Build Your Home By Hand...

CONTENTS

1. Problem Statement	4
2. Audience Definition	10
3. Benchmarking	12
4. Early Concepts	20
5. Visual Development	24
6. Design Iteration	28

Problem Statement

PROBLEM STATEMENT

Cob houses and natural building materials offer an alternative building method with a variety of benefits. While this could benefit those interested in building their own home, many aren't even aware of the option

WHAT IS COB?

Cob is an earthen building material comprised of four simple natural materials: clay (binder), sand (strength), straw (reinforcement), and water (to mix).

There are many benefits to building with cob, including durability, greatly reduced environmental impact, and financial empowerment.



Linda Smiley's 'Heart House', one of the first cob houses built in the United States



This group is working to put a roof onto this partially completed cob house

WHY COB?

The construction industry is a major cause of mining and industrial processing, with all their attendant pollution, ecological havoc, and social disruption. Modern building materials depend on mining: gypsum for drywall; iron for rebar, hardware, and roofing; lime for cement. And every material used in a typical modern building is the product of energy intensive processing. The lumber mills, the steel foundries, the factories making plywood and chipboard, the industrial plants using tremendous heat to turn minerals into cement -all consume vast quantities of power, supplied by the combustion of coal and oil, the damming of rivers, and the splitting of atoms.

These manufacturing processes release toxic effluent into the water and hazardous chemicals into the air. Once made, these materials depend on fleets of polluting trucks to deliver them, usually from hundreds of miles away. A major byproduct of all industrial construction and destruction is landfill waste, which comprises 25 percent of landfill volume.

Seventy-five percent of all trees cut in North America are used in construction. The United States lost 15/16ths of its original forest, and the lumber industry is trying to cut down the last sixteenth.

SOURCE

Ianto Evans and Michael G. Smith, The Hand-Sculpted House. White River Junction, Vermont: Chelsea Green Publishing Company, 2002.



By substituting earth for wood in the walls, floors, and finishes in a standard 2,000 square-foot house, we can save 60-80 percent of the lumber. Earthen construction generates no air or water pollution. Excess material goes right back into the ground, effectively unaltered.

Audience Definition

NATURAL BUILDERS

Cob houses can usually be built by the owner. You don't need a degree in architecture or to be a structural engineer to build a cob home. Many people build their own homes after taking a one weeklong cob building workshop. It is very rewarding to be able to build your home with your own two hands.

The benefits cob has to offer can benefit anyone how has the vision to see its potential. Cob is a recent arrival in the United States. Except for adobe in the Southwest, earthen building is virtually unknown here. For that reason I decided it was important to keep the audience as broad as possible, and instead focus on spreading general awareness of the topic and making the benefits clear.

Benchmarking

EXISITING SITES

By benchmarking existing websites that focus on cob houses and natural building, I was able to determine what resources already exist on the subject. This process also helped me to evaluate the strengths and weakness of existing sites to help me determine where improvements might be made. I was able to take away several lessons from benchmarking these sites. Current resources contain information that is either a simplified overview of the subject, or extremely detailed information on the building process. There are few resources that bridge the gap between introducing the concept and learning detailed building techniques. Of the sites I evalutaed, the development of visual style varied and often tended to be somewhat unconsidered and ultimately unengaging.

COB COTTAGE CO.



COB COTTAGE MENU

- Recent News / Events
- What Is Cob?
- Cob Pictures
- Workshops
- Books, videos, etc.
- Apprenticeships
- Information Requests/Donations
- For More Information
- Lessons from a book signing tour
- About Cob Cottage Company

Rethinking your life? Finance, health, lifestyle, environment, philosophy: LifeStatement.com

Kiko Denzer, on the work of art, and the art of work: TheWorkOfArt.org

Latest News:



OFFICE HOURS

Monday/Wednesday/Friday – 10am to 2pm 541–396–1825 ~ cob@cobcottage.com PO BOX 942, Coquille, OR 97423

NEXT TOUR DATE: JUST ANNOUNCED - NEW TOUR DATE: January 16th 2pm!!!! Please Join us if you can't make this one the next one after that will be on February 28th at 3 pm for a free tour and potluck to follow. Meet the staff, see what we have been up to this year. See over a dozen cob buildings and garden walls, huge sustainable garden and Boots the cat! Call 541-396-1825 to RSVP for a free scheduled tour. Or if those dates do not work for you, call and ask if you can schedule a private tour for a \$50 donation. If you can't make it this month, the next free tour dates will be March 12th (3pm), April 10th (3pm) or May 22nd (4pm). And if you want a longer stay - come join in the next workparty from January 17th-22th or February 23-28th.

2016 Workshop Schedule is now posted. Please click on the "workshops" under the menu to the left to see our most current calendar. Hope you can join us this year!!!

A SPECIAL MESSAGE FROM IANTO EVANS... Ten Ways Natural Building can Address Climate Change

In 2009 lanto was a featured speaker at the Summit on Climate Change in Copenhagen. 180 nations were present for a week, discussing ways to slow down global warming. Here's the paper lanto read, with minor updates.

PROS

• A large selection of cob related books and

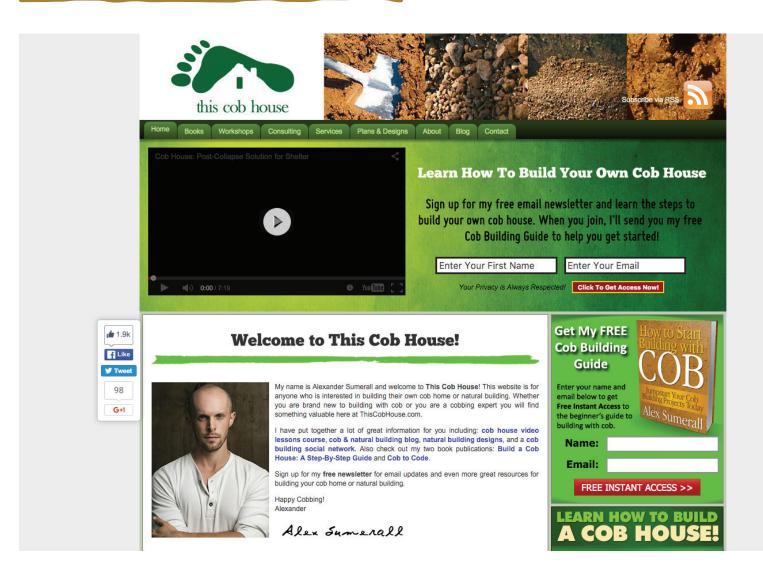
DVD's for sale.

- Information on cob workshops for those interested in-depth learning.
- Galleries of pictures of all things cob, great for inspiration
- Authors lanto Evans and Linda Smiley brought cob to the United States for the first time in the 1990's.

CONS

- Introductory information is shallow and makes little mention of cob's benefits.
- Visual design is somewhat unconsidered.

THIS COB HOUSE



PROS

- Contains good introductory information on cob and does a good job of explaining the benefits available, although the information is slightly buried.
- This site offers workshops, consulting, and building plans and designs for purchase.
- Blog has a lot of good articles on a variety of cob-related topics.

CONS

- Gives visitors the feeling the site is trying to sell them something.
- The only books for sale are written by site's author.
- While the visual design is slightly more considered than other sites it still leaves something to be desired.

COB COTTAGE CO.



KATE'S COB

This beautiful cob home is 1,200 square feet and features round log posts and beams from trees that were milled from the property. There are cob walls on the first floor and cedar boards frame the loft above. This house began as a Cobworks workshop in 2003 and was lovingly finished by Kate, her daughters and a cobbing crew over the next few years. Kate also hosted 3 more workshops with us to add on the outdoor seating area with cob oven, a garden wall and gate, and a finishing plaster workshop.



PROS

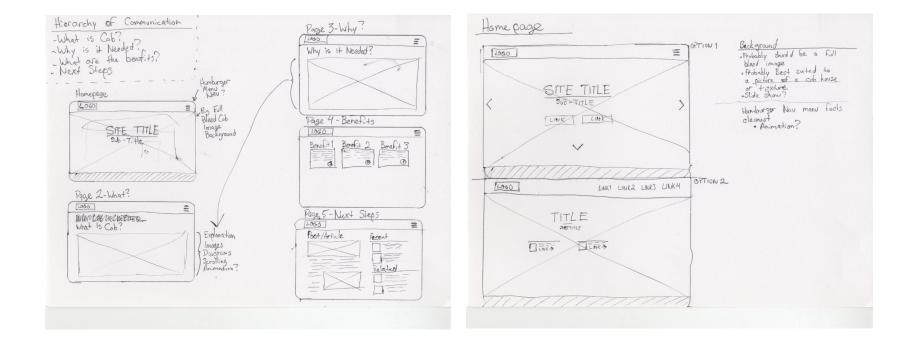
- Probably the most considered visual design of sites benchmarked.
- Information on workshops for those interested in hands on learning.
- Gallery contains interior and exterior pictures of several completed cob homes, great for inspiration.

CONS

- A short FAQ page provides little introductory information for those not familiar with this topic.
- Only two articles available on the 'Articles'

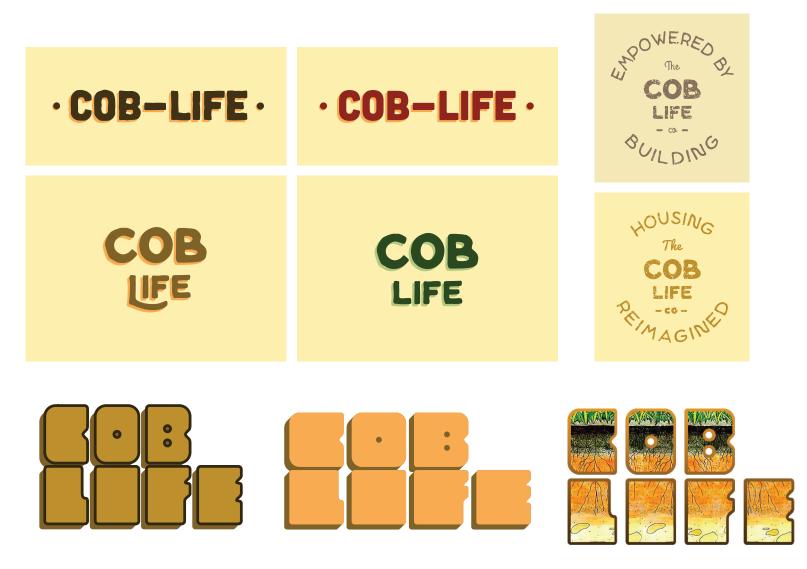
page.

Early Concepts

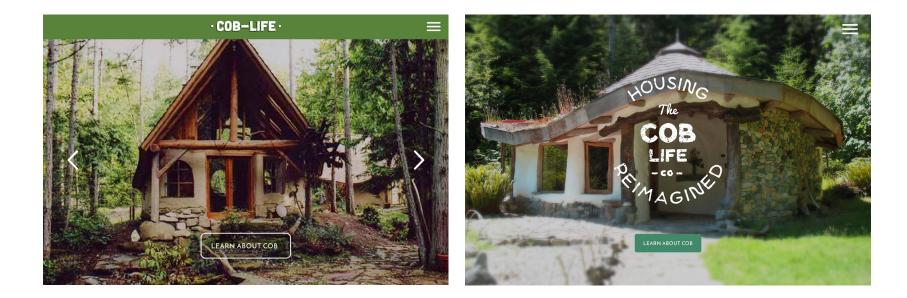


These early sketches show wireframes. These wireframes helped me think

through the placement and hierarchy of elements on the pages of the site.

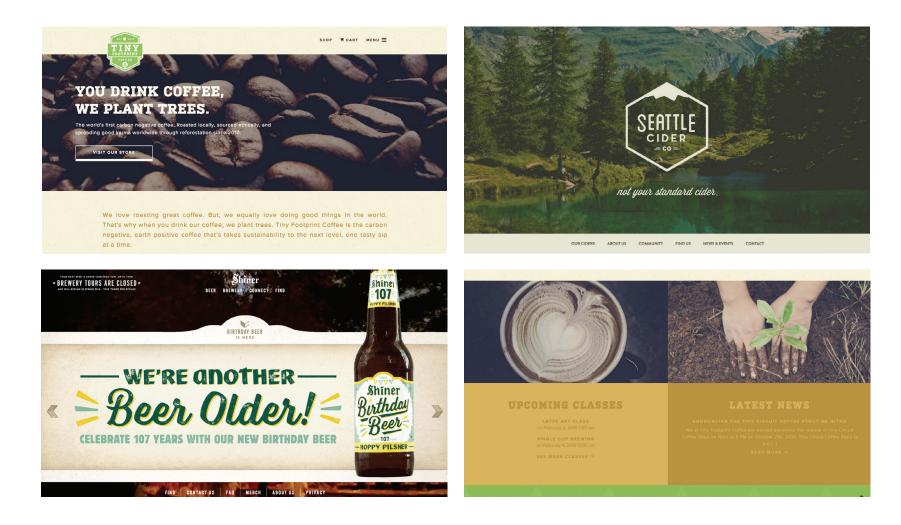


Above are several early attempts at designing a wordmark for my site. I first tried experimenting with a more illustrative, blocky style imitating the blocks used to build cob. Later attempts made use of hand-crafted display fonts.



These are some early attempts at designing a homepage for my site. I experimented with different combinations of photography, type, and word mark treatments. These early explorations helped me start to define the aesthetic and visual style that I wanted to communicate through this site.

Visual Development



When looking for visual inspiration, I decided to look to craft beer and coffee websites. The visual design of these sites did a good job of communicating a natural and handcrafted aesthetic; values that I also wanted to communicate through my design. These sites helped influence the colors, textures, type, and photography styles used in my site.

COLOR SELECTION



TYPOGRAPHY & LOGO

Bacon ipsum dolor amet cillum elit sausage esse, ut pork sirloin tenderloin lorem. Ground round meat loaf sunt tail est, aliquip beef deserunt. Officia adipisicing pork belly aliquip, consectetur ut bacon. Pork chop reprehenderit ut brisket. Rump bresaola do turkey, brisket .

Body Copy 17pt, Joesfin Sans, Regular

COB Houses For All

Heading 1 82pt, Cubano

Natural, Hand-crafted, Friendly

Heading 2 41pt, Josefin Sans, Bold

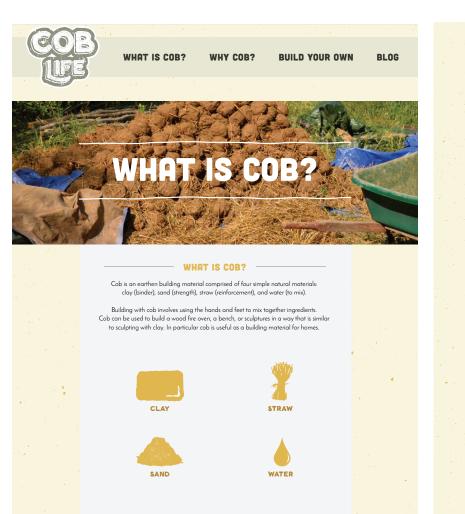
HELLO WORLD (BOLD). HELLO WORLD (OUTLINE). HELLO WORLD (THIN)

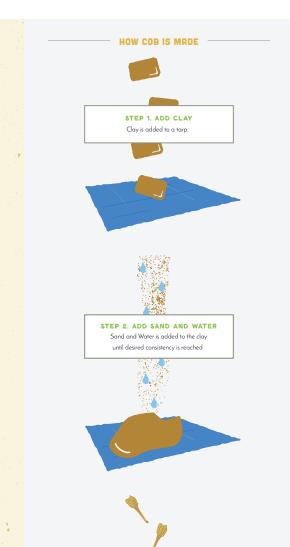
Heading 3 (Display) 24pt, Woodland



Design Iteration

FIRST DRAFT





SECOND DRAFT



Building with cob involves using the hands and teet to mix tagether ingredients. Cob can be used to build a wood fire oven, a bench, or sculptures in a way that is similar to sculpting with clay. In particular cob is useful as a building material for homes.



A BRIEF HISTORY OF COB

Inboked earth is one of the oldest building materials on the planet, it was used to construct he first permanent human settlements around ten thausand years ago. Because of its versatility ind widespread availability, earth has been used as a building material on every continent ind in every age.

COB IN ENGLAND

The word cob comes from an old English root meaning a lump or rounded mass. Cob building arose in England by the 13th century and become the norm in many parts of Britain by the 15th century. It remained that way until industrialization and cheap transportation made brick widely available in the mid-1800s. Cob ware notificable common is notherestern England

and in Wales, where the subsoil was a sandy clay and other building materials such as wood and stone were scarce.



Thousands of comfortable and picturesque cob homes in England have been continuously occupied for many centuries and now command very high market values. In the late 1990s an estimated twenty thousand cob homes remained in use in the county of Devon alone. Cob cottages, with their thatched roofs are now valued as snug, historical, and picturesque homes.

B IN THE UNITED STATES

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THIRD DRAFT



Building with COB HAS A VARIETY OF BENEFITS over traditional building methods. Here are some of the main benefits of choosing cob housing:

HEALTH



Modern building materials can be potentially toxic to both builders and inhabitants. These materials can include neurotoxins, carcinogens, hormone mimics and reproductive disruptors, which could be playing a role in a number of today's increasing health problems. Even the mainstream press often carries stories of cancers and respiratory problems linked to formaldehyde-based glues, plastics, paints, asbestos, and fiberglass. The toxicity of these materials impacts everyone associated with them: workers in the factories, builders on the construction site, and the inhabitants of those homes.

In contrast to these toxic materials, what could be less toxic than the clay, sand, water, and straw used to make cob?

FINANCIAL EMPOWERMENT Most new houses cost at least \$100,000 to build and take a lifetime to pay for. Real earnings are declining, and

FINANCIAL



Most new houses cost at least \$100,000 to build and take a lifetime to pay for. Real earnings are declining, and housing costs continue to rise, trapping people in lifelong mortgages. Many homeowners take jobs they do not like to pay for houses they do not love.

But it doesn't have to be this way. By using local, unprocessed materials such as earth and straw, by building smaller and smarter, and by providing much of the labor yourself, you can create a home that is almost unbelievably affordable. With earthen buildings especially, the raw material is almost free, and the skills needed are very basic. Many people have built cob homes for under \$5,000. You can also save yourself money in the long run with a smaller, more efficient house that uses simple passive solar technology for heating and cooling.

⁶⁶ INHABITED EARTHEN BUILDINGS IN THE MIDDLE EAST AND INDIA ARE OFTEN MORE THAN A THOUSAND YEARS OLD! ⁹⁷

COMFORT

The breathable clay walls in cob houses seem to pull some of the moisture out of humid air keeping the inside cooler in hot humid weather. In winter cob absorbs the energy of the sun during the day and radiates it back into the building at night, keeping the inside warm and cozy.

DURABILITY

All biological materials have a predictably short life and degrade over time. Wooden structures generally survive for only a few generations. As we currently build, using fastgrown softwood, a house is in poor shape in a half a century.

Earth by contrast, being geological lasts indefinitely. Inhabited earthen buildings in the Middle East and India are often more than a thousand years old! Earthen walls are also fireproof and immune to wood-eating insects like termites.

FOURTH DRAFT

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BUILD YOUR OWN

BLOG

straw used to make cob'

FINANCIAL Empowerment

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FIFTH DRAFT

OF BUILDING WITH COB



This couple is doing much of the labor themesleves saving them lots of money on construction costs.



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HEALTH

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FINAL DESIGNS

WHAT IS COB?

WHY COB?

HOMES THAT FIT LIKE A GLOVE

BUILD YOUR OWN

BLOG

HOW COB IS MADE

STEP 2. ADD SAND AND WATER



Cob is an earthen building material comprised of four simple natural materials: clay (binder), sand (strength), straw (reinforcement), and water (to mix).

Building with cob involves using the hands and feet to mix together ingredients. Cob can be used to build a wood fire oven, a bench, or sculptures in a way that is similar to sculpting with clay. In particular cob is useful as a building material for homes.



PLAN KOUR BLAN KOUR COB HOME

WHAT IS COB?

WHY COB?

BLOG



1. HEALTH

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DEVELOP A VISION

Set a vision for what you ultimately want to achieve with you building. Only you can know what you want, buit it's a good idea to think logically and realistically when deciding what you want to build. A lot of people's ideas become very extravagant and out of proportion with what they can realistically accomplish. So, it's important to keep it real. And this is where the next point in the checklist comes in.