

Grow-Light System

Equipment needed for grow-light system:

1. Pots or any container with drainage
2. Aluminum foil. (Put on wall behind grow-light to increase reflected light.)
3. Watering can
4. Water-soluble, complete fertilizer with balanced NPK
5. Two garden flats (without drainage holes) If you use the lightweight plastic ones, get 4 so you can double them up.
6. Clear plastic to cover frame and prevent water loss over weekends and holidays
7. Labels to mark pots can be cut from cottage cheese or yogurt cartons, or popsicle sticks can be used.
8. Agricultural or dolomite lime (1/2 tbsp./gal. of soil mix)
9. Sterile potting soil. Since soil mixes vary greatly in their quality, component mixtures and pH, mixing your own potting soil may be a good option. The basic components are: peat moss; sand; perlite or vermiculite. Mix equal parts of each and moisten the mixture thoroughly before planting. Preparing your own gives the flexibility to conduct experiments with different mixes.
10. Appliance timer
11. Heavy-duty extension cord

This inexpensive light system can provide adequate light for about a dozen ponypacks or 4" pots. The light at the edges of the flats will be poor, so rotate containers periodically. Adjust the light on the chain, so that it is only an inch or two above the plants. If needed, group the plants by height and raise one end of the light higher than the other. The light will function fine at an angle.

Materials Needed:

- 1 4 ft fluorescent lamp fixture w/ reflector
- 2 bulbs for above
- 2 4 packs of 2" right angle braces
- 2 pack cup hooks
- 3 feet of chain
- 16 2" screws

Lumber:

- 1 8ft. 1 x 2
- 1 6ft. 1 x 2
- 1 10ft. 1 x 4

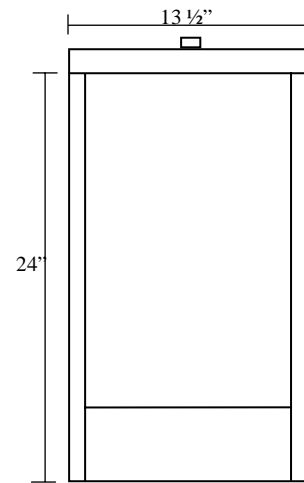
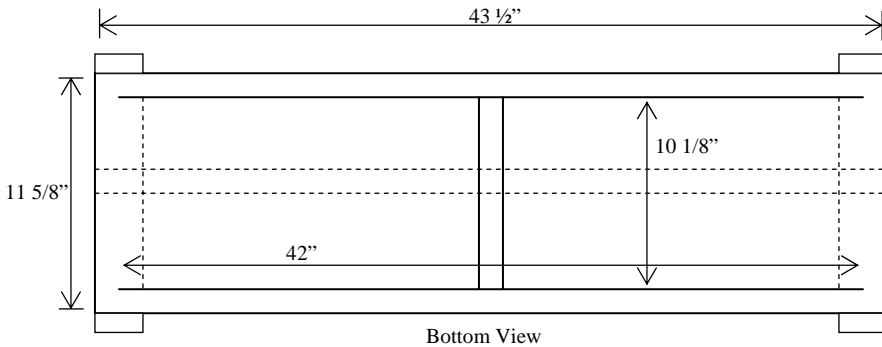
Lumber Cutting:

- 10ft. 1 x 4 = 2 bottom long pieces 42" = 84"
- 2 bottom cross pieces 11 5/8" = 11 5/8"
- 1 bottom mid piece 10 1/8" = 10 1/8"

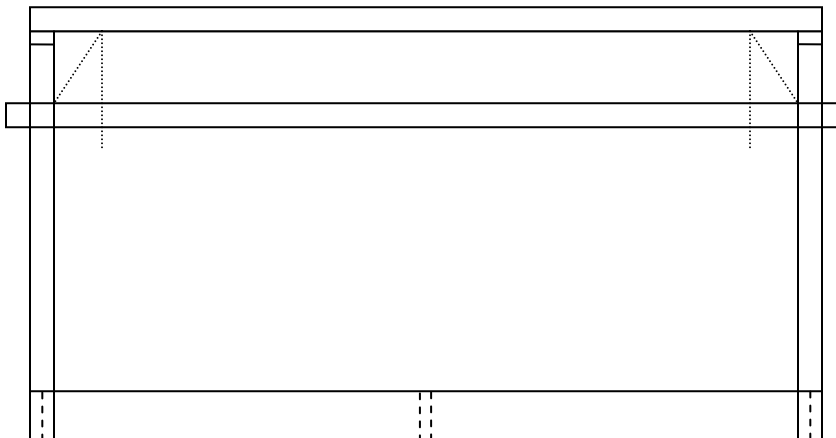
- 6ft. 1 x 2 = 1 top long piece 43 1/2" = 43 1/2"
- 2 top cross pieces 13 1/8" = 26 1/4"

- 8ft. 1 x 2 = 4 vertical pieces 24" = 96"

****Materials and lumber should cost less than \$50.00***



End View



Side View