

Furniture made from soil then baked like bread by Erez Nevi Pana

Alyn Griffiths | 5 December 2013

Eindhoven designer Erez Nevi Pana has developed a dough made from soil and fungus that can be baked in an oven to create stools and chairs strong enough to sit on.



Influenced by childhood memories of playing in his parents' greenhouse, <u>Erez Nevi</u> <u>Pana</u> began experimenting with soil as an accessible material for producing affordable, environmentally-friendly products during his studies at <u>Design Academy Eindhoven</u>.



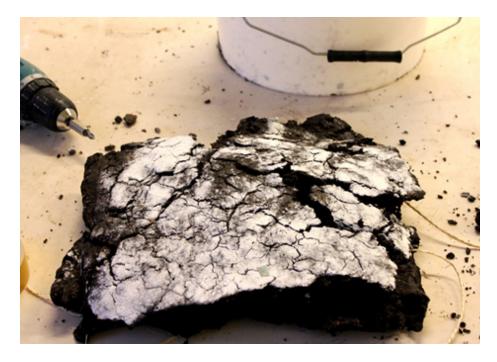
By combining it with fungi and other natural materials, the designer developed a mixture that rises like a dough due to a biochemical reaction and can then be shaped using plaster or wooden moulds.



The resulting objects are baked so that the mixture hardens, becoming robust enough to carry the weight of a person or to be sanded, sawn and drilled.



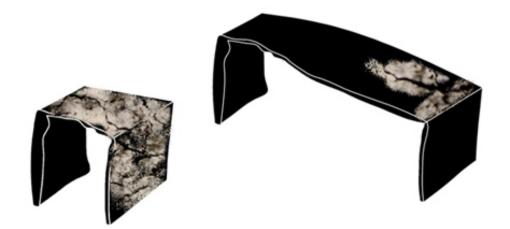
"At first, I started with a flat surfaces, just as an experiment to test the strength and durability of the material," the designer told Dezeen. "I was curious to know how strong is it? Can the mixture hold human weight?"



Following a process of refinement involving trialling different amounts of the various ingredients in his kitchen, a suitable combination was identified and a series of simply moulded items of furniture were produced. "There is a fine line between the state where the mixture is strong or delicate - either not baked enough or burned," explained the designer. "So the baking time has to be strict and every chair has its own period of time that it is baked in an oven."



As well as furniture, Nevi Pana has experimented with moulding cups using the material, which he claimed was capable of holding the water but gave it an unwanted flavour.



Concept drawing for chairs

"The recipe is not perfect - there's some things that I still need to understand but I feel I am on the right track," added the designer. "If the material is impermeable, many choices are possible and it opens the gate for many routes in which I design any object I desire."

The project is on show at an exhibition called Biodesign at The New Institute in Rotterdam, alongside plants that could grow lace from their roots and tiles made from snail poo, which runs until 5 January 2014.