New construction single family house, Otelfingen ZH

2017





The single-family house in Otelfingen in the canton of Zurich, which has four rooms, is located on a beautiful slope. Virtually everything you see in this house is made of wood. The house consists of the natural building material from the floor slab onwards.

The project

The single-family house in Otelfingen, a neighboring municipality of Wettingen in the Canton of Zurich, was designed and built as a timber structure at the request of the client. Timbatec was responsible for the structural analysis and design of the project. The interface between timber construction and concrete construction is at the ground level. The client also wanted the wood to be visible and not hidden. This applies to both the interior and the facade of the house. What is special about the house is that the individual floors are not on the same level, but are offset. To get from one room to another, you have to climb a few steps. In addition, the house has galleries that provide a view from the first floor almost to the roof.

The construction

Another special feature of the house in Otelfingen is the special shape of the roof. On one side of the wooden building, the roof reaches all the way to the ground and thus becomes, so to speak, the - windowless - facade of the house. A large skylight and the generous window front at the living room, which allow daylight to flow into the house, ensure sufficient brightness inside.

The challenge

The entire garage was also built in wood. It is located directly above a bedroom of the single-family house. The ceiling in between must therefore meet the highest requirements for sound insulation. For this purpose, a board-stack ceiling made of solid wood was chosen in order to achieve more mass and stiffness. A sound-insulated mastic asphalt was laid on top.





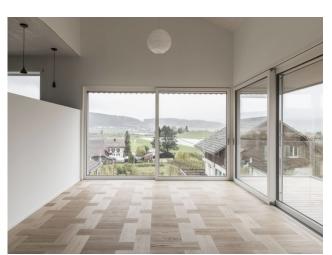
Special shape: The roof extends to the ground on one side



The garage directly above the bedroom made high demands on sound insulation



Slightly offset floors: live on different levels



The wood can also be seen inside

Construction Data

- Solid and glued timber 55 m³
- Solid/triple-layered wood panels 15 m³
- Facade formwork 110 m²

Services of Timbatec

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- Technical site supervision and site inspections
- Structural analysis and design
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- Civil engineering services

Architect

Wellmann Architekten AG 8004 Zurich

Client

Reynald and Chantal Hiroz-Heinis 8112 Otelfingen

Photography

Wellmann Architekten AG 8004 Zurich

Timber constructor

Hecht Holzbau AG 6210 Sursee

