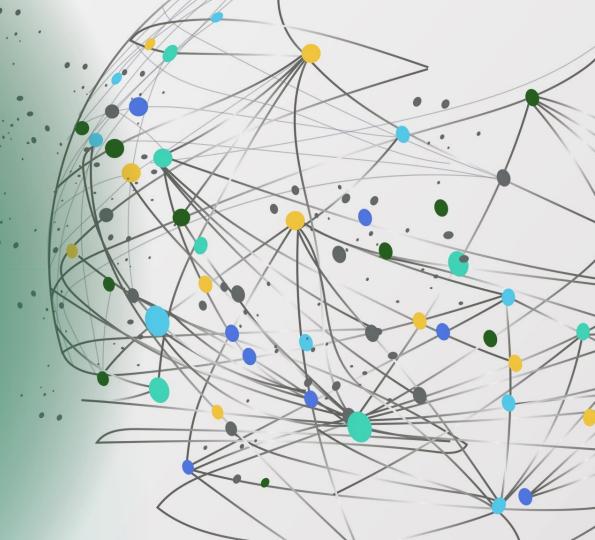
Solar Decathlon

DESIGNED, BUILT, AND LED BY STUDENTS





What have we accomplished so far?

- FIRST DELIVERABLE
- DESIGN AND MODELING SOFTWARE
- SAFETY PLAN
- MARKET ANALYSIS
- SCHEDULE
- BUDGET
- SITE PLAN
- GRID ISLAND CAPABILITIES
- TALKED WITH LOCAL COMMUNITIES
- WORKED WITH MONOLITHIC DOME INDUSTRIES
- Finished construction of the House.

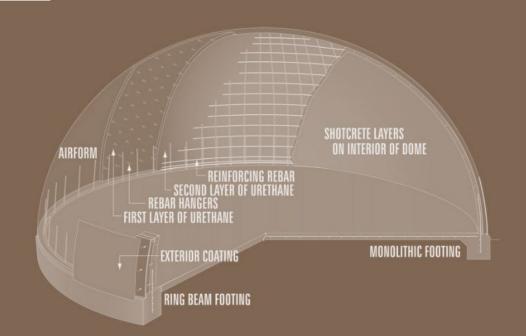
Our Solution



CONSTRUCTION METHODS

QUICK PROCESS

- 1. Prefabricated Airform is inflated
- 2. Form sprayed with expansive foam insulation from inside
- 3. Rebar is attached
- 4. Shotcrete applied to interior of dome



What makes this all possible?

INDUSTRY PARTNERSHIP AND NETWORKING

FACULTY ADVISEMENT

GOVERNMENT GRANTS

MATERIAL DONATIONS

Communication and Marketing Strategy

The easiest way to change someones mind is to show them, not tell them.

We often show students, faculty, visitors and many others what we are doing on our project, and in what ways these principles will save them time and money. A lot of individuals have seen our house and are amazed at what we can do.

Execution

Our team set out to do one thing, reduce the amount of heating and cooling loads for the house. Heating and Cooling air takes 40-60% of all homes electrical load, and so if we were to make a sustainable house we wanted to address this glaring issue.

By making the concrete domes that have a huge thermal massing ability and an almost unbroken insulation layer we believe that our Triple Dome Home will not only perform better than other homes, but that we can save the occupants money and energy.



Community Outreach

We have reached out to local papers, different professors and students. We have talked with industry professionals as mentors, advisors and sponsors to our project. We have gone on podcasts and have changed the way a lot of students view sustainability. It's not a LEED checklist, it's a way of value engineering that is better for everyone involved.

We will have our open house for the Solar Decathlon Event, and then we will show our house off in two separate competitions. We want as many people as possible to see our home and be amazed that some students could design and build a home that solves a lot of our housing and energy issues.

