“EARTH TURNS TO GOLD IN THE HANDS OF THE WISE”

- Rumi
Who We Are

At CalEarth, we believe housing is a human right and everyone deserves a home. Our mission is to further the research, development, and education of Superadobe, a safe and accessible form of Earth Architecture that provides environmentally and financially sustainable living spaces.

Through our SuperAdobe training programs, we have empowered thousands of people to improve the world around them. SuperAdobe structures can be found in 54 countries being used for a variety of purposes including emergency housing, an orphanage, a birthing center, wellness retreats and personal residences. As we teach, we also learn and continue our research and exploration of SuperAdobe’s potential.
SuperAdobe: Powerful Simplicity

SuperAdobe combines ancient building techniques with basic architectural principles, and the results are earthquake, fire, and flood resistant structures that can range from a one-person pod to a fully modernized home. Using sandbags, barbed wire and the earth beneath your feet, SuperAdobe is a truly affordable and sustainable way to build homes anywhere on the planet.
Our Founder

Nader Khalili (1936–2008) was a visionary architect, author, humanitarian, teacher, and innovator. Born in Iran as one of nine children, his quest was to empower the world’s poor and refugees to build homes using the earth under their feet. His sustainable solutions to human shelter have been published by NASA, employed by the United Nations, and awarded the Aga Khan Award for Architecture, among others. Inspired by the poetry of Rumi, he was a quiet hero who never forgot the importance of living an honest, meaningful life. “No one can prove there is a meaning to life. I must make my own life meaningful. That is all.”
SuperAdobe is a powerful tool in the fight against the global housing crisis. It is currently used across the globe in ways that have helped rebuild communities facing a housing crisis. The education provided by CalEarth has empowered hundreds of people to found humanitarian projects for those in need.
After the devastating 2010 earthquake, there were multiple efforts carried out in Haiti by CalEarth alums, including the Konbit Shelter Project in Cormiers, Leogane. “Our building project offered meaningful work for people at a time when many were desperate to participate in something constructive that could restore a sense of efficacy amidst the chaos and displacement.” The group partnered with a local grassroots organization that works with the homeless population of the region and re-built homes for individuals as well as a community center over a three year period. They also held workshops and trained local community members who were subsequently hired and paid to build the shelters.
A UK charity, Small Earth, built over 40 domes in 2006 for the Pegasus Children’s Project in Nepal, which is home to over 90 children and their caretakers, all of whom were confirmed safe after the 7.6 earthquake that hit Nepal on 25 April 2015. Trained by a CalEarth alumni in 2005, Small Earth’s founder, Julian Faulkner, shared the news: “The domes have come through relatively unscathed with just surface cracking to the plasterwork...in the village below the site, 15 houses have collapsed and many others are badly damaged.” Faulkner stated the superficial damage to the buildings is a testament to the quality of training we received that has enabled us to further develop the technology for use in climates as diverse as the temperate UK, the monsoon-drenched Himalayas and the African savannah.”
In 1995, Nader Khalili partnered with the UNDP and the UNHCR to apply his Mars research to providing emergency shelter for Iraqi refugees seeking safe harbor at the Baninajar camp in Khuzestan, Iran. Using only “the tools of war”—barbed wire and sandbags—refugees built 15 domed shelters using his Super Adobe system. Each shelter (50 sq. ft/4.6 sq. m) was built by a team of six refugees and took 7-11 days. The cost of per shelter was $625.

After the completion of this project, Khalili built an entire emergency shelter prototype village on the CalEarth campus to further refine and simplify the building technique. Senior U.N. officials from the Emergency Response Division at the U.N. Development Program visited the prototype village in 2001 and commented that “The (Khalili) initiative is very suitable because it covers the permanent character of the structure and the dignity aspect of the people who are going to benefit from the shelter – to live in one of these houses is absolutely perfect. To live in a tent is not so dignified in the long run.”
Notable SuperAdobe Structures

The following examples represent a small sample of the SuperAdobe projects worldwide built by CalEarth alumni or using CalEarth technology and designs. SuperAdobe domes and vaults have been built in at least 49 countries on 6 continents and the list continues to grow. These projects range from backyard landscaping to eco-resorts and everything in between, showing the range of what can be done using SuperAdobe.
Oman

Junoot Eco Development

Junoot is a masterplan development situated in the South of Oman, in the village of Shuwaimiyah. Known for fishing, the village is situated on a 30 kilometer virgin beach on the shores of the Indian Ocean. Two prototype structures (one ecodome and one triple vault) were built as a collaboration between CalEarth and The United Real Estate Co. and awarded the World Architecture Award in 2012. URC commissioned CalEarth to create this prototype to set an example of the type of architecture that is most desirable to high-end, authentic-experience seeking, and adventurous tourists. Junoot will eventually feature chalets, a 100-key resort and a boutique hotel, some of which will be built using SuperAdobe.
California

Earth One

Located on CalEarth’s Hesperia Campus, Earth One is a 2,000 sq. ft home including 3 bedrooms, 2 bathrooms and a 2 car garage in a 9 vault design. The vaulted house prototype has been in development since the mid-1980's by Nader Khalili and CalEarth to allow the maximum space, light, and interior ventilation, while using the traditional form of the vault. The vault system can be combined with domes and apses or repeated back-to-back to form a variety of aesthetic and efficiently planned house designs. Earth One includes conventional interior framing, fittings, and finishes including central heating and air conditioning, and was fully permitted by the building department and received a residency permit in the City of Hesperia in 2007.

Photos Courtesy of CalEarth
SuperAdobe Case Study 3

California

Eco Dome

The Eco-Dome is a 400 square foot structure featured in Vogue Magazine, and on programs including HGTV Tiny House Hunters and CNN. It is a spacious and energy efficient “tiny” home that includes a rocket mass heater and a passive cooling system called a wind scoop. The Eco-Dome is engineered to surpass all structural building codes and has been permitted and built in various locations worldwide. Eco-Dome is a modular design, and commonly built as a “Double Eco-Dome” to provide additional bedrooms (see Bonita Domes example).

Photos Courtesy of Eric Simpson
SuperAdobe Case Study 4

California

Bonita Domes

Built by CalEarth alumna Lisa Starr, Bonita Domes is a double-eco dome that is both a private home studio and retreat. Lisa was granted a building permit in 2010 (under the 2007 building code) and began building in early 2011. She received her final occupancy permit in April 2014. Bonita Domes features three separate structures: one-12 ft diameter and two-8 foot diameter structures; and her personal residence, a 1360 sq. ft. structure (two-15 ft diameter and 1-12 ft diameter). 85% of the material used to build the structure was earth excavated from her site.
Help us reach further. Become a CalEarth Member.

CalEarth is engaging in ground-breaking research and education that fundamentally transforms housing options worldwide. Please consider making a donation to support all aspects of our programming including:

**Take SuperAdobe Mainstream:**
CalEarth continues to seek funding to support necessary research and testing to make SuperAdobe a standardized, available building technology worldwide.

**CalEarth Campus:** With an ever-growing set of educational programs, CalEarth is in need of additional campus buildings to provide space for student housing and classrooms. We will also need to build a sidewalk, parking lot and ADA accessible pathway throughout the site in compliance with the City of Hesperia.

**Duffle Bag Dome:** CalEarth developed an emergency shelter kit which includes all the tools and materials needed to build a six-foot emergency shelter and train 15 builders, all in two 35 pound duffle bags. We are seeking funding to create 50-100 Duffel Bag Dome kits (each kit costs $300 to produce) that will be deployed along with instructors to disaster-stricken sites. Instructors will teach community members SuperAdobe building techniques, and empower them to rebuild.

To make a donation please visit us at: www.calearth.org/donate
“WHAT YOU SEEK IS SEEKING YOU”

-Rumi

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