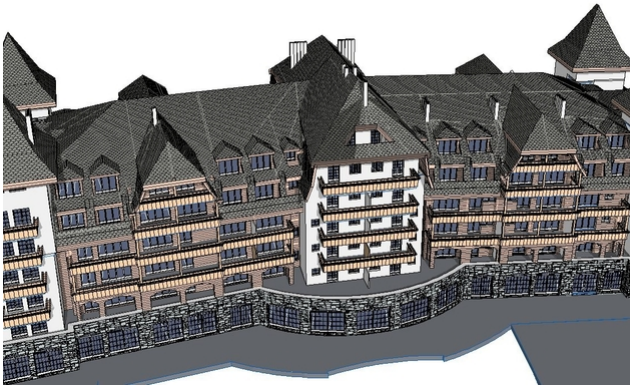


# New construction Grand Hotel Alpina, Gstaad

2011



The history of the new Grandhotel Alpina in Gstaad began with the demolition of the old Hotel Alpina in 1995.

## The project

The huge hotel complex placed high demands on all involved. One particular challenge was the size and shape of the roofscape. This extended over 3 stories on a bent floor plan with a central section and included - in addition to the mansard roof and 4 towers - many skylights and changes in pitch. The assignment Timbatec's task was to design and construct the roof, which extended over a floor area of approx. 35 x 90 m. The roof was to be built of wood. From the point of view of the timber engineer, the complex shape as well as the generous room divisions were sticking points that made the construction and dimensioning a high art.

## The construction method

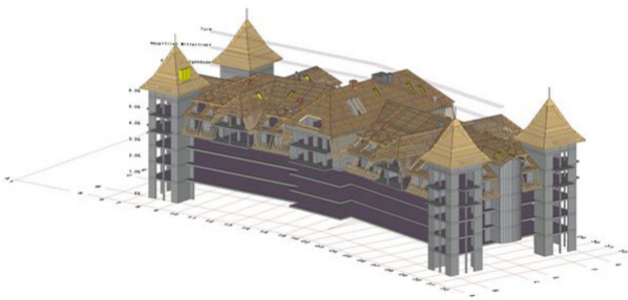
The quality requirements: It was also necessary to execute the work planning (2D / 3D) - a cooperation of numerous planners and contractors involved - in perfect quality. Limited space on the construction site and a tight schedule (impending winter) required partial prefabrication of the roof structure. The challenge was great, as was the need for storage space for the material and the interfaces were numerous. In the fall of 2010, the completed assembly of the roof structure could be celebrated. After four years of construction, the new hotel was opened on December 1, 2012.



Roofscape



View inside



3D view



Shell

### Construction Data

- Glulam (GL28h) approx. 32 m<sup>3</sup>
- Glulam (GL 24h) approx. 213 m<sup>3</sup>
- Glued laminated timber (GL 24h) approx. 17 m<sup>3</sup>
- Construction timber approx. 32 m<sup>3</sup>
- Single bars approx. 4'100 pcs.
- Roof formwork approx. 4'500 m<sup>2</sup>
- Cellulose insulation approx. 20'000 kg
- Steel parts welded approx. 4'500 kg
- standard connectors approx. 500 kg
- (beam girder
- rafter supports etc.)
- Rod anchors 835 pcs.
- SFS screws approx. 2'600 pcs.
- Anchors wood/concrete approx. 1'300 pcs.

### Services of Timbatec

- SIA phase 31 preliminary project
- Cost estimate
- SIA Phase 32 Construction project
- Structural analysis and design
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- Works planning 3D and 2D
- Site supervision and site inspections

### Owner

Bach Immobilien AG  
3780 Gstaad

### Timber contractor

Chaletbau Matti Holzbau AG  
3792 Saanen

### Architect

Jaggi & Partner AG  
3780 Gstaad

### Timber construction engineers

Timbatec Holzbauingenieure Schweiz AG, Thun  
3600 Thun