

Solar Home Progress

Aug 2010



Solar Panel mounting

- From last time: Designed a 12x24 base to support structure for mounting 20 panels (in 4x5 array)



However

- After putting up one of the A-Frames to support the panels, I stepped back to realize that this is ridiculous.



Ridiculous



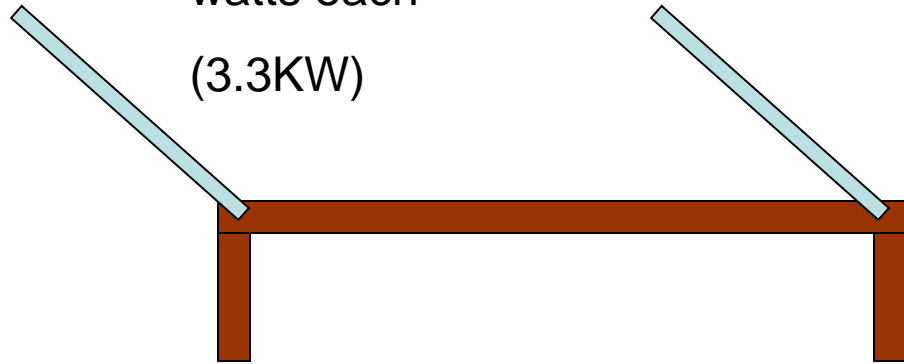
- I'm not going to try to get 40 pound solar panels up that high by myself.
 - It didn't look that high on paper.
- I can't be sure of wind survivability (not with \$12K of panels).
- Its obstructing of the views.
- Its obnoxious.

New Plan

- Have plenty of space to build out as opposed to up.
- Redesigned for lower wind profile and low visibility.
- Will only be able to mount 16 of 20 panels on present base
 - Safer to erect and maintain

2 Rows of 8
panels at 205
watts each

(3.3KW)



Delivering Solar Panels

- Each box contains 2 panels weighing 40 pounds each



Ran into new problem

- The solar panel data sheet led me to believe that there were 4 holes in the frame for mounting.
 - I thought they were “through” holes which would allow panels to be screwed into the frame.
 - It turns out that the holes are only on backside of frame

Make-shift Mounting method

- Deck screws and washers



I'm not crazy about this method

- Particularly at ends of array.
- Also, anyone with a screw driver can walk away in seconds with a \$600 solar panel.



First row installed



Before mounting second row

- Refine mounting system
 - Find out how to use the backside mounting holes. Do these provide a deterrent to theft?
- Any improvements in mounting will be applied to first row.

The End

