

How to Build with Cobb

Anyone can do it!

Sustainable building from dirt!

Build a fence – Build an outside oven—

Dog Kennel – Dog house— outside fireplace

Property entryway— cabin – house—

The possibilities are endless when building with Cobb because you can form it like clay. It will harden; then the Cobb will set up like cement.

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Building With Cobb

Cobb is not something new. It has been around for many years. You may remember Cobb from the story in the Bible. God's people were slaves of Pharaoh. God's people built with Cobb. What is Cobb? It is a mixture of ingredients that are used to build things. A mixture of straw, sand, clay and water. It dries and cures into a stone or cement. It becomes very hard. Cobb has excellent insulation properties, it is fire safe, it can be formed and shaped as needed, and Cobb will not mold. I use the clay dirt right out of my yard. The sand I get from the beach. The straw is about five dollars a bale. I have even received straw for free. Feed stores have a lot of straw and as a result they have to sweep it up. They do not have any use for the sweeping's; so they are yours for the asking. I am sure that you can get these materials cheaply almost anywhere. I believe most places have these basic forms of dirt.

Cobb Ovens can be great. I built one and really like it. You can cook anything that you would normally cook in a traditional oven. The nice thing about a Cobb Oven is while being extremely hot inside; outside the oven is cool to the touch. You get an excellent smoked flavor when you cook in a Cobb oven. My Cobb oven is shaped like a smurf hat. You may have watched that cartoon as a kid. There is a Cobb oven at a local business where I live that is shaped like a bull. It has to do with the name of their business. The options are endless, as to what you can create and what shape that you make it. With Cobb you can build many things like houses, fireplaces, dog houses, kennel's, fences, sheds, and the possibilities go on and on. We will stick to Cobb ovens right now.

To make a Cobb oven (we will get into the how of formulation later) start laying Cobb on three sides. Each day the oven will rise taller. Allow dry time at least over night. In the front, begin to taper your Cobb into a triangular pattern, angling in an upward pattern; make an ark in the front for the doorway or hole. To make the chimney you can use a piece of stove pipe as I did or just take a used coffee can cut out the bottom, to make a tube.

Then as you angle in or lean your walls in on the top, leave a hole to insert the can. Begin to fill around the can

upward, let Cobb dry, then pull the can forward. Do not pull the can out, just pull it enough to build upward, to make the chimney. If you have several old coffee cans you can leave them in, just build Cobb around them for the chimney. That is it to making a Cobb oven. No two are the same so have fun.



Notice chimney
and can.



Now we will get into the making of or the formulating of Cobb. First there is no wrong way to do it. You cannot ruin the mixture. The way it is usually done is to screen the clay first, getting out all of the rocks. A tarp is put on the ground the mixture is put on the tarp water is applied and it is mixed with your feet. That is just one way of mixing Cobb however; I do not do it that way; I don't use a screen for rocks, or use a tarp. I add the clay rocks and all, then mix in a wheel barrow with my hands. I will admit that I throw out a rock or two from the mix. The best way to make Cobb is to purchase a cement mixer. They are now being sold at Ace Hardware for \$299.00. This may seem like a lot but it is not. Your work is cut in half and your production will be increased by 100%. You can also rent a cement mixer. If you are doing a project such as a home then you will need a mixer and maybe even wooden forms, that clamp on your project wall's with bolts that hold the wood together. Then you would just fill in the forms and pack Cobb down and let it dry. Another note for home building before we proceed, interiors are usually done in plaster. You can use regular plaster or earthen plaster can be made or purchased from [solar.realgoods.com](http://www.solar.realgoods.com)

<http://www.solar.realgoods.com>

Beautiful Cobb homes have been made and I encourage you to look them up on the internet search for them. They are awesome with neat built in's like Entertainment Centers, fireplaces, fireplace hearth, seating, window seats, and many other things.

Now comes the how to part that you have been waiting for. Now what I do is take several scoop's of clay and throw it in the wheel barrow. Take the same amount of sand. About a 50/50 amount of sand and clay. Sometimes you may need to add a little more sand in the end. Now add a little water, it is better to have to little water than too much. It is kind of like making bread. Start mixing the two together.



After you have mixed the clay, sand and water until it is all off the bottom of the wheel barrow. I like to think of the ingredients like the following:

The sand = flour

The clay = hardener or maybe (yeast)

The straw = rebar strengthener or
binder (holds together)

If you think of the ingredients in this way, it will help you in mixing properly, and producing a nice Cobb reaction. The next step assuming you have your clay, sand and water to a consistency that is not too wet and not too dry, is to add your straw. You need to have a pair of scissors with you and then cut the straw in 3 to 5 inch lengths. It does not have to be real precise.



Mixed sand, clay, water.



Cut straw on top and then mix into cannon balls.



Once you have added the straw, you may need to add more (flour) or sand to the mixture to dry it up a bit, if you have added too much water. Now you continue mixing the Cobb batch until it begins to get sticky and you can form what Cobbers call, (cannon balls). That is when you know that you have the mixture just right; you are able to make a cannon ball. That is how you begin to build by making these cannon balls. Just take your wheel barrow to where it is needed and as you make cannon balls you shape them into, your creative work.

Now we move to foundations; if you were building a house you would use gravel after you have dug out and leveled the location. For a house you would more than likely use a cement foundation. Cobb is amazing and you can do amazing things with it. If you are making a shed,

Cobb can be built on a rock wall foundation. I built my Cobb fireplace on an old redwood stump with a layer of flattened, Cobb as the foundation. That will work because Cobb as I said is very fire safe and you cannot even feel heat on the outside, of the oven. I am building a tool shed and I used a Cobb foundation for it.

It is necessary to build a little one day and then wait and let it dry. Build on that the next day. Do not get in a hurry. Building takes time it is not all done in one day. Also when building with Cobb pat with your hand by gently slapping and thus compacting your work. It is like taping a cake pan on the counter to get out air bubbles. The smoothing and shaping techniques are very simple. Smooth the surface of your work with your hands as a cement worker smooths his/her work. Shaping is done by pushing, patting, squeezing the Cobb with you hand. It is much like modeling with clay, but a lot more easy. If you ever have a crack or settling occurs, just make a batch of Cobb up and patch your work. It is as good as new! Cobb is proven to last many, many years. If you are wondering if rain will affect your work it hasn't for me. I live in the northwest and it rains a lot. My work is still standing. I have had no trouble.

I want to go into roofing just a little and explain some types of roofing for you. When building with Cobb I have seen roofs made of wood and composition roofing. A wood and ground type of roof for a Cobb building. Where the roof is landscaped with natural plants or grass. So the roof types are usually composition and wood and natural.

Just think of the thermal capabilities of a Cobb house or cabin. Walls can be as thick as you like. We are talking an insulation that would keep you cool in the hottest weather and warm in the coldest weather. Straw built homes are very similar in insulation quality. I know of a building that is made with thick walls that when it is over one hundred degrees outside it is 70 degrees inside that building. Now that is something to think about. Imagine a home that you would not have to spend a lot of money on cooling or heating. What a concept and what a savings. The building I am talking about is in Hopland, California. It is the Solar Living institute. A really cool, place that is a bonus that I am including in this book. Not everyone knows about it! I was taught how to make Bio- diesel there. Yes you heard me correctly. Diesel that is made from restaurant fryer grease. They offer many other classes like how to install solar panels, straw building, hybrid adobe, hydrogen energy, solar hot water, Cobb (although I did not learn it there) and so much more.

Oh did you want their address?

707-744-2017

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The future of sustainable living comes alive at the Gaiam Real Goods Solar Living Institute. Experience the future with their on-site 150kw solar energy system, see the largest straw-bale building in the world, stroll through 12 acres of permaculture gardens. They also have a great store. They sell a lot of sustainable living items lighting, solar panels, books, a bio-diesel batch machine, and so much more. They also have a catalog that they will send out to you and I believe it is still free.

You can go there and learn a lot so, get a class schedule sent to you. They also have intern programs. It also helps the Solar living institute. They now have a few

classes offered over the phone. So now you know how to build with Cobb. I hope that you will use it to build something great. Something that will be enjoyed and will be there for a long time.

Imagine building your dream home out of Cobb. There are many places in the U.S. that would be great for building a dream Cobb home. How about a dream Cobb world of your very own creation. Perhaps you may want a Cobb retreat, that many people would come for hundreds of miles to visit. What about that ranch with a beautiful Cobb entrance. You can buy property very reasonably in places such as New Mexico, Texas, Arizona, and Wyoming. I have seen two acre parcels for \$900.00 with water that is not too deep to drill a great well. 40 acre parcels for 16 or 20 thousand; a car can cost more than that. Some people that I met bought a piece of property in Wyoming 180 acres for \$50.000 not bad at all. That is not much more than a new truck. Many people live in a travel trailer on their land while they build their dream home. You can get away with a lot more in terms of what you can build, on your own ranch. When you are in a city or township; they can dictate what you can build, how, and where. There are so many ordinances and local codes that you have to live with and meet, in order to build a home. Just something to

consider when thinking of building with Cobb. For many home ownership and/ or land ownership, is not possible today. But I have just shown you a way that it just may be for you. In many States where land is cheaper, you can put \$100 to \$1000 down and pay only \$100 or \$200 a month to purchase a property. Then you can live on it while making your improvements to your land. Start out with a travel trailer as I suggested earlier. Where I live in California, a three- bedroom starts at \$289,000 and that is just average. For more exclusive areas where I live like near the beach \$800,000 and up. The MC Hammer song comes to mind, “ Can’t Touch This”. Ouch! That is expensive. Is everyone a millionaire in California? No, not by a long shot. Many share homes or live in trailers. What if you build a little paradise where land is cheap now, you never know what it could be worth in a few years. There are some in our area who bought a home like two years ago for \$200,000 and now it is worth \$400,000 now. Can it happen? Yes. But it is a great dream to have a place where you can do what you want; build what you want to and not have to answer to anyone. Many places are not like that. Like for instance because of ordinances you can’t do this and you can’t do that. Well in those places that I mentioned you can. I live in a place where we cannot do what we wanted to do. Because of community rules. But out on the ranch in Arizona, Wyoming, Texas,

and so on you still have the freedom to have that cattle-ranch, horse ranch, lama ranch, zebra ranch, buffalo ranch. Less, rules of communities, and more freedom. You not only can build Cobb structures you can build your dream come true, in the wild west.



I would encourage you to look up land for sale on the internet if you are interested in your own Cobb dream ranch. A good book that I would suggest for you to read if you are planning on purchasing property is: “Finding & Buying Your Place in the Country” by Les Scher and Carol Shcer. A smart investment before purchasing any property in the country. This is a book written by a Northern California lawyer who has specialized in country property for more than 20 years. Perhaps you already have your place in the country. Good for you! You can build with Cobb right now. It does not take a lot of space to begin to experiment with Cobb if you are planning on building small, like a Cobb oven or dog house or a fence. You can do this almost anywhere without a complaint from anyone. Have fun! I hope you find this book helpful. Most of all, I hope you put what you have learned to use be creative and enjoy what you build. I know that I have enjoyed the Cobb oven that I have recently built in my yard.

My Store front is :

<http://www.people.lulu.com/users/index.php?fHomepage=22928>

On lulu.com for more of my books like:

How To Save Money On Your Electric Bill

Things You Should Know When Camping

And more to come:

How I lost 40lbs. may be more by then

What must I do to be healed?

I might even do a very short How- to about:
How- To Make Bio-diesel.

Thank you ,

Paul Rhodes

