American-Made Solar Prize

Request for Technical Assistance

No Exposed Conducive Parts Solution for

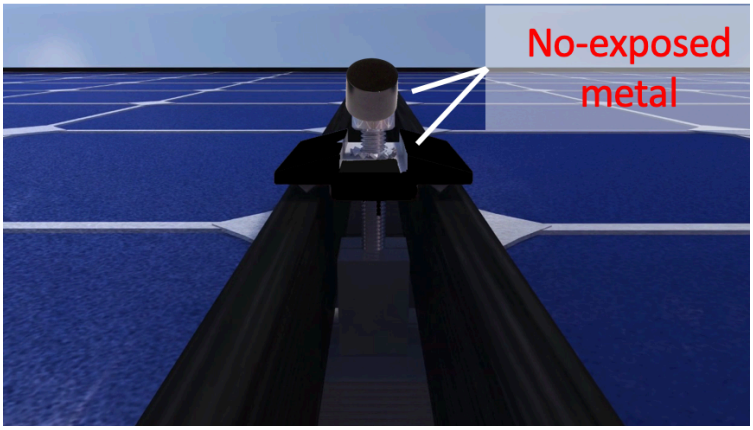
NEC 690.12(B)(2)(3) Rapid Shutdown

Our team may require the following technical assistance:

1. 3D printing of prototype component:
   a. Composite mid-clamps, end-clamps, and end-caps for mounting rails.
   b. Composite frames for solar modules

2. Testing mechanical and electrical characteristics of components and assemblies, including impact testing.
3. Testing bonding materials for composite frames
4. Environmental aging test of components and assemblies.
5. Intellectual property consultation.

We believe that either NREL, or Lawrence Berkeley National Laboratory should have most of prototyping or testing capabilities for item 1-4, however we are open to testing at any labs. Our team is mostly centered in the San Francisco Bay Area.



Mockup of PV array with no exposed metal parts

We will explore fiber reinforced plastics, high tensile fibers and polymers, along with metal that is covered with a non-conductive material to prevent shock when touched. We want to select materials that will be inexpensive to mass produce and easy to adapt to current production processes for solar equipment.