



Lighting Distribution and Layout

Program: Electrician Technician

Course: EL150 Commercial Applications

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

- Utilize an architect's scale, state the actual dimensions of a given drawing component.
- Create a material takeoff of the lighting fixtures specified in a lighting plan.

Lab Equipment:

- A set of light prints or figure 1

Required Tools:

- 1 - Pencil

Materials: N/A

Safety (PPE):

- Safety glasses/goggles
- Hard hat

Resources: N/A

Required Time: 60 minutes.

Shop Maintenance:

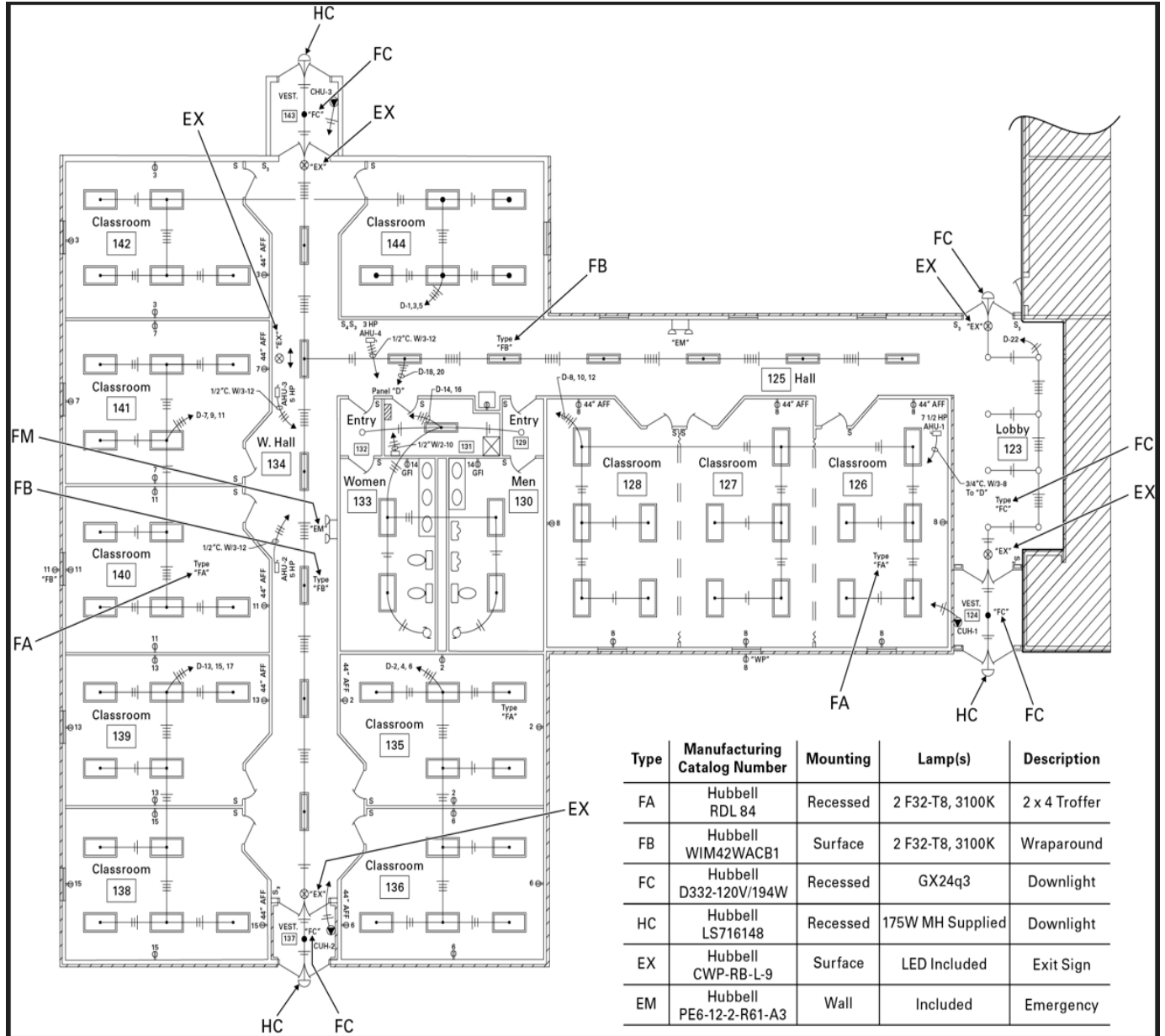
- All work will cease 20 minutes prior to the end of class.
- All work areas must be cleaned.
- Tools and equipment must be cleaned and returned to the designated areas (cage, tool room, cabinets etc.)
- Any broken or missing tools must be reported immediately.
- Tools and equipment are students' responsibility.

Procedure:

1. Using an architect's scale, state the actual dimensions of a given drawing component.



- Make a materials takeoff of the lighting fixtures specified in the provided drawing. The takeoff requires that all lighting fixtures be counted, and where applicable, the total number of lamps for each fixture type must be calculated. (Fill these in on the provided Lighting Fixture Takeoff worksheet.)



**Lighting Fixture Takeoff**

| Lighting Fixture Type | Manufacturer And Catalog Number | Number And Type Of Lamps | Total Number Of Fixtures | Total Number Of Lamps For Fixture Type |
|----------------------------------|--|---|-------------------------------------|---|
| FA | Hubbell RDL 84 | 2 F32-T-8, 3100k | | |
| FB | Hubbell WIM42WAC81 | 2 F32-T-8, 3100k | | |
| FC | Hubbell D332-120V/194W | GX24q3 | | |
| HC | Hubbell LS716148 | 175W MH Supplied | | |
| EX | Hubbell CWP-RB-L-9 | INCL. | | |
| EM | Hubbell PE6-12-2-R61-A3 | INCL. | | |