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 designed the press and wall reinforcement. Harvey has been hard at work refining and promoting and teaching ever since.


More files in this series available at the recycled plastic page at [www.simplestructures.net](http://www.simplestructures.net) or contact Harvey at [ubuntublox@gmail.com](mailto:ubuntublox@gmail.com)

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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CREDITS
Must have **straight walls**

so the wires can be ‘tensioned’—tightened to stiffen walls
Single story for safe Ubuntu-blox buildings
Or the 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
FOOTINGS AND BASE WALLS
Rubble footings work well

With a grade beam to anchor the rebar
Familiar stone or masonry for a base wall

With vertical reinforcement anchored to 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)
Anchors in earthbag for light-weight upper walls

Leave gaps for concrete
Hammer rebar through 2 courses
Fill gaps with concrete
Add form, rebar, pour sill, strap
BUILDING UBUNTU UP

UBUNTU-BLOX INFO 3: Building with Ubuntu-Blox
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 reinforcement
Overlap horizontal rebar at corners
Tighten horizontal wires to stiffen building
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 backed Harvey Lacey’s Ubuntu-Blox development and testing:

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IOM

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