# New construction single family house Schenk, Hinterkappelen

2010





In the most beautiful location directly on the Wohlensee, a sophisticated single-family house was built in Hinterkappelen. On the massive basement, a building with three floors was erected in timber construction. The wall elements were realized in timber frame construction. A board stack construction was chosen for the floor slabs. Generous galleries, high rooms and a lot of window area characterize the modern building.

# The project

On the massive basement a building with three floors was erected in timber construction. The wall elements were realized in timber frame construction. For the floor slabs, a board stack construction was chosen. These were boards stacked on edge and held together by beechwood dowels due to the clamping forces. Glue and metal fasteners were not used.

# The construction method

Due to the high degree of prefabrication of the wall and ceiling elements, the single-family house could be erected in two days. All components had to be flown in by helicopter due to the poor accessibility of the slope. A special feature: the roof construction. The cross ridge, which extends over the entire width of the building and was overlapped with the main ridge, creates an unusual roof shape. In addition, due to the lack of a roof overhang and the special roof shape, an explicit upper termination of the building façade was created. The roof design resulted in a construction with four double valleys. The upper end of the roof is formed by an approx. 4 m² flat roof with visible roof truss.





Roof construction 2



Large windows



Scaffold

#### **Construction Data**

- wooden construction
- three floors
- board stack construction

#### **Services of Timbatec**

- SIA phase 32 construction project
- Statics and construction
- SIA Phase 51 Implementation project
- Product development

# **Timber Construction Engineers**

Timbatec Holzbauingenieure Schweiz AG, Thun 3600 Thun

## Owner

Robert and Simone Schenk-Bertschmann 3032 Hinterkappelen

# **General Contractors**

Renggli AG 6210 Sursee

