

DIY Free Standing Rectangular 2' by 2' by 4' to 6' GroX Grok Box – Total Cost – @ \$150.00

48" by 10' Reflectix Roll of Metallized Reflective Double Layer Polyethylene Insulation – \$15.00

4 – 1/2" by 10' PVC Pipe (Plumbing Grade, Not Furniture Grade) – \$10.00 – Home Depot

8 – 1/2" 3 Way PVC Corners (Plumbing Grade, Not Furniture Grade) – \$15.00 – <https://flexpvc.com>

1 – Sterilite 28 Quart Storage Box (Floor Protector) with White Lid (Light Socket Array) – \$10.00

15 – 28 Ounce Polypropylene Yogurt Containers (Individual Plant Containers) – \$10.00

9 – Phenolic Lamp Sockets with Rings – \$20.00 – <http://www.txlampparts.net>

9 – Extra Phenolic Lamp Socket Rings – \$5.00 – <http://www.txlampparts.net>

9 – 800 Lumen 2700 K, 3000 K and 5000 K LED Bulbs – \$20.00

1 – 12 Foot Heavy Duty White Extension/Lamp Cord – \$10.00

4 – 3" by 2" by 1" Black Plastic Project Box Enclosures, 16 – 1/2" Rubber Grommets

18 – Small (Blue) Wire Ring Terminals, 18 – 1/4" Plastic Cable Clamps and 8 – Large Wire Nuts

Small Bolts/Nuts/Lock Washers, Grow Tent Clips, Velcro, White Nylon Line

\$15.00 Total

Notes

For a 4' tall GroX, cut the 4 – 10' PVC pipes into a 4' length and 3 – 2' lengths.

For a 5' tall GroX, cut the 10' PVC pipes in half and cut the 2' sections from a separate pipe

For a 6' tall GroX, cut the 4 – 10' PVC pipes into a 6' length and 2 – 2' lengths, and use an extra pipe.

Use 3/4" PVC pipe and fittings for extra strength and rigidity, or for a taller (than) 6' GroX Grok Box.

Use four way tees, shorter lengths of PVC pipe and extra crossbars for smaller packing and a taller box.

Add 2' snap tee cross bars on top for extra stiffness and rigidity and for more light array hanging points.

Drill a 3/8" hole in the side bottom of each 28 oz. yogurt container, to allow the water to enter and exit.

Crimp the double wires on the lugs to simplify and safe the electrical connections to the socket screws.

Wrap the GroX with Reflectix and clip or Velcro on one corner, and cut the remainder into gap fillers.

Use white 11 mil Orca film or white 5.5 mil Panda film instead of Reflectix metallized insulation wrap.

Leave a small gap at the top and bottom for heat to convect into, up and out through the top of the box.

Suspend the light array from the top of the box, and when plants are tall and mature move it to the side.

Use four foot T8 LED tubes hanging vertically along the sides of the box for late growth side lighting.

Tools

Electric Drill (for drilling and cutting the attachment holes the white plastic socket array box cover)

1-3/8" Hole Saw (for cutting the phenolic socket holes into the white light socket array box cover)

3/8" Drill Bit (for drilling holes into the plant containers and into the plastic wire nut project boxes)

1/16" Drill Bit (for bolting the project boxes and wire clamps onto the light socket array box cover)

Wire Cutter Stripper Crimper (for cutting, stripping and crimping the lamp cord to wire up the sockets)

T8 LED Tube, 2000 Lumens, 18 Watts, 3000 K, Single Ended, Direct Wire, End Cap – \$10.00

T8 LED Tube Hanger – Total Cost @ \$5.00

T8 LED Tube Clamp (Standard Metal T8 Clamp)

T8 LED Tube Socket, Butt or End Mounted, End Wiring with 18 AWG Leads, 15 mm Tube Axis

Gray Mini Project Box, Hammond 1551HGY – 0.79" x 1.38" x 2.36" (for lamp cord socket wire nuts)

White PVC Flat Sheet 1/8" by 1-1/2" by 6" (heat bent into a curved PVC hanger hook at the top)

White PVC Extruded Angle 1-1/2" by 1/8" (cut across for angles 1-1/2" wide)

Small Screws, Nuts, Washers and Lock Washers

1/4" Plastic Cable Clamp

1/2" Rubber Grommet

4' Lamp Cord Plug

2 – Wire Nuts

Nylon Line (for hanging the bracket lower in the box)