

SOLAR STRUCTURE DESIGN PROFILE

Note: This document is meant to help guide your design process and provide documentation for your final structure. You should present this document to the judges at the Challenge.

TEAM NAME: _____ SCHOOL NAME: _____

LEVEL: ☐ 4th-8th Grade ☐ 9th-12th Grade

Congrats on constructing a cool solar structure. Please fill out this form (or just create your own document) to the best of your ability before you talk the judges. You will give this form to the judges when you meet with them, so please have one clean copy for them at that meeting.

Here is what the judges will want to see:

- Your structure
- Solar Structure Design Profile
- Any notebooks, drawings, videos that you kept while building your structure

Solar Panel Details:

- Number of solar panels _____
- Solar panel type(s) used:
Monocrystalline, Polycrystalline, Thin film
- Rated voltage (V) of a single solar panel (usually on the back of the panel or on the packaging):

- Rated amperage (mA) of a single solar panel (usually on the back of the panel or on the packaging):

Loads in your Structure:

Describe the types and quantities of loads you used in your device. This might include LED Christmas lights, incandescent Christmas lights, motors, buzzers, capacitors, and/or something we didn't think of! Tell us everything you'd like us to know about these loads!

Total Number of Loads _____

Switch Details

Number of switches used: _____

Did you make the switches? ☐ Yes ☐ No

Describe the types of switches you used and what they're connected to:

Circuit Schematic

Draw a schematic of your circuit out on a piece of paper. This should illustrate inputs, outputs, power source, and circuit layout. This allows us to see how your circuit functions fully, since we can't see the whole thing in your house!