

Solar Cooker Instructions and Useful Links

A great site for solar cooker information: <http://solarcooking.org/plans/>

The CookKit site with plans and photos: <http://solarcooking.wikia.com/wiki/CookKit>

Reflective Open Box Cooker plans: <http://solarcooking.org/plans/newpanel.htm>

Detailed Plans for CookKit, Box Cooker, recipes and more:

http://images3.wikia.nocookie.net/solarcooking/images/5/57/CookKit_plans_detailed.pdf

Brief Instructions for Making a Solar CookKit

1. Obtain a single, unfolded sheet of medium weight corrugated cardboard 3 ft x 4 ft or larger.
2. Obtain 2.5 to 3 ounces of water based white glue (polyvinyl acetate, like Elmers Glue all) or carpenters wood glue
3. Mix 2.5 ounces of white glue with 2.5 ounces of clean water. Remove tape, labels, and any plastic from cardboard.
4. Do not use any tape or glues that may react or outgas at higher cooking temperatures.
5. If you can't find a single cardboard sheet cut strips of medium fabric and glue the sheets together using the white glue.
6. Carefully trace around the cardboard template with a pencil onto your cardboard sheet. If your cardboard is folded, position the largest template fold over the largest fold in the cardboard. Mark the fold lines. Be sure to mark the slots.
7. Use a sharp box cutter or razor knife to accurately cut the cardboard. Use surface protection. Be careful, cut away from your hands. Position a metal ruler so you are cutting on the "throw-away side". Don't cut the slots too wide!
8. If you want to be able to fold up your CookKit, gently crease on the fold lines with a spoon handle.
9. Precut a sheet of aluminum foil to fit one area of the CookKit. Use a foam brush to quickly "paint" the glue mixture onto the cardboard area you will cover. Carefully position the aluminum **shiny side up** to cover the entire area before the glue dries. Smooth the foil from the center to the edges with a paper towel.
10. A few wrinkles won't matter. Immediately clean up all extra glue with a moist paper towel.
11. Where the foil is too small to cover the cardboard area, overlap it about ¼ inch and put glue on both sides. Press down with your finger and clean up immediately with a moist paper towel.
12. Set the CookKit aside and let the glue dry. When dry trim the edges with a razor blade or if you want a tidier look, brush full strength glue on the cardboard edge and the foil and curl the foil around the back. Clean up with a moist paper towel and trim when dry with a razor blade to ¼ to 3/8 inches. Trim and glue back the foil in the slots.
13. If you want to protect the bottom of the CookKit from moisture build a wood or cardboard stand or apply contact paper.
14. You will need a dark colored thin metal pot or a mason jar painted black for cooking. Place it in a clear plastic bag, a "Reynolds" high temperature cooking bag (for better longevity), or find a large clear or tinted glass jar, bowl or casserole to place the pot or jar into. Place the entire assembly on a wire stand or three pebbles to increase solar gain from below.
15. Position with the shadow directly behind the cooker and then turn clockwise a bit into the upcoming sun direction. You should see no more than a "half shadow" from the front flap. Enjoy cooking a fossil fuel free meal.

SOLAR COOKING HINTS

There is very little different about cooking in a solar cooker apart from doubling cooking time and leaving water out when cooking fresh vegetables or meats. All foods are cooked in dark covered pots except for roasting nuts and some baking. Use your own recipes and spices. Most crock pot recipes will work – try using less water. By making small adjustments in time or the amount of water, your favorite foods taste as good or better than ever. The following approximate times are for 4-5 servings. Increase cooking times for larger amounts.

COOKED DRIED CEREALS AND GRAINS - (barley, corn, millet, oats, quinoa, rice, wheat) : 2 hours. Start with usual amount of water. Next time adjust to your taste.

VEGETABLES - **Add no water.** Artichokes: 2 1/2 hours; Asparagus: 1 1/2 - 2 hours; Other fresh green vegetables: 1-1 1/2 hours. If cooked longer they will taste fine but lose their nice green color. Beans - dried: **3-5 hours**. Usual amount of water, can be soaked ahead of time; Beets, Carrots, Potatoes and other root vegetables: 3 hours. Cabbage, eggplant: 1 1/2 hours if cut up. Eggplant turns brownish, like a cut apple, but the flavor is good; Corn on the cob: 1 - 1 1/2 hours with or without husk or even in a clean black sock. Squash, zucchini: 1 hour. Will turn mushy if left longer. Sautee preheat pan.

EGGS - Add no water, cook whole. 2 hrs for hard yolks, longer the whites turn brownish, but the flavor is the same.

MEATS - Add no water. If cooked longer they just get more tender. Fish: 1-2 hours; Chicken: 2 hours cut up, 3 hours whole; Beef, Lamb, etc.: 2 hours cut up, 3 - 5 hours for large pieces; Turkey, large, whole: all day

PASTA - Heat water in one pot and put dry pasta with a small amount of cooking oil in another pot, and heat until water is near boiling. Add hot pasta to hot water, stir, and cook about 10 minutes more.

BAKING - is best done in the middle of the day (9 or 10 am - 2 or 3 pm) Breads: Whole loaves - 3 hours; Cakes: 1 1/2 hours; Cookies: 1 - 1 1/2 hours. Do NOT need to be covered. Avoid bottom crusts - they get soggy.

SOUPS & STEWS. Cook the meat or poultry first. Add all other ingredients, slowest cooking item will determine time.

SAUCES & GRAVIES MADE WITH FLOUR OR STARCH - Heat juices and flour separately, with or without a little cooking oil in the flour. Then combine and stir. It will be ready quickly.

ROASTING NUTS - Bake uncovered. Almonds: 1 hour, Peanuts: 2 hours.

Solar Cooker Plan, Folding Plan & Solar Angles

