



MISSOURI BOTANICAL GARDEN

William T. Kemper Center for Home Gardening

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Beat the Winter Blues -- Build a Light Stand

Planning on spending the winter paging through seed catalogues and wishing spring were here? Why not get ahead of the game and begin planting now? A light stand will allow you to plant and rejuvenate indoor plants, start outdoor plants early and grow salad greens now.

The lamp stand described below, which I built four years ago, is considerably less expensive (less than \$200.00) than comparable commercially available light stands and has several other advantages including:

1. More capacity. The unit is 78" high and accommodates 6, 18"x48" shelves.
2. More robust. The maximum capacity is 350 lbs. Note, the unit is heavy and you should either have it delivered to you or bring help when you purchase the unit.
3. More adjustment versatility for both shelf and light separation. The shelves can be adjusted by approximately 2" intervals and the lights by the length of chain link (approximately ½").
4. Easily assembled/disassembled and stored. The unit, disassembled, is compact and the original box can be used for storage.
5. Easily converted to an indoor/outdoor greenhouse. Simply wrap the unit or individual shelves with inexpensive sheet plastic such as the type used for drop cloths.

The necessary materials for building the light stand, including approximate costs are listed below:

Heavy duty shelving*	\$80.00
Shop lights 6 @ \$8.00ea	48.00
Power strip	8.00
Timer	5.00
Cable ties (8 inch)	2.00
Fluorescent bulbs (12 pack)	<u>15.00</u>
Total	\$158.00

* The Sams' Club item number is #773603 and can be ordered via the internet for approximately \$100, including delivery. Similar shelves as well as smaller units (should you want a smaller stand) and all of the other listed items are available from Home Depot, Lowes and other stores.

Assembly instructions included with the shelves are easy to follow. Figure 1 is a completed unit. It is important that at least four shelves, including a base shelf, are installed so that the unit is stable. Note that locking castors are included with the Sams' Club shelves.

Next, install the shop lights. I use two lights for each of three shelves (total of 6) on my stand. You can use more or less as desired. Shop lights come already assembled and include both chains and 'S' hooks,

which can be used for suspending the lights from the base of the upper shelves as shown in Figure 2. Make sure that the lights are installed so that all of the power cords are located at the same end and can be plugged into one power strip as shown in Figure 3.

The power strip is connected to the shelf with cable ties. Make sure that you purchase a grounded power strip with a sufficient number of electrical receptacles for the number of shop lights used. The power strip is connected to an electrical outlet via a grounded timer, which allows you to set on/off times.

The type of fluorescent bulbs used depends on how the light stand is to be used. I use mine to start seedlings to be transplanted outdoors and to grow greens in the winter for consumption and can use inexpensive cool temperature lights. Full spectrum lights are necessary if the unit is intended to encourage flowering.

Figure 4 is the final product set up for growing winter greens. That's right. In six weeks time while you're still paging through your seed catalogues, I'll be eating fresh salad greens.



Figure 1



Figure 2



Figure 3



Figure 4