HOUSE ONE
DIY Solar Lantern

www.house.one - by Jenn Largesse

A solar lantern is the perfect way to add a little ambiance without the hassle of expensive hard-wired lighting. And to give it a finish that's easy to apply, and will withstand the elements outdoors, I'm teaming up with our friends at Varathane. They make a fast-drying stain that saves me time, and a water-based spar urethane that seals out water. For this project I also grabbed some scrap 1x boards and picked up square dowels, wire hardware cloth, and a solar light bulb.

This project is sponsored by Varathane. All opinion are our own.

CUT LIST
1 x Board – 1 @ 5½" x 5½"
1 x Board – 1 @ 4½" x 4½"
¾" Square Dowel – 4 @ 14"
(Dowels mitered on edge
at parallel 2.5-degree angles)

TOOLS
Miter Saw
Drill Driver
Hole Saw Drill Bit
Hand Stapler
Pneumatic Nailer

MATERIALS
Varathane® Premium Fast Dry Wood Stain
Varathane® Spar Urethane in Satin
Rust-Oleum® Painter's Touch® 2x Spray Paint
Synthetic Bristle Brush
Lint-free Cloths
Sanding Sponge
(1) Solar Light bulb
1 x 6 Board (or scrap)
1 x 5 Board (or scrap)
(2) ¾" x ¾"x 36" Square Dowel
(8) 2-inch wood screws
3/8-inch Staples
1¼-inch Finish Nails
Wood Glue

STEPS

STEP 1 – CUT THE PARTS
Download our cut list above. Using a miter saw, cut the parts. To cut the dowels, set the saw to 2.5-degrees. To make the dowels splay outward in both directions, tip the dowel on edge during the cut as shown.

STEP 2 – DRILL THE TOP HOLE
Drill a hole in the center of lantern top for the solar light bulb.

STEP 3 – ASSEMBLE THE PARTS
Assemble the parts by drilling pilot holes through the top and bottom boards and into the square dowels. Secure the pieces with wood glue and screws.

STEP 4 – SIZE THE HARDWARE CLOTH
Trace the inside opening of the assembled frame onto the hardware cloth.

STEP 5 – CUT THE HARDWARE CLOTH
Cut three panels from the hardware cloth.

STEP 6 – APPLY THE STAIN
Sand the parts and then wipe away any dust with a lint-free cloth. Using a lint-free cloth, wipe on a coat of stain in the direction on the grain. I'm using a Varathane color called Weathered Gray. Let the stain set for two to three minutes. Wipe away the excess stain with a lint-free cloth, and let dry for at least an hour.

STEP 7 – APPLY THE TOPCOAT
Brush on a coat of Spar Urethane with a synthetic bristle brush. Let dry for an hour.

STEP 8 – COAT THE HARDWARE CLOTH
Lastly, spray the hardware cloth with two coats of flat black spray paint.

STEP 9 – ATTACH THE HARDWARE CLOTH
Staple the hardware cloth panels to the filler strips

STEP 10 – SECURE THE SIDE PANELS
Secure the assembled hardware cloth and filler strips inside the lantern frame with nails.

STEP 11 – INSTALL THE LIGHT BULB
Secure the solar light bulb with glue.