



## Draw a Room to Scale

**Program:** Electrician Technician

**Course:** EL110 Basic Safety

**Objectives:** In this lab students will learn how to properly draw a room to scale. After completing this lab, you will be able to:

- Draw a room to scale.
- Add in the proper symbols.
- Make a legend.

**Lab Equipment:** N/A

**Required Tools:**

- Architects Scale

**Materials:**

- Paper
- Pencil

**Safety:** N/A

**Resources:** N/A

**Required Time:** 2 lab days.

**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.)
- Any broken or missing tools must be reported immediately.
- Tools and equipment are students' responsibility.

**Procedure:**

- Have students draw to  $\frac{1}{4}$ " scale of a single bedroom (14' x 12') with an attached bathroom (4  $\frac{1}{2}$ ' x 8') floor plan including:



- Receptacles
  - Light outlets ○ Switches
  - Cable outlet
  - Smoke/Carbon detector
  - Doors
  - Bathroom exhaust fan
  - Window
  - GFCI
- Identify the scale on the drawing.
- Create a legend.
- Draw the proper symbols.
- Include cabinet and bath fixtures.
- Students must use an architect scale and make dimension lines, where applicable.
- The instructor will check at least two of the scaled walls for accuracy.