Ian Sercombe Architects

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ISA, founded in 1996, specialise in residential and small commercial builds with a focus on Earth and straw-bale construction methods with a high emphasis on low embodied energy construction methods and materials to keep the environmental impact to a minimum. The team consists of Ian Sercombe, Kate McLean, Simon Hayward and Sage Sercombe-McLean.

Ian Sercombe
im schriftlichen Interview mit Michael Anderson
21 Mai 2022

Why does your architectural practice focus on earth as a building material?

IS: I've always had an interest in the more natural materials, even while studying architecture. At university I was focusing on rammed earth or straw bale, along with hardwoods, in my designs. Once graduating I visited some great buildings in Australia, New Zealand, the Americas and Europe that further inspired me. Once I started doing my own projects, I started using mud bricks, straw bale and rammed earth. A friend who lives nearby was also interested in rammed earth and set up his own business. With him close by we start using rammed earth on as many projects as possible.

Do you focus on a special earth building technique? If yes, why?

IS: Mainly rammed earth because I have access to a good contractor close by as well as access to earth we can get approved through Australia's bureaucracy as `alternative materials´. I've also completed 5 Strawbale homes, which are all finished with 55mm of mud rendering internally and externally.

Are you primarily concerned with new buildings or with the renovation of old buildings?

IS: We're mostly doing new buildings, however occasionally we do renovations and include rammed earth if it's the right fit.

Does the decision to build with earth affect the design process in your studio?

IS: Not really. The concept is around the judicious use of thermal mass. From there we would typically want to specify rammed earth because of its low embodied energy and warm aesthetic.

From which project have you learnt most? In which way has the use of earth been changed and adapted throughout your projects?

IS: I would still learn something new from every project. The use of earth has evolved mainly in terms of detailing, getting expansion joints in unobtrusive locations, how to best seal around windows etc. The evolution has been more in the detail rather than the overall walls. Most of my projects have modest budgets so we don't get too fancy with curves, differing layers, suspended panels etc.

Who are your clients? How do you establish contact with your clients?

IS: I find most of my clients via word of mouth. They want an energy efficient home. I do get a few via my website who are already interested in using rammed earth.

Where do you see the biggest hurdles/challenges in building with earth?

IS: Bureaucracy. Australia is very conservative with the National Construction Code and it only really addresses mainstream products. We have to produce a `deemed to satisfy´ solution when using `alternative´ materials. The energy assessing tools are also a bit of a challenge. I'm not sure how well their engine understands how thermal mass really works in a house.

Where do you get the earth or the earthen materials from?

IS: Mostly from quarries nearby our projects.
Do you keep working with the same earth building companies?

IS: Yes

How does the cooperation with the professionals (structural engineers, building physicists, etc.) work when building with earth?

I tend to use the same engineers so they now have a good understanding of the earth materials.

To what extent does earth as a building material influence the timing of the construction project?

IS: It doesn't change it, as long as we have the contractor programmed in.

To what extent does earth as a building material influence the construction costs?

IS: It's more expensive than what's used in brick veneer project homes, however, by knowing how to use rammed earth cost effectively we can keep it competitive.

Are the clients in any case happy with the results?

IS: The clients are always stoked. In the long term they will spend less money on heating and cooling and they will be living in a healthier house.

What is your experience with the submission/official approval of earth building projects?

IS: The local councils I mostly work with are used to it and are happy for us to use it. The building certifier we use is also used to it.

To what extend would guidelines or standards in earth building be important for the planning and implementation of your projects?

The more mainstream the guidelines or standards could be the better. A lot of people are put off by the additional effort required to get alternative materials signed off by councils/certifiers. We have a system now so it's not too bad, however regulations are always evolving and we keep having to up the ante on the paper work.

What role do political decisions or financial subsidies/incentives play in moving earth building forward?

IS: I'm not sure. I don't see politicians taking any interest at a micro level of building. The catch is the Australian building industry is massively dominated by project home companies pushing out cookie cutter houses. Fast houses, like fast food. There's no incentive for them to look at using earth – there are not enough contractors, not as easy to work with. The incentives we need before intensifying the use of earth is forcing developers to build more energy efficiently. The developers will never care about the planet, they only care about how much money they make. If the government can create regulations that mean the only way to make money is by doing truly energy efficient homes, then developers will do it (and claim it was their idea when marketing it!). Once we have a system that requires proper energy efficient homes we have a chance of getting more earth structures happening by virtue of the low embodied energy as well as thermal mass it offers.

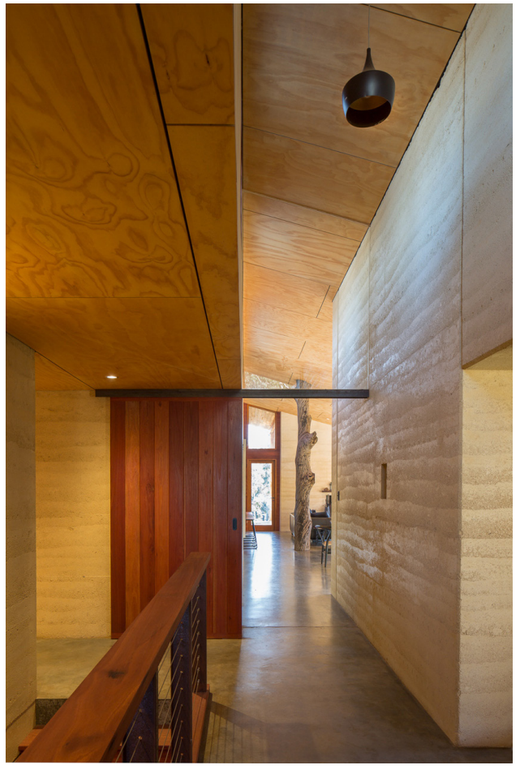
Are you also doing research on earth construction? If so, in which direction does the research go? Are there research grants?

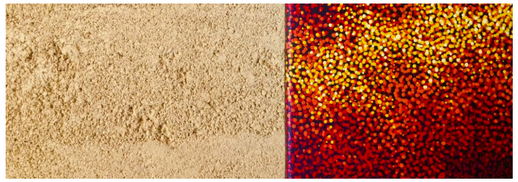
IS: I'm not doing research but spend a lot of time with a col-

league who does. I believe there are grants available, mostly via universities.

Where do you see the future potential in earth building?

IS: The future potential is the low embodied energy of earth and its low supply cost. When designed well it doesn't have to be expensive. Perhaps more systems will come into place that make rammed earth easier to create. I've seen examples of tilt up panels, as well as this year seeing a machine that automates the process a lot. However, these still have limitations but are heading in a great direction. The fact that earth has low embodied energy and at the end of its life is easily recycled into another use makes it a much more wholistic option than most other building products.





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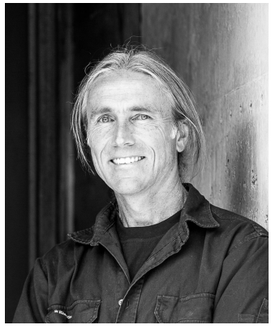

Ian Sercombe is director of a small architectural practice based in the Great Lakes region, Worimi Country, on the NSW Midnorth Coast, Australia. The practice specialises in residential and small commercial developments.
Ian's work is heavily influenced by a desire to integrate with the natural world. This is evident in the way the buildings connect with their site through passive design and material selection. While connecting with site is important, Ian is equally passionate about aiming for qualities of tactility, beauty, serenity and joy in spaces. Qualities that make a space feel great and provide inspiration and healthy environments for the occupants.
Ian studied architecture at the University of Technology, Sydney, graduating with first class honours.