

## Solar House Directions for Facilitators:

(use to create a house to take to events, or to make ready-to-build kits for workshop participants)

There are two different instruction sheets in the kit, yellow and white, but these aren't as complete as they could be.

Use this page along with the two direction sheets to construct your facilitator solar house.

The Solar House Kit box has photographs that show a completed model, and you should refer to these in building a model. The house in that picture is made of white corrugated plastic board, also called Coroplast. You can buy signs made of this material at Home Depot and spray paint them white, or a grocery or liquor store may give you an old sign. Corrugated cardboard or foam core board can be used, but will not hold up well.

Materials: Corrugated plastic board, 21" x 24" or larger, epoxy adhesive, ruler, utility knife, masking tape, double side foam tape.

Cut out the Roof, Floor, and Wall sections below, leave the leftover to use for the ceiling panel.

Cut slits in the roof for the wires from the two PV panels and a hole for the solar water heating tubes, cut out door and windows.

Score the wall corners along the dotted line for them to fold easily. Attach PV panels and water heater to roof before assembly.

Use epoxy glue to assemble walls to base and roof to walls, use tape to hole these all together. Wait for epoxy to harden.

Measure the inside width between walls and cut a panel for the ceiling, be sure it's a snug fit, then create holes for the fan, light, and water heater tubes. Test fit everything, fan, light, and ceiling in place before epoxying these in place. The ceiling should be installed parallel to the roof panel and about one inch lower than it. Use epoxy to secure the light and fan to the ceiling panel and let harden.

Secure the ceiling inside the house using epoxy where it meets all three walls. Double sided foam tape may be used for attaching roof panels.

NOTE: In making re-useable pre-fab kits for use by workshop participants, cut out and pre-fit all pieces per directions above, but don't use epoxy.

Provide all parts, masking tape, and double-sided foam tape to teachers, along with the yellow and white instructions found in the Solar House kits.

