Eco-House: Sustainable House Design From Environmentally Friendly Concrete

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The biggest problems on the planet is pollution, so we wanted to venture into environmental engineering, and help the planet. Eco-House is the name of our project, a name which is due to the fact that our house meets the criteria of ecology, and therefore is in harmony with the environment. To fully explain the construction of Eco-house is based on different ecological materials. The walls of the house are made from bricks that are obtained from the clay that is found in the earth, the bricks are joined with a kind of ecological concrete created from molasses, lime and animal blood. The frame of the house is made of wood, as well as the parquet, with hardwoods like oak and acacia. The roof of this house will be ensured by the location of terracotta tiles, and, on this roof will be put a vegetated part which has several benefits such as that of thermal and acoustic insulation, reduction of the greenhouse effect this which among other things makes it able to be in town as well as in the countryside, on the psychological level, it helps reducing stress, and it increases the plant cover of the region. The house's electrical system is based on photovoltaic panels and wind turbines. We also thought about reusing wastewater, filtering it all in a device that would contain coconut fibers and clay, sending it back to the ground to feed the water table and go up in the form of springs in a well artesian that we will build too. Organic waste can also be useful. We would have stored them in a sort of landfill, hermetically sealed, extracting the biogas there and using it for cooking, where it would also have solar ovens. So finally we can say that the house is very independent and advantageous so it would be a pleasure for us to make it a reality.

Awards Won: