

Let's build **MORE** than just buildings



October 2010

Right: 2 classrooms for 50 students at an orphanage

Left: The University of Cincinnati team in their earthbag test building

Below right: Owen's round house



Earthbag Needs:

More testing, including:

- Diagonal compression of wall portions
- Plaster & stuccoes on heavy clays
- Shake table tests of full buildings

Realistic guidelines for earthbag design

Translations of construction information and plans in

- French & Kreyol
- Arabic

Better reports about existing structures' performance

More trained builders

Training for dome and non-dome reinforced buildings

SIMPLE Earth Structures



Needs in the developing world are great and complex. Often poverty is integrally connected to lack of power or property or knowledge. So many who wanted to build in Haiti this year found it impossible to buy land.

No one person or organization can correct all this, but those below have helped make a difference in some recent aid projects:

Professional expertise with earthbag:

West coast US- Engineer Nabil Taha,
SW US- Engineer Bill Druc, Architect Kevin Turner
Midwest US- Architect Liam Ream

Enthusiastic about earthbag:

Kevin Rowell of Kleiwerks and UN Habitat in Haiti
Architects Darrell DeBoer and Christopher Andrews
EMI- Engineering Ministries International
An engineer at Brown University
Civil engineer and seismic expert Dov Leschinsky
Philippe Garnier of CRATerre

EARTHBAG FIRSTS:

Custom engineered plans for stabilized earthbag in high seismic risk zones available from Nabil Taha

East coast US Earthbag training- repeated Homegrown Hideaways, KY & 1 time Barrels of Hope, FL

A non-dome structural earthbag building designed by an architect at a Cynthiana, KY park.

French language blog: <http://www.notremonde.org/ma-maison-en-sacs-de-sable-un-sac-a-la-foi/>

My wish list:

Supplies to test fill materials for flood-prone areas

New universities to start more engineering tests

A training workshop in the NY area

Travel overseas to develop building plans *with* people or teach workshops in Haiti and Senegal and other places.

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After the earthquake in Haiti, I had time to think about how little wood is available there. I felt burdened for them, and thought 'I bet earthbag would really work well there. I wish I could help, but of course I can't.'

Then Owen Geiger of GRISB.org and www.EarthbagBuilding.com asked me to.

Many emails were already seeking advice and plans for earthbag buildings for Haiti. The internet was buzzing.

The spring was very busy. Owen blogged, taught, built, advised, and posted training videos on You-tube.

Kelly gave advice, fielded enquiries and with Zana developed an entire new website focusing on aid.

I read anything I could find

about Haiti and a 30 -page book grew. Anthropologist Jay Edwards thought I could get a grant to visit and study

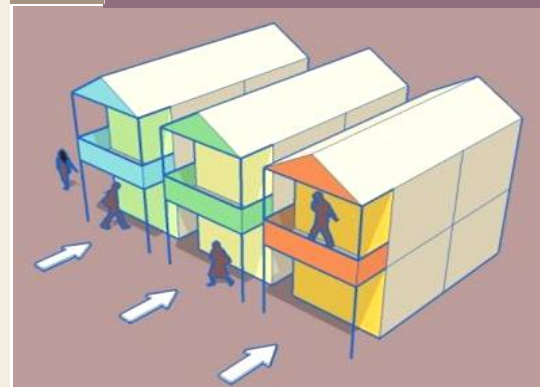
Haiti more. But there were plans to draw and details to work out. Finally I got my hands dirty with tests and visits to trainers and real projects.

and real projects.

After 8 months we have earthbag buildings and builders in Haiti. There are free plans for reinforced homes and classrooms, and a little more knowledge about earthbag's structure.

Will the next 8 months bring even safer buildings for the poor?

Help Needed!



October 2010

Who cares about disaster victims?



THE BOTTOM LINE

How much time, money, and energy will a building take? Will a family be able to buy medicine after they build? Can they add on and keep the building up? Will a pastor be able to feed the children who live inside?



Projects we helped plan for Haiti this year



Many of you.

We can't fix everything. But we can make a difference, especially if we're not working alone. "Whoever is generous to the poor lends to the Lord, and he will repay him". Proverbs 19:17

Left: Shelters improved with earthbags. Above: Haitians learning to build.



storms and quakes

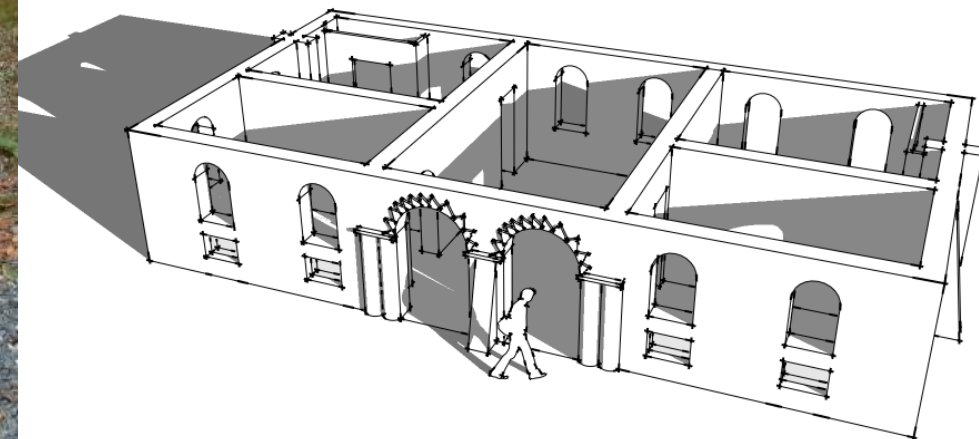
Earthbag buildings look like cement block when they are finished with cement or lime plaster. They use poly grain bags and barbed wire. They don't require skilled workers or cement or power tools. They cost 20- 25% as much as cement block!

New ways of building with earth can keep costs low for both nationals and missionaries. Low-cost buildings can allow people to make their own decisions and build shelter in ways that work well for their culture and their land.

Earthbag enables those in need to care for themselves. People around the world want to learn to build it.

In many places people with limited income welcome relatives and friends in need to stay with them. They want to be able to add on without an architect a little at a time.

Wood and cement are too expensive for most of the world to use safely. Old ways of building with earth or stone may not stand up to



Above: 2 of a proposed 6 school buildings are built at Children of Hope Orphanage, Leogane

Below: Self-help house by Barrels of Hope at Wynne Farms, Kenscoff

Bottom: Baptist Church, Building- Port au Prince

Test structure for the University of Cincinnati

Yet to come: US aid housing in 6 cities



Helping long distance www.EarthbagStructures.com & [www.Scribd.com/Patti Stouter/documents](http://www.Scribd.com/Patti_Stouter/documents)

Around the world people looking for help check the web. Earthbag Structures now has plans, training materials, costs and examples of aid projects.

Free plans now include a school building with two 6.8 m square rooms. It can be reinforced for high seismic risk areas by cement stabilizing and providing deeper footings for the buttresses.

<http://www.earthbagstructures.com/PDFs/CLASSROOM.pdf>

Info at the Scribd site:

Haitian Wisdom- 30 p. about vernacular architecture

Friction & Tensile Strength of Earthbag Components- 13 p.

Build to Resist Hazards- 56 p. construction manual

Choosing Shelter Plans
Choosing Transitional House Plans

Soils for Earthbag- Part 1 Testing & Part 2 How to Build



is the **keyboard** **MIGHTIER** than the **hammer?**

