

David Nigteagle's Design and Installation Considerations for his Home

1. What did you consider in your decision to install the equipment and system you chose?

I built my home, an Earthship, a little more than twelve years ago. Parts of my system have evolved over the years. The original system inverter is still up and running. Most initial decisions were based on available funding and anticipated load requirements. Last summer we added 1300 sf in the form of a second floor. The first floor is 1750sf. In building the second floor we had to relocate our two major solar arrays from their original position.

2. Who designed the system?

I did.

3. How did you choose an installer?

My company, The Solar Source, did the complete installation.

4. What were the products used in the installation and why was each product or vendor chosen?

I believe in buying the best you can afford. The equipment must last a very long time and it is well worth investing in quality equipment. My inverter is a Trace (now known as Xantrex). My solar panels are eight BP 75w on one array with a fixed mount and eight 120w Solarex on a wattsun tracker. We also have two 150w on a temporary ground mount pending completion of our second floor. We have two Solar Boost 50 charge controllers and 8 Dekka 6 volt batteries. We also have a Kohler 8.5 KW propane backup generator. Additionally, we have two 400 watt Southwest Wind 403's.

5. What problems did you anticipate?

Insufficient battery storage capacity. This will be remedied in the spring as the addition of the second floor will allow more room for additional storage batteries.

6. What problems were unexpected?

N/A

7. Was the cost higher or lower than you anticipated?

In line with what I expected - as a general contractor I have learned to always anticipate costs to exceed initial expectations.

8. What would you do differently or what suggestions do you have for others?

Lets talk about this one in person.