

# Wood construction hall Ramseier, Grenchen

2006

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The company Ramseier Technologies AG is active in the field of industrial powder coating technology and is building a new hall in Grenchen.

## The project

In addition to the main building, which houses production, warehouse management and offices, premises for the development of modern coating technologies were created in a separate building. A walkway connects the two wings. After detailed project studies, it was determined that an economical and elegant solution could be achieved with the timber construction method. The main building has dimensions of 55.2 m x 38.2 m, with a building height of 7.10 m. The interior has galleries on both sides. Inside, there are galleries on both sides with a permissible payload of 1000kg/m<sup>2</sup>. Reception room, offices, sanitary facilities and necessary technical rooms are also located here.

## The construction

The annex building, called Dubai, has a round facade and is used for research and development purposes. The building envelope was completely prefabricated as elements in the factory and could thus be assembled within a very short time. The main supporting structure, which carries the roof loads in a 6.80 m grid, consists of a glulam beam with a cross-section of 200 x 100 mm and corresponding glulam posts. Roof and gallery floor elements are made of glued laminated timber ribs and three-layer panel planking as a composite box. The facades of both parts of the building were clad with special moisture-resistant particleboard (Formboard), which was cut and drilled at the factory using laser technology. The glass surfaces were designed with mullion-transom glazing. In order to bring daylight into the interior of the building, a skylight strip has been implemented on the roof. The flat roof waterproofing was prefabricated and installed quickly after erection, so that weather influences could be largely reduced.



Gallery with 1t payload per m2



Building narrow side with 3m canopy



Hall view



Installation planning

#### Construction Data

- Glulam GL24h 83 m<sup>3</sup>
- Frame construction scantlings C24 145 m<sup>3</sup>
- 3-layer boards 1'010 m<sup>2</sup>
- Formboard panels 1'050 m<sup>2</sup>
- Fermacell boards 1'370 m<sup>2</sup>

#### Services of Timbatec

- Factory design 3D and 2D

#### Timber contractor

Hector Egger Holzbau AG  
4900 Langenthal

#### Architect

Hector Egger Holzbau AG  
4900 Langenthal

#### Works planning

Timbatec Holzbauingenieure Schweiz AG, Thun  
3600 Thun

#### Timber Construction Engineer

Makiol und Wiederkehr  
5712 Beinwil am See