Concrete
Posted by Nanos - 2008/02/07 13:48

What are the costs for mixing yourself V having it delivered ready mixed ?

One thing I hear time and time again is the difficulty in getting concrete delivered to a high quality, so looking to mix it myself.

I am looking towards mixing large amounts though, hundreds of tons, rather than just a few.

==========

Re:Concrete
Posted by jackson - 2008/02/07 14:03

Hi Nanos

Welcome to the site.

There seems to be lots to be saved in doing things yourself, such as most of the buid, however there are some things it is worth paying for, especially if produced efficently in large volumes, even if not on site. This could be potentially said for making all of a timber frame house in a workshop, and bringing to site once ready.

The thing with making up muck, is that the size of the mixer will determine the time taken.

It is worth considering the relevance of using so much concrete, and what other options are available. Cement used in concrete is a vast consumer of energy in its making, and it may be worth discussing what you plan to do and see if anyone has any advice on alternatives.

==========

Re:Concrete
Posted by Basil - 2008/02/08 18:52

Concrete in large amounts is definitely worth getting ready made.
However as Jackson points out it is not eco-friendly. I don't really know the alternatives I use lime (with bricks or stone) which is a great material really movement tolerant material. Many of the older buildings would have collapsed years ago if they'd been made of concrete instead of lime. Lime is porous also so the walls breathe you don't get condensation.

==========

Re:Concrete
Posted by Nanos - 2008/02/14 22:31

I wonder what the size and capacity of the off the shelf mixers are available.

The reason for the choice of concrete is to produce a very long lasting and strong structure.

One of the aspects that I see in very old buildings is how they have been reused over the years, rather than torn down and a replacement built.

As I reckon if you go the route of designing a home that will be around for hundreds of years, your save on resources long term, and also try for something that requires little maintence. (eg. no wood to paint/replace.)

With a desire to build an earth sheltered underground design, there aren't too many materials which would be suitable for that choice.

==========

Re:Concrete
Posted by Basil - 2008/02/18 10:02

The core of our house is 1000 years old it has lasted because it was made from oak (which over the years has become as hard as steel), bricks, stone and lime. Concrete cracks where as lime bends but we are on particularly unstable ground being in the fens. Where the house has been repaired in the past with concrete the ungiving concrete has ripped the bricks apart. The underground cellar is lime and stone and has lasted 1000 years it has just undulated over the years.

==========

Re:Concrete

Posted by Nanos - 2008/02/18 15:46

I am a great fan of old oak buildings, we certainly knew how to make things which lasted in those days.

I'd agree using concrete on unstable ground is a difficult one, (One place I once lived was on houses built on concrete rafts and there was one house in the village where the raft had cracked in the middle..) and I'm aiming to build onto solid rock to avoid that issue.

I also like the old Japanese buildings for the way they are designed to move with the ground.

==========

Re:Concrete

Posted by climber - 2008/02/19 12:21

Hi

If you use fibre flakes in the concrete mix it will reduce cracking and you can use much less concrete. - around 15 -25% less.

Also look at Limecrete / Lime Crete.

Ric

==========

Re:Concrete

Posted by Nanos - 2008/02/20 17:16

So far looking into those has revealed a couple of mayor issues with them;

Only useful for slabs laying slabs flat on something, not any good for ones needing to support themselves, or on their side, as they are prone to collapse! (Suggestion has been to use them along with steel rebar.)

Reports of them rotting in the concrete and turning to mush.

Thanks very much bringing limecrete to my attention, that looks (Yet another!) one to research into.

(For anyone else interested, some info here about it.)

http://www.oldhousestore.co.uk/tech_ohs/limecrete.html

It reminds me in part of Roller Compacted Concrete, I wonder how if it can be made waterproofed ?

==========

Re:Concrete

Posted by climber - 2008/02/21 16:12

Hi

the fibre that people are now using is plastic - polyetherlene I think - check plastic type. Polyethelene is a non toxic - goodish /greenish plasic

Check out Famescape and Profiile 6 for interesting concrete and plastic fibre roof sheeting as well.

I'm leaning as much as u are, so your links and thoughts are also v useful for me

thx

ric

==========

Re:Concrete

Posted by Nanos - 2008/03/02 07:27

Finding it difficult to locate Famescape, any links to it ?

I also find the forum here a useful source of information. (Even though its based in the US.)

http://bbs.monolithic.com

==========

Re:Concrete - Farmscape and Profile 6 roof sheets

Posted by climber - 2008/03/02 12:53

These are the manufacturers of Farmscape and Profile 6 roof sheeting.

It got an A rating on a BRE eco test despite being made from cerment - seems quite impressive

http://www.marleyeternit.co.uk/

http://www.marleyeternit.co.uk/products/Products/ProductDetails.aspx?pcat=2&pcatname=Profiled+Sheeting&rangeid=11&rangename=Farmscape&pid=10&prodname=Farmscape

I liked the monolith website - I've looked at it before, their building system and style are definately not for me however I really liked their water filter:-

http://static.monolithic.com/edcircle/waterfilter/backorder/index.html

It looks like the best and cheapest solution I've ever seem.

Ric
:P

==========