

Bamboo and Strawbale in Germany

by Susanne Korner & Tilman Schaberle - Mossautal, Germany

To our knowledge, this is the first house in Europe built with bamboo posts as the roof structure support. It is the first straw-bale house in the state of Hessen.

The curved outer walls are non-loadbearing and are made from straw bales in a timber frame with a width of 1-ft. 2-ins. Clay from a nearby village was used as plaster in several layers, with a different composition for the inner and outer wall surfaces. The walls are shining with a soft pearl color achieved by adding white sand and marble sand to the finishing plaster. The wooden construction of the roof

is covered by a green roof and a central glass dome. Hemp was used as insulation for the roof and the inner walls. The whole building is basically made from natural materials: bamboo, wood, straw, clay-bricks, clay, hemp, and linoleum

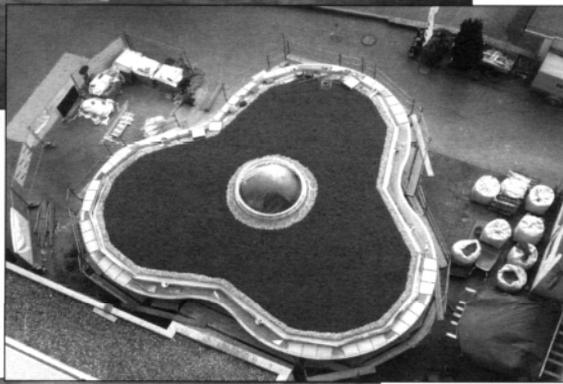
for the floors.

All electric installations are shielded to prevent electro-smog. We used the existing gas heating system and installed a wall-heating system, which is fixed to the straw bales and covered by the clay plaster.

As the owner of the building is very interested in ecology with a high quality standard, the interior design was done with a great care. Handmade tiles from Morocco decorate the toilet and

bathroom. The doors are made of ash tree (untreated), handmade egg-shaped glasses decorate the central room and the untreated wood furniture is specially made for this building.

During planning and construction, we encountered many difficulties. The curved walls caused extra work and challenges for all the craftsmen, since it is Germany's first straw-bale house with curved walls. Thanks to many years of hard work by the German Straw Bale Association (FASBA www.fasba.de) the approval for using straw bales was given in due time. However, it took over six months to get approval to use bamboo for the main structural construction!



This 1,076 sf building was privately financed, is now owned by Henry Nold and located in Darmstadt, and is used as an office for an automobile repair shop. It was designed by Shakti Architecture and the planning was started in August 2004 and construction was completed in December 2005.

The orientation of the whole building, the unusual shape of the

building as well as the design of the spaces are made according to Feng Shui to optimize the subtle energy flow.

Our intention is to inspire many people with new ecological building technologies and a holistic approach to architecture.

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