



Tips for BUILDING an indoor growing rack

With Wyoming's short growing season, an indoor growing rack can give a great head start on a vegetable garden or landscape plants. Tomatoes, for example, may be started from seed in late winter and be planted as seedlings after the last frost. It can also save gardeners a lot of money and allow them to grow different varieties of plants that they may not be able to purchase locally. A growing rack can be built many different ways. In this article, I'll show you how I built my own growing rack.



1) Make it portable

This rack breaks down into two side frames, three shelves, and two fluorescent light fixtures for easy storage when not in use. I used salvaged light fixtures from a local builder, but these can also be purchased from most hardware or department stores; all other supplies were purchased from a local lumber company.

It is easily assembled or disassembled by screwing in two 3-inch lag bolts on each end of each shelf to secure shelves to end frames.

2) Make it sturdy

End frames in this example are constructed with 2×4s fastened together with 10d nails and wood glue. Detachable shelves (1/2-inch plywood or oriented strand board) are backed with 2×4s and secured with 1 1/2-inch drywall screws for rigidity. A coat each of primer and paint make it washable, water resistant, and attractive.





3) Size it to your liking

Since I used light fixtures with four standard 48-inch fluorescent tubes, I sized the shelves to be slightly larger than the fixtures, or 24 by 60 inches. I kept 24-inch spacing between shelves so there is room for the 4-inch thick light unit and enough space for larger plants. Standard fluorescent lighting is all that is needed and not a particular growing lamp light.



4) Make light height adjustable

Since plants will be grown from seed through the first two or three months, lights will need to be raised. Light chains on hooks can be adjusted as increased height is needed. Lights are kept 2 to 3 inches above plant tops.



5) Be careful with electricity

Be sure electrical connections are properly grounded and plugged into a GFCI (ground fault circuit interrupter)-protected outlet. I mounted a grounded power stick on the outside of the frame to keep outlets away from water. The power stick is then plugged into a timer so lights are turned on and off automatically. Optimal light time is 16-18 hours per day (plants need some dark so don't leave them on continually). I placed the cell packs (individual four- to six-packs of tiny plastic growing pots) in larger pans to keep the unit dry. Cells were watered by adding water to the liner pans.

6) Get Busy!

Late winter is a good time to start plants from seed, so the time to plan and build is now! With the help of the growing rack, I had 6-inch lettuce and broccoli plants in my garden before Memorial Day and saved hundreds of dollars on landscape plants.

Tony Hoch is manager of the Laramie Rivers Conservation District and can be reached at (307) 721-0072 or tony.hoch@wy.nacdnet.net