

WHAT IS EARTHBAG?

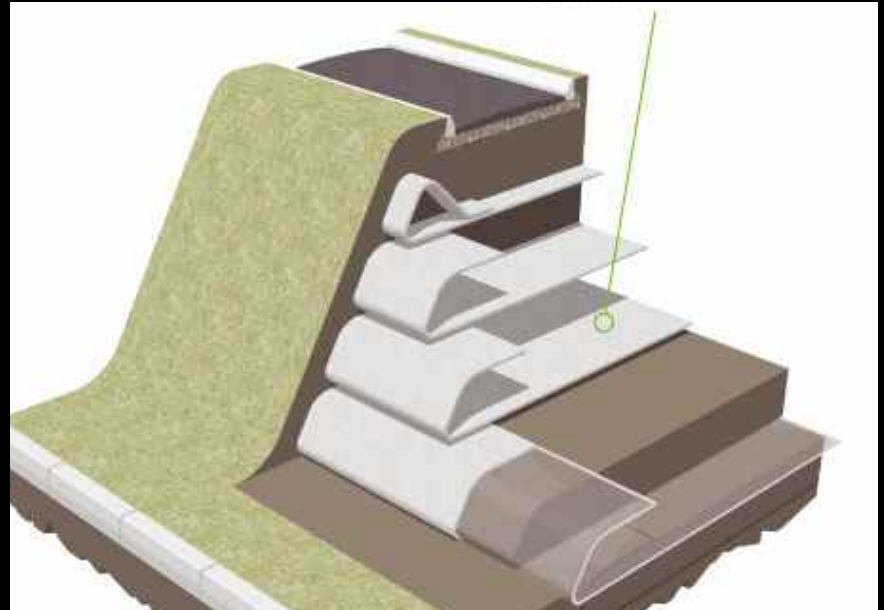
B1: EARTHBAG INFO PART 1



Patti Stouter (www.BuildSimple.org)
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with Natural Building Blog friends

HIGH TECH EARTH

Like geofabric retaining walls



A SIMPLE PROCESS

Using Hand Tools



SIMPLE SUPPLIES

**Poly-propylene
bags or tubes**

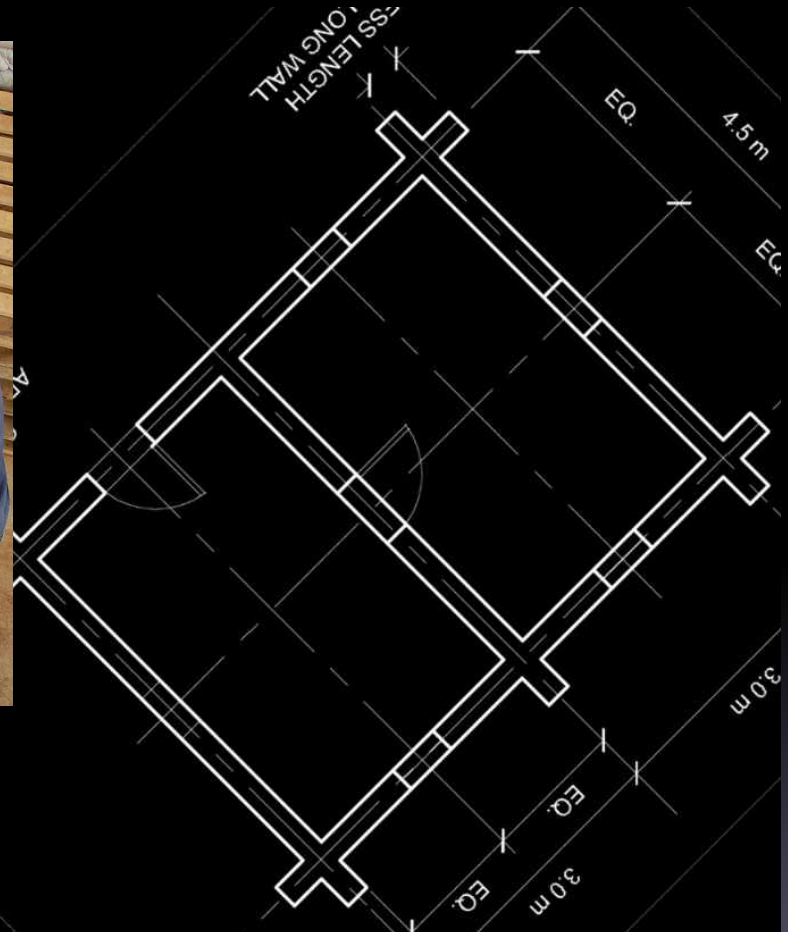
Barbed wire

Poly cord

Wire



FOR CAREFULLY CHOSEN PLANS



A LOT OF SUBSOIL

**Damp,
slightly sticky
'cohesive'
soil**



A LOT OF LABOR

**Unskilled
workers
with one
skilled builder**



OFTEN ON A NATURAL FOOTING



EARTHBAG uses most soils for low to medium strength walls



CONTAINED EARTH (CE) makes medium to strong walls



- **Soil must be strongly cohesive**
 - **Damp**
 - **Tamped**
 - **Reinforced for risk**

CONTAINED GRAVEL (CG) resists moisture



Footings for all walls and buttresses

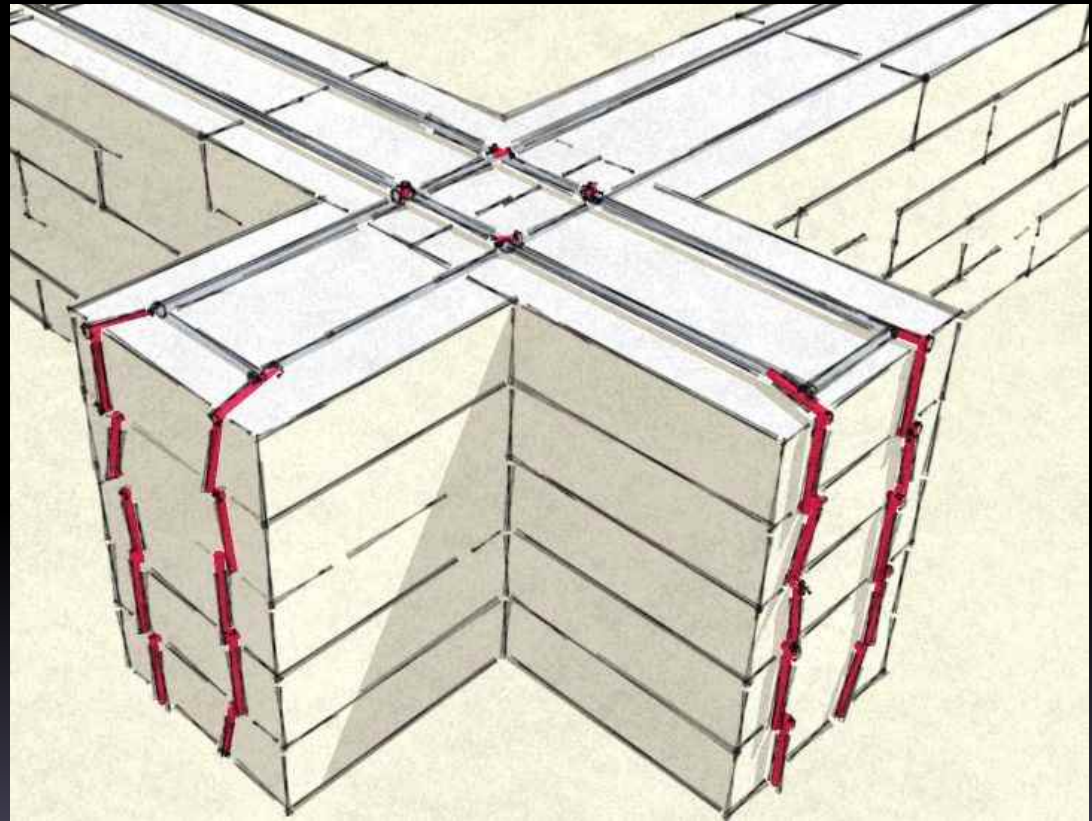


Lay a course

Tamp it firm



Lay barbed wire every course



Overlap bags like bricks



Or use long tubes



Straight or curved walls



Openings of arches or frames



Always topped by a bond beam



Attach a roof



Or build a dome



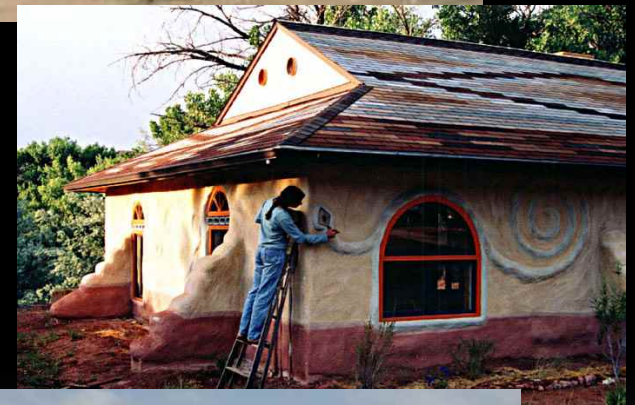
Plaster protects the bags



HAITIAN, EAST INDIAN, SOUTH AFRICAN, AND AMERICAN EARTH BAG-



**For schools, clinics,
homes, and more!**



Earthbag can be:

- **50- 70% cheaper than concrete block**
- **Sustainable**
- **Cool in hot regions**
- **Less likely to mold than concrete**
- **Quiet inside**
- **Safe from hurricanes and weapons**
- **All YOURS!**

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B1: EARTHBAG INFO PART 1

See the other parts of the Earthbag info series available online to learn about earthbag construction.

Example projects around the world are featured on the Earthbag Building and Calearth websites.

Strong buildings require care and advice. Before building, purchase a book or video, take a course, and/ or seek advice from experienced builders and/ or architects or engineers. To build in areas with seismic risk, look for Build Simple's latest structural information.

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Thanks for hard work and sharing photos:

Images courtesy of:

1, 17 (left), 19, 20, & 22- Small World School, Nepal

2 (left), 21- E. Vallejo, Columbia

2 (right)- www.Terram.fr

5, 14 (l.), 15- E. Bellamy, US

7- F. Pacheco, EcoOca, Brazil

8, 23 bottom left- M. Gunn and S. Smoot, Children of Hope, Haiti

10- C. Ernstsen, Build for a Reason, Uganda

11 left- K. Hart, Earthbag Building website

12- R. Barber, EMI/ Free Burma Rangers, Thailand

13- Aman Setu School, India

16- F. McBride, United Earth Builders, US

17 (r.)- G. Carneiro, Brazil

23 upper left- Rasin Foundation, Haiti

23 upper right- J. Kennedy/ Next Aid, South Africa

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