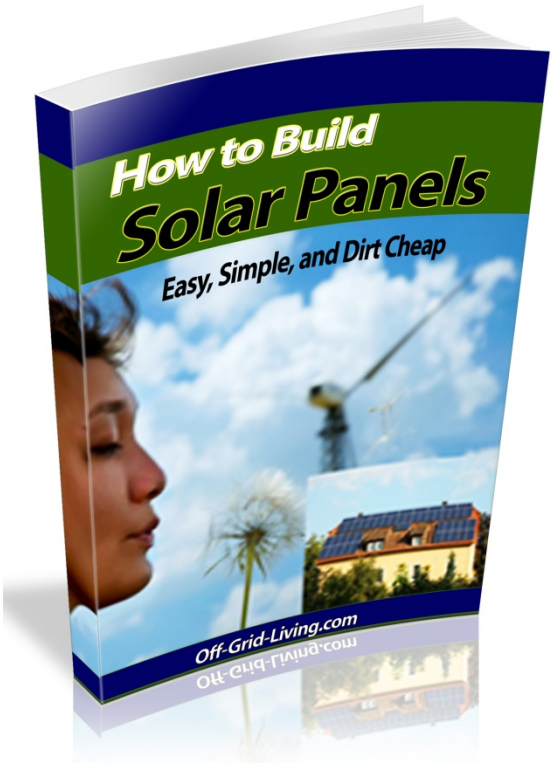
Off-Grid-Living

In An Urban and Suburban World



Lesson #10 ...

Building the frame

By David Sieg and Information Specialists Corp.

The Disclaimers, Legal Stuff and Butt-Covering Section:

Before attempting to build a solar system for your entire house, take my course "Home Energy Made Easy" Go here: http://Off-Grid-Living.com I'll give it to you for free for being a member of this course. Understanding the concepts in that course will save $1000's of dollars when you go to build your system.

This is but one small section of a complete action plan for building solar panels dirt cheap. Which is one small section of a course on going off the grid in Urban/Suburban America. You can learn how to

- **Grow your own food year around, no matter where you live.**
- **Slash your energy and living expenses by 50% or more.**
- **Create your own fuel**
- **Finding economical shelter**
- **Alternative methods of (Legally) making money**
- **How to live anonymously**

Check out http://Off-Grid-Living.com

NOTICE: You Have the Right Give This To Anyone You Want!

But You Can't Resell this Report for your own profit!

Introduction

The most important thing to take away from this lesson is..

Building the frame can be done with scrap wood found in your garage.

I've chosen to use graphics for this part rather than photos because photos can be misleading, many times they aren't clear, and graphics give a much better representation of actions to be taken. I would also recommend you that you go and buy all the parts and material necessary and you have everything handy before you begin. This will save you running back and forth to the home improvement store, wasting gas and money.

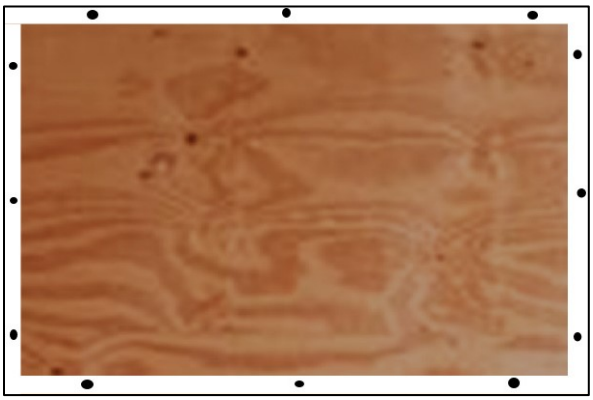
For this instructional I'm going to assume you're using 3"x6" solar cells.

Also, a pair of saw horses also come in handy to hold up the frame while you're working on it.

- OK, the first thing you're going to do is take your plywood and lay it flat across your work table or sawhorses. I like to start with a half sheet simply because it is easier to work with. You can ask at the HI store for them to cut it in half for you. They will usually do it for free. But a full sheet can also be used. It is up to you.

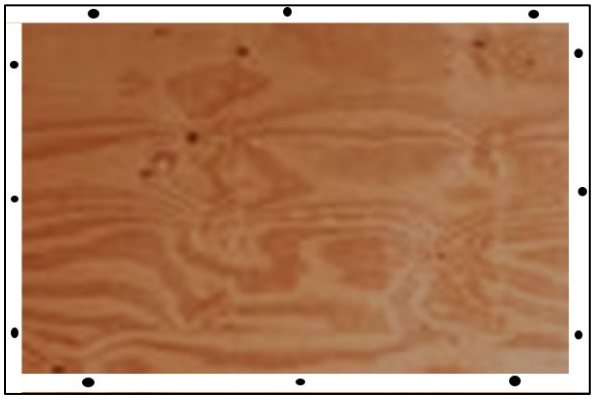
- You're going to coat the plywood with 3 coats of the UV protector. This can be anything you have that you have left-over, used in painting the porch, or deck. Keep in mind, this doesn't have to be pretty, it has to be functional.

- Next you're going to take 1"x1" (Actually what they are is a 2"x4" ripped in half. Some people call them 1"x1"'s some people call them 1"x 2" in reality they are someplace in between. Measure and cut them to fit around the outside edges of the plywood frame.



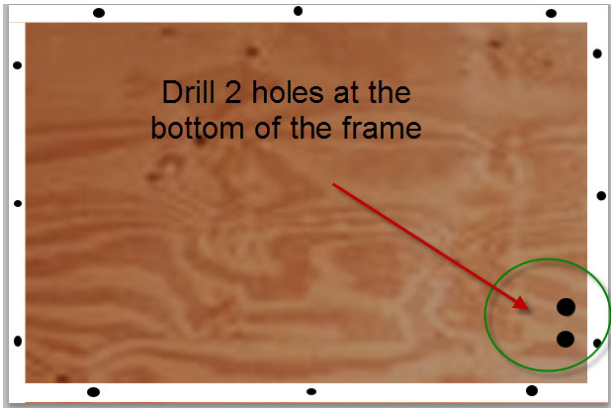
4. If you have clamps handy you can tack these down with glue and clamp them in place. I usually drill pilot holes for my screws, then use the screws themselves screwed just enough to tack them in place.

5. Once you have the pieces cut and placed around the perimeter of the plywood, Screw them down tightly. I've only shown 3 screws, but use as many as necessary. You don't want any gaps, where water can enter the frame, but one screw every 4 inches is plenty.

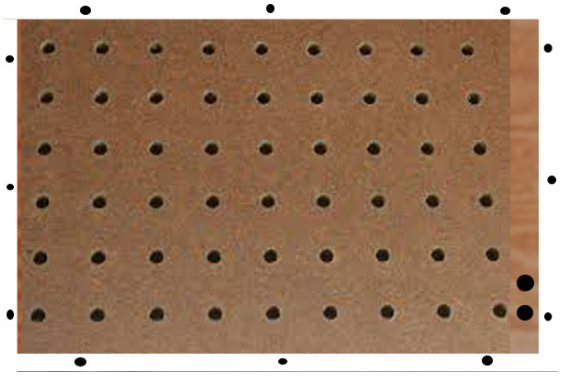


6. As an optional step you can sand down any rough edges on the plywood of the wood surrounding it in preparation for painting.

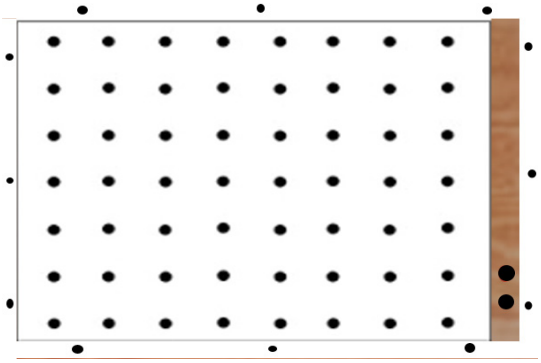
7. The next step involves drilling 2 holes at the bottom of the frame corner of your frame. The holes don't need to be that big, but big enough to let the bus wires can run through them.



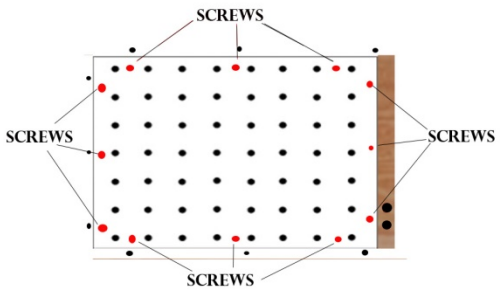
8. It is at this point that some people cut a piece of peg board to fit inside the frame. I say some people because some people do, and some don't. Personally, I do. Anyway, cut the peg board so that it can easily slide in and out of the frame and so that the 2 holes at the bottom are easily visible.



9. Ok, now it is time to paint using the UV protector sealant. Use a brush or a roller, whichever you prefer, take the peg board out, and paint one side of it. Then paint one side of the frame with the sealant as well. Be sure to get any cracks and cover it well.



This is the most time consuming part. Most sealants want you to wait 24 hours between coats and this is a good idea. You're going to want to paint the front and back with at least 3 coats, making sure it is dry between coats.



10. Once the peg board has been painted it is time to screw it in place. Once it has been screwed down inside, set the entire frame aside. We'll come back to it later. You've just completed your frame.

PS…Don't forget you can get personalized coaching at Off-Grid-Living.com/ For some this is the ideal way to get hands on experience as well as personal attention needed to make this work for you.

Coming Up Next ...

Lesson #11: "Assembling the Solar Cells"

In the next lesson we'll be getting down to the nitty-gritty and start putting together our solar cells. .