





9 Steps to Make Solar Dryers

MATERIALS

Bow saw	(1)
Tape measure	(1)
Hammer	(1)
3-inch nails	(1/2 kilogram)

Scissors	(1 pair)
Marker	(1)
1 1/2 inch nails	(1/2 kilogram)
Timber	(5 pieces) (4mx2m

UV Material	(5mx2m)
Agricultural net	(5mx2m)
Black DPC polythene	(2mx2m)



Create the frame for the solar dryer

Use timber of a height of 1.7m for the front and 1.5m for the back. This will make the front higher, allowing rainwater to slide off. Make two frames with these measurements. When attaching them, leave a 50cm gap at the lower end to keep rainwater out. Also, leave a 0.5cm space at the bottom for air circulation.



Connect the two frames together

Use 1.1m timber pieces to join the front and back sections at both the top and bottom ends of the frames. Strengthen the structure by attaching timber at the back, which will also serve as a tray holder. Maintain a one-foot (12 inches) gap between the trays.



Measure the door dimensions

The door is 1.1m wide and 1.3m tall, and it opens upward to keep water out.

Strengthen the frame by adding a timber piece in the center.



Wrap the frame with a polycarbonate sheet

Trimming any extra parts. Be careful not to create holes and follow the instructions for proper placement (inside and outside). Seal the frame securely using small nails. Leave a 0.5m gap for air circulation.



Create a vent for air circulation

Use 1.1m timber pieces to join the front and back sections at both the top and bottom ends of the frames. Strengthen the structure by attaching timber at the back, which will also serve as a tray holder. Maintain a one-foot (12 inches) gap between the trays.



Create a door for the solar dryer

Cover the door frame with the polycarbonate sheet (UV plastic material).



Create the drying trays

Use the remaining timber and attach the insect net. Each tray should measure 90 by 39 inches. The net allows air flow to dry the products. Place one tray higher and the other lower.



Connect the door to the dryer using door hinges.



Securely place the thick black polythene bag on the base.