

Supervisors and lab facilitators should Facility Services if they suspect machinery is not grounded properly.

Housekeeping procedures to prevent electrical fires:

- Keep work area free of waste paper, oily rags, sawdust, and/or other flammables
- Clean grease, dust, and dirt build-up off machinery.

4. ELECTRICAL EMERGENCIES

If someone receives a serious electrical shock, **do not touch him or her!** Switch off power source where shock originated only if you can do so safely and contact Campus Safety and Police immediately.

In case of an electrical fire, do not touch the object nor use water to put it out. If the fire is small and you have had fire extinguisher training, you can use a multi-purpose ABC extinguisher or a CO₂ extinguisher. Contact Campus Safety and Police immediately.

5. LOCKOUT/TAGOUT AND ELECTRICAL REPAIRS

Only qualified personnel are permitted to perform electrical repairs. They will utilize lockout/tagout procedures.

[Table of Contents](#)