

CASE STUDY

THE HAITI EMPOWERMENT PROJECT

Stahlin Non-Metallic Enclosures contributes to the Haiti Empowerment Project through Ohio State University's Solar Energy Society.



THE SITUATION

The Haiti Empowerment Project brings the intellectual and material resources of Ohio State University together with Haitian counterparts to assist in the development and implementation of culturally relevant projects.



THE CHALLENGE

An Ohio State University student group, Solar Education and Outreach, a student chapter of the American Solar Energy Society, initiated a sustainable project for Haiti after members had learned that one of Haiti's largest problems is the lack of electricity — specifically for lighting. A decision was made that the group would add electricity and lighting to a small school in Haiti by installing a complete solar powered energy system.

One significant challenge was how to properly protect the solar panel controls.

THE SOLUTION

Fiberglass J1614HW enclosures from Stahlin Non-Metallic Enclosures were chosen to house the solar panel controls because the J Series provides a rugged design proven to hold extreme reliability in tough environments.

The power system was installed in the Stahlin Non-Metallic J1614HW enclosure with cables from the solar panels cables going directly to a charge controller. From there, the charge is regulated to the batteries, first going through a breaker. From the batteries, the charge returns to the charge controller where it is then fed to an inverter. The DC current then gets converted into AC for actual use in lighting.

The new solar power system now provides reliable power for lighting to be used during tutoring sessions, adult education classes, or other school functions. Additionally, participating electrical engineering students from University Caribe gained valuable experience from their first working exposure to photovoltaic components.



The J Series enclosures follow the original design of fiberglass enclosures products featuring a modest overhang cover on a flange mounted base. This enclosure can be configured with cutouts, windows, and other modifications to enhance any instrument installation.