



Registration Form

TEAM INFORMATION

Team Name/Project Title: Project [un]Contained

Department: Mechanical Engineering

Faculty Advisor: Dr. Peter Jenkins

Team Members : Nicholas (Nic) Chandler, Jason Bergfalk, Austin Zerr, Amber Weber, Gage Brumley, Brad Dyksterhouse, Riley Hamlin, Corey McLaughlin, Jon Farmer

PROJECT INFORMATION

Description:

Project [un]Contained is designing and developing a multi-purpose, self-sustaining shipping container structure for the developing world.

Abstract:

Project [un]Contained embodies the achievable idea that harsh environments should not result in harsh living conditions. This effort is led by University of Colorado, Denver students to design and develop a deployable multi-purpose structure utilizing upcycled shipping containers to make a positive impact in the developing world. The specific demographic that we are targeting is the poorest country in the western hemisphere, the country of Haiti. Aside from its infrastructure being susceptible to natural disasters such as hurricanes, earthquakes, and mudslides, Haiti also struggles with many utility-grid based and public health problems. The four major needs in Haiti are: a safe structure, reliable energy, clean water, and good health. The solution of Project [un]Contained addresses these needs in the following:

Safe Structure: A 480 ft² structure utilizing two used shipping containers made of Corten steel with secure doors and windows, and all essential amenities (Beds, Lights, Plumbing, Kitchen, etc.)

Clean Water: Integration of a rainwater collection system partnered with water purification for clean drinking water while also using low flow shower, sink and composting toilet.

Reliable Energy: A 2 kW modular PV system working with Battery Storage technology for 24/7 Electricity while utilizing LED lighting & Energy Star Appliances.

Good Health: An urban garden for consumption and profit, usable workspace with electricity, and refrigeration capabilities.

Illustration:

