BUILDING WITH UBUNTU-BLOX
(RECYCLED BUILDING BLOCKS)

UBUNTU INFO PART 3

Patti Stouter       April 2012
Ubuntu is an African word with a rich meaning that encompasses cooperation, humanity, and group solidarity for survival in situations with scarce resources. It is a good name for a self-help technology that can turn a problem into a resource.

Inventor and welder Harvey Lacey of Dallas, Texas envisioned the press and system to build with trash in response to the housing crisis after the Haitian earthquakes. Owen Geiger provided advice about how to reinforce the wall. Harvey has been hard at work refining and promoting and teaching ever since.

See other files in the Ubuntu Block Info series also available online soon to learn more about building with Ubuntu blocks.

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PLANNING UBUNTU-BLOX BUILDINGS
Must have straight walls

so the wires can be ‘tensioned’—tightened to stiffen walls
Single story for safe Ubuntu-blox buildings
Or a second story above a fire-resistant ground floor

**IF BEDROOMS OPEN TO OUTSIDE STAIRS***

* In a prolonged fire, Ubuntu-blox materials might release toxic gases or melt.
Build Ubuntu-blox on a non-flammable base wall

WHERE PEOPLE COOK INSIDE
Heavy base to anchor Ubuntu-Blox against high winds
Exterior pinning stiffens Ubuntu walls

Use rebar, pole, or bamboo
Rubble footings work well with a grade beam to anchor the rebar.
Familiar stone or masonry for a base wall

but anchor vertical reinforcement to it or in it
Or use gravel and earth bags

For a cheap non-flammable base wall
(only gravel or stabilized earth fill where exposed to rain, snow, and leaks)
Earthbag anchors for light-weight upper wall

- Leave gaps for concrete
- Hammer rebar through 2 courses
- Fill gaps with concrete
- Add form, rebar, pour sill, strap
BUILDING UBUNTU UP
Lay blocks with one baling wire side up
Tie each block to two horizontal wires

Tie horizontal wires to rebar at corner or end
Every second course tie verticals together
After 4 courses run horizontal reinforcement

3/8 inch rebar
Or use 11 gauge masonry joint reinforce-ment
Overlap horizontal rebar at corners
Tighten horizontal wires to stiffen building
FINISHING WELL

[Image: People working on a wall made of white bundles attached with wires.]
Anchor frames for doors and windows to rebar
Attach ring beam to vertical rebar

Screw wood ring beam at corners and overlaps
Tie roof rafters to bond beam well

Hurricane straps hold the roof on
Use a light-weight roof for earthquake safety
Plaster mesh strengthens walls for high risk areas

Use plastic fishnet or galvanized chicken wire tied to rebar

For lower risk areas plaster attaches well to recyclable blocks or to non-recyclable blocks bagged in plastic mesh
Always plaster to preserve block strength
Use Ubuntu to build the economy as well as homes

AVAILABLE MATERIALS, EASY TO LEARN
Thanks to the many individuals and organizations that have supported Harvey Lacey’s Ubuntu-Blox development and testing:

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