

Location: D-64285 Darmstadt
Architects: Schauer + Volhard, Darmstadt
Earth building: Lehmbau Breidenbach, Viersen
Construction: 12/1995-5/1996



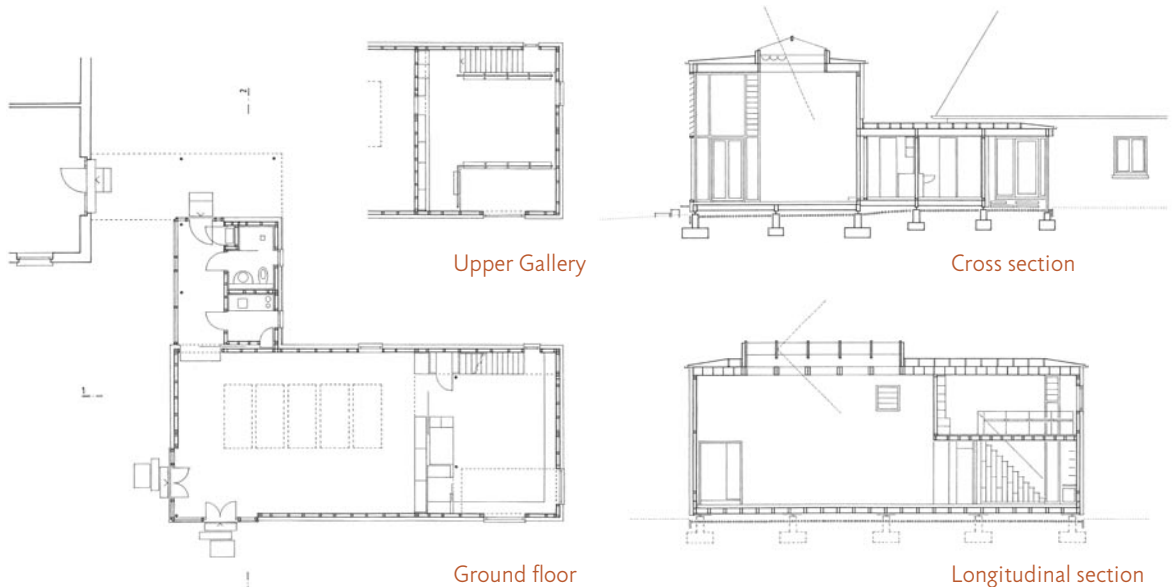
Atelier for an artist, Darmstadt



The atelier, a simple cube, provides the sculptress with a clear and simple space for her artistic work. The red of the building volume contrasts with its complementary opposite the green of the park-like garden. Supported only on a few single point foundations the atelier appears to float in space over the grass, anchored only to the house by a covered walkway and connector.

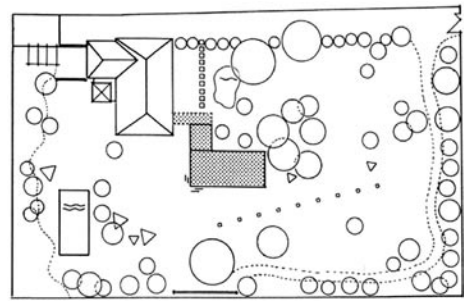
Inside the atelier, two thirds of the space is 4.80 m high, surrounded by

closed even surfaces, with light falling from above, only opening at the south-west corner to let in the garden. To the rear a second level, a gallery, has been inserted providing a more intimate space for archive and library. The space is structured by fitted objects such as wall, stair, balustrade etc. Details, surfaces and colouring are intentionally low-key, flush doors, light channels, shadow incisions instead of covering strips, invisible press catches behind the cupboard doors etc.



earthen building · case study

Usable floor area: 126 m²
Building costs: 335 000 €
Building cost/m²: 2660 € (incl. fitting out)



In order to keep the construction period as short as possible the floor, walls and roof were made of plywood stiffened timber frame elements. The elements were prefabricated as the foundations were being cast. The building was erected rapidly on site and could be closed against the weather so that work could continue inside and outside during the winter months without the different tradesmen encumbering one another.

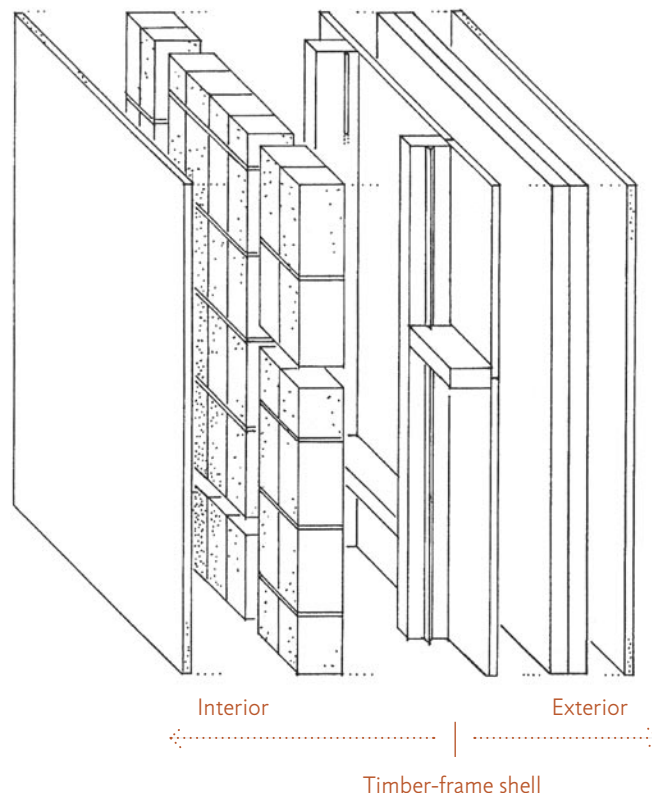
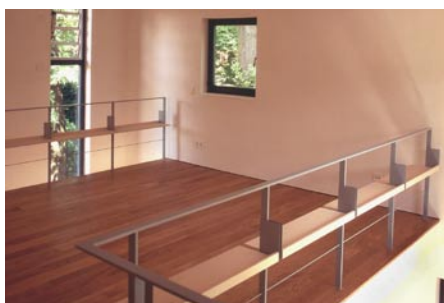
The roof is made of wood web elements which span the entire 6 m width of the building. The floor is supported on high-grade wood-veneer PARALLAM joists resting on point foundations to provide maximum strength with a small cross section. The horizontal cavities are filled with loose cellulose insulation. The inside of the exterior walls were filled with light clay bricks (2DF from claytec) stacked vertically in earthen mortar and plastered with an earthen plaster.

The panels are insulated on the outside with two layers of reed-matting, fixed and rendered with external render. The plas-

tered internal brickwork provides a better thermal capacity, noise insulation and acts as a wind barrier without the need for an extra vapour barrier.

As far as possible, materials from regenerative sources or recyclable materials were utilised (wood, reed, straw, cotton and cellulose fibres) as well as air-dried earth. The ecological building material earth has a long tradition of use in conjunction with wood. Its good thermal properties help keep the wood dry and provide a good thermal mass in an otherwise lightweight construction.

The building was awarded the Joseph-Maria-Olbrich plaque in 1998 and received an honorable mention for the wood construction prize in Hessa 1999.



Wall construction