



Power Tools Lab

Program: Electrician Technician

Course: EL110 Basic Safety

Objectives: Under the supervision of your instructor, you should be able to:

- Visually inspect and identify the following tools to determine if they are safe to use.
- Demonstrate proper usage of tools.

Lab Equipment:

- Work benches

Required Tools:

- Pencil
- Cordless drill
- Hammer drill
- Circular saw
- Reciprocating saw
- Bandsaw
- Hole-saw (use with drill)
- Auger

Materials:

- Plywood
- 2" x 4" studs
- EMT pipe
- Cement block
- Anchor bolt kit
- Metal and wood blades for reciprocating saw

Safety (PPE):

- Safety glasses/goggles
- Hard Hat

Resources: N/A

Required Time: 300 Minutes

Shop Maintenance:

- All work will cease 20 minutes prior to the end of class.
- All work areas must be cleaned.
- Tools and equipment must be cleaned and returned to the designated areas (cage, tool room, cabinets etc.)
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- Any broken or missing tools must be reported immediately.
- Tools and equipment are students' responsibility.

Procedures (Eye protection must be always worn)

1. Layout all tools on the table, identify as many tools as you know by name and explain the use of as many tools as you know.
2. Visually inspect tools to determine if they are safe to use.
3. Cut a 6" piece of a 2" X 4" wood stud using the circular saw.
4. Cut a 3" piece of ½" EMT pipe using a reciprocating saw.
5. Cut a piece of plywood using a reciprocating saw.
6. Cut a 3" piece of ½" EMT pipe using a bandsaw.
7. Drill a hole into plywood using a hole-saw and drill.
8. Drill a hole into a 2" X 4" stud using an auger bit and a drill.
9. Drill a hole and install an anchor into a cement block using a hammer drill.