

# SOLAR DISTILLER

## PARTS AND MATERIALS

NUMBER REQUIRED	PARTS	SIZE		MATERIALS
		ENGLISH "	METRIC mm	
2	Slanted sides	3/4 x 6 1/4 x 8 1/4	20x159x210	Pine
1	Back	3/8 x 6 1/4 x 8 1/2	10x159x216	Hardboard
1	Bottom	1/8 x 3/8 x 10 x 13	3 or 10x254x330	Hardboard
2	Rectangular sides	3/4 x 2 5/8 x 4 3/4	20x67x121	Pine
1	Front	3/4 x 2 5/8 x 10	20x67x254	Pine
1	Top	3/8 x 5 1/2 x 10	10x140x254	Hardboard
1	Glass	1/8 x 8 1/2 x 10	3x216x254	Glass

## PROCEDURE

1. Layout and cut all parts to size.
2. Slant for glass should be at least 30°.
3. Construct distiller using nails and glue. Do not attach bottom. Allow just enough space for glass to pass under front of top piece.
4. Insulate interior of distiller with sheet foam insulation (1/2" (12mm) minimum, 1" (25mm) preferred). Glue in place.
5. The bottom of distiller should also be insulated. Cut sheet foam to size of interior space. Glue in place.
6. Paint interior with flat black water base paint. Finish exterior as desired.
7. Tape glass in position using masking tape.

## USING THE SOLAR DISTILLER

Locate a container of water under the glass area so it is exposed to incoming sunlight. Make a rectangular container from aluminum foil to catch the distilled water and place it inside under the edge of the glass. Place the solar distiller in the sun and position it so the sun's rays strike the interior of the box. In a short time, the water will heat up and begin condensing on the glass and flowing into the aluminum container.

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