SUPPLYFRAME
DESIGNLAB
HACKADAY PRIZE 2020

CalEarth

Humanitarian Aid

The Mission

CalEarth develops and educates the public in self-made, environmentally sustainable building designs. Houses anyone can build with their own two hands, using locally available earth, sandbags and barbed wire, that also meet modern-day standards.

SuperAdobe architecture is a powerful tool in the fight against the global housing crisis. The education provided by CalEarth has empowered hundreds of people to also start humanitarian projects for those in need.

The Work

Projects like the Pegasus Children's Project in Nepal in 2006 provided housing to 90 children and their caretakers and withstood the 7.6 earthquake in 2015. The Langbos Children's Home in South Africa, provides care and support for vulnerable children in the Langbos community.

The Baninajar Refugee Camp on Tehran/ Iraq border enabled the refugees from Southern Iraq, as the eventual inhabitants, to build the shelters alongside trained UN personnel in the Baninajar refugee camp in Khuzestan, Iran. CalEarth has provided the tools and training to many communities who needed immediate housing after a crisis.

Dream Team Challenge

Automated Options for SuperAdobe Building Processes:
One potential drawback to the SuperAdobe system is that it's a very laborious method of construction. The intensity of labor accounts for the vast majority of building expenses.

This challenge asks teams to automate or mechanize parts of the building process in order to maximize efficiency, and drive labor costs down, without compromising the integrity of CalEarth's vision to ensure accessibility and affordability of the technology.