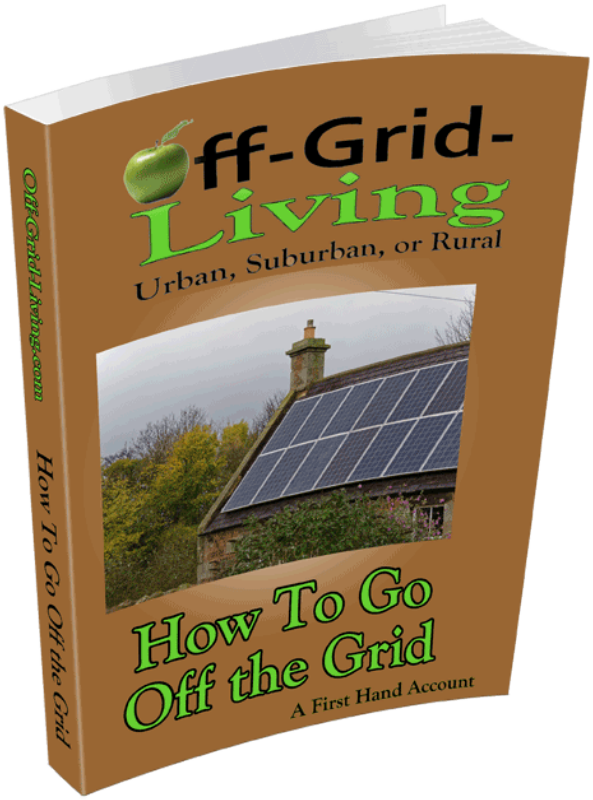
Off-Grid-Living

In An Urban and Suburban World



Lesson #14 …

How To Get Free Glass For Solar Applications

The most important thing you need to take away from this lesson is…

With glass you can do a number of solar applications. With free glass, you're on your way to saving a whole lot of money.

FREE GLASS

I consider this chapter to be one of the best values in this entire book. By putting the ideas presented here into place, you can immediately get your money's worth and then some.

Glass is the principle material in a number of solar applications. With glass can make solar ovens, solar water heaters, solar hot air heaters, and anything you want solar.

All the glass you're going to get is double insulated (two sheets), tempered safety glass, and it is all free. The best part is, it is so easy you're going to be amazed.

Here's what you do: Simply look in the yellow pages and call some glass and window companies. That's it!!

Stop in around mid-morning. Bring donuts. Find the owner if you can, if not the manager. Tell them the size you are looking for, and engage them in a conversation about using glass for solar energy. .

Tell them what kind of glass you're looking for and what you're doing with it. (I like to get glass that was removed from sliding glass doors. These are typically 34" x 76" and have two sheets of "safety glass.")

This is the perfect size for large windows or skylights. Ask them if they have any glass that they are throwing away that is close to the size needed.

Usually they do. The ethically thing to do is offer to buy it. But usually if you showed up with donuts (or sandwiches if it is around lunch time) The “Law of Reciprocity” will usually kick in and they’ll say “just take it.” (They were going to throw it away anyway.)

Even if they don’t, offer a low-ball price to take it away. They worst that they can do is say no, but in my experience it is unlikely. If they do, thank them. Leave your name and number and tell them if they get any (that size, or that kind) to give you a call. Sometimes business owners like to think things over. In any event, be friendly, leave the donuts or sandwiches, and leave.

Several were ALL TOO HAPPY for me to come pick up the glass. This saves them from paying for the dumpster that the glass goes into.

Once I got to know them a little, they set the glass aside for me and I come by once a week and pick it up. I always bring coffee and donuts, bagels, and what not. Now they already know what I’m looking for so if they call and say, "Come get the glass," I get over there fast and get it.

Typically, I like to get glass that was removed from sliding glass doors. These are typically 34" x 76" and have two sheets of “safety glass.” I’m sure you know what safety glass is so I want go into long explanations here. Needless to say, if they do break, I have a mess to clean up, but not a life-threatening problem. The glass in the photo (bottom left) in wood frames is also double insulated glass.

This makes it easier to work with because you have wood you can screw into, making the pieces more manageable.

The free glass I get is, of course not “perfect.” Sometimes, you’ll get glass that is slightly fogged due to moisture getting in between the glass sheets this is usually caused by a seal failure. This doesn’t matter in the slightest. In a solar heating system, the solar heat will quickly evaporate any water inside the glass, after that, use a little silicone and you can plug any leaks after the water is gone. Right now, I have enough free glass to cover my entire roof if I so desired. Further chapters in this book will show the glass being used for passive solar heating and for a solar oven.

FREE MIRRORS

You can also get all the free mirror you’ll ever need from glass suppliers as well. Many times they’ll have very faint scratches in the surface. But as a reflection surface for a passive heater, it doesn’t matter at all. I got 1/4" plate mirror, but all kinds can be found for free. I would suggest using a thinner glass mirror, less than 1/4" inch thick…this stuff is heavy, and is NOT safety glass. You can easily get cut if it breaks. I got over 200 square feet of mirror for free from one glass supplier. Wear SAFETY GLASSES and USE GLOVES.

These doors and mirrors are perfect for solar ovens. You can bake bread, and cook any number of things for free. The glass can be turned at a forty-five degree angle to the sun, reflectors (mirrors) on the top and the bottom, can make this a truly efficient heater, even on cold winter days.

These glass doors can also be used in a “flat” box type solar oven as documented elsewhere in this book. Again, the wood around the glass makes it very easy to attach a mirror on hinges or the wood of an insulated solar oven.

What you can do with all that free glass

One of the best uses for glass is to build an attachable greenhouse onto the front porch, or on the side of your house. You will be amazed at the amount of heat a south facing “solarium” will generate. Of course, if you’re living in a warmer climate, then using it to build a detached greenhouse could be the

answer. Literally, using these doors and 2x4's you can wall in a porch in minutes.

You use a blower to move air from the house into the greenhouse on the porch, the hot air will then enter the front window and move into the house.

If you have a south or west facing wall, you can easily use this glass to make a passive solar heating wall. Since they already mounted inside wooden frames, and most doors are fitted to the inside dimensions of a house, what might cost you $10,000-$20,000 in upgrades can cost as little as $500.

In fact, glass is so useful for solar energy purposes, just go and get some and you'll easily see where various elements can fit into your home and ideas.

What You Can Do Starting Today

1) **Start calling glass and window shops in your area.** The worst that can happen is they'll say no. If that happens, call the next one.

2) **Examine your house and see if a passive solar wall, or attached greenhouse would work for you**: Look at your house with a critical eye and see if picture windows, skylights, passive solar walls, or a greenhouse would you in your quest to lower your heating bills.

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 #5: "How Small Solar Systems Work"

In the next lesson we'll be understanding wind energy and turbines and whether this is a realistic option for your renewable energy projects.