



Casa Mair ristrutturazione

Natural Remodelling in Northern Italy

Location: Merano, Bolzano Province, Italy owner: Family Mair Margareta Schwarz built in: 2007 square metre: 142m² living area+31m² gallerv+39m² roofed balconv climate: aloine/mediterannean 300m above sealevel; number of heating days; 191; average temperature during heating period: 4 83°C

Ecological features: straw insulated wooden vault roof, artfull clay plastered innerwalls

Short description of the building:

the top-floor flat is shaped in a round symmetric floor-plan with a seperate gallery level and a high vault roof ("monastry style vault"), put on the existing rectangular shaped building.

architact: Arch

Architectural intention:

"roundly ambience":realization of a comfortable, cosy topfloor flat with organically shaped walls, Light flooded rooms should hide under a protective roof.

Constructive challenge: the vault roof is built with a wood-shell construction filled with strawbales as insulation. The gallery is built with wood and glas. Preference on few but ecological materials such as wood, straw, glas, clay, natural stone. All aspects of building should be covered with that.

Realization of the architectural intention:

The organically shaped rooms, the cosy day- and night-lightening and the natural feeling of the ecological materials, all that results in a comfortable living-ambience.

Very fascinating for me was the big variety in which you can use the KLH-Multilaver Wood Board: the yoult roof, the gallery which is covered with glas paving tiles, the corkscrew staircase with the static principle of a gothic corkscrew staircase, teh windowsills, all pillars and static wooden parts are made out of the same 12.8cm thick KLH-Multilayer Wood Board. All this provides a consistent look to the flat.

Also glas was used for several applications: the inner walls , the flooring, the window frames, teh balcony ballustrade, the wall covers

We also used clay bricks and clay plaster, bathroom design from Alessi, and a lot of wood, especially the KLH-Multilayer Boards.

Challenges and difficulties:

Most of the craftsmen had difficulties with the rund, organic design of the walls and the roof. Especially the roof was a challenge for the carpenter because it is a 3dimensional vault. We had to print the plans 1:1 (9metre of paper) so he could cut the wood. I think it is often a problem of the mind, not a technical problem. Most crafts men are used to build rectangular shapes and have problems with round shapes.

The flat gets hotwater from a solarheatingsystem which is supported by a gas condensing boiler.

Energy consumption:

According to the "climate protocoll of the Prov. Of Bozen" teh heating per year is 25kWh/m² living area. The flat gets hotwater from a solarheatingsystem which is supported by a gas condensing boiler. Also the wall heating system which was reduced to a third of a conventional system, is supplied by this system. The Solarsystem provides enough energy from march to october

The compact structure and the optimized insulation with strawbales have helped to reduce the energy of gas consumption to a guarter of the former consumption. The U-Value of the structure is 0,13W/m²K.

Intention of the owner

The owners wanted to build a new , different home for their second period of life. They had a lot of confidence in the architect, and the partnership was excellent.

Architectural philosophy and background:

Constructive architecture is what i am interested in. For me ecological materials are the assumption for a good ambience. Especially I am fascinated by the material wood, because you can realize crazy constructions which I would love to leave naked. The materials straw and clav are fascinating for me because you can warm, cosy rooms,

Script e domande di Catherine Wanek per il libro "news architecture and strawbales" Catherine Wanek - www.strawbalecentral.com : Black Range Films & Natural Building Resources. 119 Main St. Kingston, NM 88042



Ristrutturazione

Casa Mair Merano (prov. Bolzano)

Anno di costruzione 2007



























































































19/09/2008 festa della terra

4 progetti di paglia ed argilla

dott.arch.Margareta Schwarz - prov. Bolzano